

**50+**

# **BANK PO | CLERK**

**2016-2020 PREVIOUS YEARS'**

**Memory Based Book**

Useful for SBI, IBPS, RRB, RBI & Other Bank Exams

**eBOOK**

**English Edition**

SBI PO | Clerk: 14 Sets  
IBPS PO | Clerk: 16 Sets  
IBPS RRB PO | Clerk: 16 Sets  
RBI Grade B | Assistant: 8 Sets

**VERSION**  
**3.0**

**6000+**  
Questions  
Detailed Solutions of  
English | Quant |  
Reasoning

**500+**  
Exclusive  
**BANKING & STATIC**  
Awareness Questions

### REASONING ABILITY

**Directions (1-5):** Study the following information and answer the questions given below:

There are three rows i.e. row 1, row 2 and row 3 Such that row 2 is in the north of row 3 and row 1 is in the north of row 2. There are 4 persons sitting in row 1 and 8 persons are sitting in the row 2 and 4 persons are sitting in the row 3.

Persons sitting in the row 3 faces north. Persons sitting in the row 1 faces south. First 4 persons sitting from west to east in row 2 faces north and last four person sitting from west to east in row 2 faces south.

**Note:** All the persons sitting in the row 1 and row 3 are facing the persons sitting in the row 2.

E faces the one who sits second to the right of P. No one sits on the left of E. Only one person sits between P and R. Only two person sits between R and the one who faces F. D sits immediate right of F. D does not sits at the end of the row. Q sits second to the right of the one who faces D. A face the one who sits on the immediate left of Q. G faces S but does not sits at the end of the row. P is not the immediate neighbour of G. Only one person sits between K and S. K faces the one who sits third to the right of N. J and M are immediate neighbours. J does not face D. Only two person sits between M and L. More than two persons sits between B and C, who does not face L. C does not face south.

- How many persons sit between A and G?  
(a) One (b) None (c) Three  
(d) Two (e) None of these
- Who among the following sits second to the right of C?  
(a) F (b) D (c) G  
(d) L (e) None of these
- Four of the following five belongs to a group following a certain pattern find the one that does not belong to that group.  
(a) ML (b) CB (c) RF  
(d) ED (e) KS
- Which among the following pairs sits at the ends of the rows?  
(a) BS (b) EQ (c) KG  
(d) RM (e) None of these
- How many persons sit on the right of L?  
(a) Three (b) One (c) No one  
(d) Four (e) None of these

**Directions (6-10):** Study the following information carefully and answer the given questions.

A word and number arrangement machine when given an input of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.

**Input: 42 74 TBEF WRAK 95 NLDG 31 65 KEOR QCOF**

Step I: 90 42 74 TBEF NLDG 31 65 KEOR QCOF AKRW

Step II: 79 90 42 NLDG 31 65 KEOR QCOF AKRW BEFT

Step III: 60 79 90 42 NLDG 31 KEOR AKRW BEFT CFOQ

Step IV: 47 60 79 90 31 KEOR AKRW BEFT CFOQ DGLN

Step V: 26 47 60 79 90 AKRW BEFT CFOQ DGLN EKOR

Step V is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

**Input: IMRE 40 69 RBHI 86 PMCN 25 KDSM 57 VATW**

- How many steps would be needed to complete the arrangement?  
(a) V (b) VII (c) VI  
(d) IV (e) None of these
- Which step number would be the following output?  
45 52 64 91 IMRE 25 ATVW BHIR CMNP DKMS  
(a) II (b) III (c) V  
(d) IV (e) None of these
- Which of the following would be Step III?  
(a) 52 64 91 IMRE 40 25 KDSM ATVW CMNP BHIR  
(b) 52 64 91 IMRE 40 25 KDSM ATVW BHIR CMNP  
(c) 64 52 91 IMRE 40 25 KDSM ATVW BHIR CMNP  
(d) 52 91 64 IMRE 40 25 KDSM ATVW BHIR CMNP  
(e) None of these
- Which of the following element would be the 4<sup>th</sup> to the left of the one which is 8<sup>th</sup> from the left in the step IV?  
(a) 91 (b) IMRE (c) 64  
(d) CMNP (e) None of these
- In Step V, which of the following element would be on eighth position from the right end?  
(a) ATVW (b) BHIR (c) 64  
(d) 52 (e) None of these

11. In the word 'HOUSEWARMING' all consonants are written as their preceding letter and all vowels are written as their following letters. Now all letters are arranged in alphabetical order from left to right and all the repeated letters are eliminated. Then, how many such pairs of letters are there, each of which have as many letters between them in the word (in both forward and backward direction) as they have between them in the English alphabetical series?
- (a) One (b) Two (c) Four  
(d) Three (e) More than four

12. If we form the word by 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> letter of 'FORMATION' and 3<sup>rd</sup> and 4<sup>th</sup> letter of 'WOMEN' then, what will be the 3<sup>rd</sup> letter from right?
- (a) R (b) A (c) M  
(d) E (e) None of these

**Directions (13-15):** Study the following information carefully and answer the questions given below.

A%B (28)- A is 42m in north of B

A\$B (13)- A is 27m in south of B

A#B (24)- A is 28 in east of B

A&B (25)- A is 29m in west of B

M#L (10), N%M (11), O&N (13), P\$O (31), Q#P (38), R%Q (6)

13. N is in which direction with respect to Q?
- (a) North (b) West (c) North-west  
(d) East (e) South-east
14. If Z is the midpoint of the line formed between M and R, then what is the distance between L and Z?
- (a) 35.5m (b) 34m (c) 36.5m  
(d) 37.5m (e) None of these
15. What is the distance between L and R?
- (a) 50m (b) 51m (c) 46m  
(d) 48m (e) 49m

**Directions (16-20):** In the following questions, the symbols %, &, #, \* and @ are used with the following meaning as illustrated below-

'P#Q' means 'P is not greater than Q'

'P\*Q' means 'P is neither equal to nor smaller than Q'

'P%Q' means 'P is not smaller than Q'

'P@Q' means 'P is neither smaller than nor greater than Q'

'P&Q' means 'P is neither greater than nor equal to Q'

Now in each of the following questions assuming the given statement to be true, find which of the conclusions given below them is/are definitely true and give your answer accordingly.

- (a) If only conclusion I follows.  
(b) If only conclusion II follows.  
(c) If either conclusion I or II follows.  
(d) If neither conclusion I nor II follows.  
(e) If both conclusions I and II follow.

16. **Statements:** N \* Q % R % O & P @ M

**Conclusions:** I. N % O II. O & M

17. **Statements:** A # B \* C \* D & E

**Conclusions:** I. A \* D II. D & B

18. **Statements:** K % J \* H % G; H \* S % T

**Conclusions:** I. H & K II. T \* J

19. **Statements:** B # D @ F # G \* H % C

**Conclusions:** I. B & G II. G @ B

20. **Statements:** V % W & K # L; W \* P @ M

**Conclusions:** I. M & L II. V \* W

**Direction (21-25):** Study the following information carefully and answer the questions given below:

Six persons are sitting in a row. Some of them are facing North and Some are facing South. They are of different ages. Person whose age is even numbered doesn't sit immediate right of the person whose age is even numbered.

Two persons sit between P and T and one of them sits at extreme end. Three persons are sitting between the persons whose age is 14 and 42. Person whose age is 15 sits 2<sup>nd</sup> to the left of T. There are as many persons sit between T and person whose age is 15 as between the persons whose ages are 15 and 28. Q sits immediate right of the person whose age is 15. One person sits between S and U and neither of them sit at extreme end. Q is older than R. T whose age is even numbered is older than U who faces North. Person whose age is 20 sits 3<sup>rd</sup> to the left of the person whose age is 19.

21. How many persons are sitting between R and the person whose age is 20?
- (a) One (b) Three (c) Two  
(d) Four (e) None
22. Who among the following sits immediate right of U?
- (a) S  
(b) Person whose age is 19  
(c) T  
(d) Person whose age is 42  
(e) None of these
23. What is the position of Q with respect to the 2<sup>nd</sup> youngest person?
- (a) 2<sup>nd</sup> to the right (b) Immediate left  
(c) Immediate right (d) 2<sup>nd</sup> to the left  
(e) None of these
24. What is the age of the person who sits immediate left of S?
- (a) 14 (b) 15 (c) 28  
(d) 19 (e) None of these
25. How many persons are facing North?
- (a) Two (b) Three (c) One  
(d) None (e) More than three

**Direction (26-30):** Study the following information and answer the given questions:

In alphabetical series each consonant is assigned a different number from 1-6 (for ex- B is coded as 1, C-2.....H-6) and again those numbers get repeated (for ex- J-1, K-2.....so on). And for the codes of Vowels it starts from the numeric code of Z i.e. if the code of Z is 2 then the code of vowel A is 2 and code of E is 3 and so on till U which is coded as 6.

Note: The code of vowels lies in the range of 1 to 7.

Besides the above information, following operations are to be applied for coding the words given in the questions below.

If the two immediate digits are same (in the code) then the digit of the letter having higher place value in the English alphabet will be changed to '♠' i.e. If the code of a word is '225' hence the code will be changed to '♠25' and if the two immediate digits (in the code) are in the form such that the preceding digit is one more than its succeeding digit then the higher digit will be changed to '□' i.e. If the code of a word is '435' hence the code will be changed to '□35'.

26. If the code for the word 'SE\_ \_ED' is coded as '37□3♠□3' then what letters will come in the fill in the blanks to make it a meaningful word?

- (a) RV (b) AL (c) EM  
(d) AD (e) Either (b) or (d)

27. Which of the following word will be coded as '3462□3'?

- I. SMOKED II. STAKED III. STOKED  
(a) Only I (b) Only II (c) Either II or III  
(d) Either I or III (e) All of the three

28. Which of the following combination of the words and codes is/are true?

- (a) SLOWLY - ♠36♠□2  
(b) BELIEVE- 1□3□4□4  
(c) BURNT- 172□4  
(d) ADVERB- 3♠□4□1  
(e) All are true

29. If the code for the words 'BEAST MODE \_\_\_\_' is coded as '1□3♠4♠6♠24634' in the given coded pattern, then what will be the missing word?

- (a) CLUB (b) WORK (c) STUN  
(d) WORN (e) Either (b) and (d)

30. What is the code for 'NECKLACE'?

- (a) 4□2♠1353 (b) ♠42♠♠□23 (c) □421♠353  
(d) □42♠1335 (e) None of these

**Direction (31):** Study the following information carefully and answer the questions given below:

Eight persons are sitting in a row and all are facing North. Only two persons sit to the right of A. Two persons sit between A and B. Three persons sit between C and G. E and G are immediate neighbors of B. D sits immediate left of E. F sits 2<sup>nd</sup> to the right of H.

31. How many persons are sitting right of G?

- (a) Two (b) Three (c) Four  
(d) Five (e) None of these

32. Rooftop solar power growth has demonstrated an overall positive trend, But this will need to be scaled up massively to achieve the national target.

**Assumption:**

(I) With ongoing improvements to solar cell efficiency and battery technology, rooftops will only get more attractive in the future.

(II) Major **solar** projects that connect to the grid often face the challenge of land acquisition and transmission connectivity.

(III) A survey helps determine usable rooftops, separating them from green spaces, and analyses the quality of the solar resource.

- (a) Only II follows  
(b) Both II and III follows  
(c) Both I and III follows  
(d) Only I follows  
(e) Both I and II follows

33. To provide proper education, we need to improve our education system. To improve education system, we need good teachers. To provide good teachers, we again need good education. In India there are some good institutes too but most of the students opt for a job rather than trying the career in teaching field which requires post-graduation as minimum eligibility criteria because they do not get a good salary there.

**Course of Action-**

(I) The Salary of the teachers should be hiked to encourage them for opting teaching.

(II) The minimum eligibility criterion to be a teacher should be graduate rather than post-graduation and PhD to become a teacher as students can get a job even after graduation.

- (a) Only II follows (b) Only I follows  
(c) Either I or II follows (d) Neither I nor II follows  
(e) Both I and II follows

**Direction (34-38):** Study the following information carefully and answer the questions given below:

Six persons are working in a company. Their designations are Chief Executive Officer (CEO), Chief Managing Director

(CMD), Managing Director (MD), General Manager (GM), Chief Finance Officer (CFO), Finance Officer (FO). Sequence of the posts are as above i.e. the post of Chief Executive Officer (CEO) is higher than Chief Managing Director (CMD), the post of Chief Managing Director (CMD) is higher than Managing Director (MD) and so on the post of Chief Finance Officer (CFO) is higher than Finance Officer (FO). They have different years of experiences. They get different annual salaries.

Only two person's designation is lower than the designation of the person whose annual salary is 7 lakhs. There are as many posts above the post of the person whose annual salary is 14 lakhs as below the post of the person who have 7-year experience. Annual salary of CEO is 6 lakhs. There are three posts in between the post of the persons whose experience are 4 years and 5 years. Person whose annual salary is 14 lakhs have just higher post than the post of the person who have 6 years' experience and just lower post than the post of the person who have 8 years' experience. Two posts are between the posts of the person who have 3 years and 8 years' experience. Person whose annual salary is 5 lakhs have higher post than the person whose annual salary is 9 lakhs and lower post than the person whose annual salary is 4 lakhs. Person whose salary is 9 lakhs doesn't have 4 years' experience.

34. Who among the following has lowest salary?  
 (a) Person who is CMD  
 (b) Person who have 6 years' experience  
 (c) Person who is GM  
 (d) Person who have lowest experience  
 (e) None of these
35. Person who is GM have how many years' experience?  
 (a) 3 years (b) 4 years (c) 5 years  
 (d) 8 years (e) None of these
36. How many persons are senior than the person whose annual salary is 14 lakhs?  
 (a) None (b) One (c) Two  
 (d) Three (e) More than three
37. Which of the following is the annual salary of the person who is CFO?  
 (a) 4 lakhs (b) 5 lakhs (c) 7 lakhs  
 (d) 9 lakhs (e) None of these
38. Which of the following pair of combination is/are true?  
 (a) CMD - 4 lakhs (b) GM - 7 years (c) MD - 6 lakhs  
 (d) CFO - 5 lakhs (e) None is true

**Direction (39-40):** There are some criteria which will be considered during appraisal of employee-Statement by manager of a company.

- Punctuality and sincerity are one of the key points which will surely reviewed.
  - Hard work and dedication towards work will be applauded.
  - Just to quantify an amount in the salary package of employee with no reason will not be entertained.
39. Which of the following can be inferred from the above statement?  
 I. Punching machine of office will be evaluated by HR.  
 II. There will be minimum 10% increment for deserving employee based on their performance.  
 III. Some of employees of company have done a tremendous job with complete determination and enthusiasm.  
 (a) Only I (b) Both II and III (c) Both I and III  
 (d) Only III (e) None of these
40. Which of the following undermines the statement given by Manager?  
 I. Increment of 15% has been done for all the employees whose 1 year is completed.  
 II. Performance chart has been prepared by leaders of different department based on their proficiency.  
 III. Relaxation time for late coming of 240 minutes in a year i.e. of 10 minutes twice in a month is given to all employees.  
 (a) Only II (b) Both II and III (c) Both I and III  
 (d) Only I (e) None of these

**Directions (41-45):** Study the following information and answer the questions given below:

There are nine boxes which are kept one above the other such that the box which is placed at the bottom most position is numbered 1 and so on till the box which is placed at the top position is numbered 9.

All the boxes contain different number of pens in it.

**Note:** The number of pens in a box is equal to the multiple of the place number of the box which is kept immediately above it i.e. The number of pens in the box which is kept at the bottom is equal to the multiple of is 2, 4, 6... and so on and the number of pens in the box which is placed at the top (9<sup>th</sup> position) is 10, 20, 30 and so on.

Only two boxes are kept between the box having 42 pens and box A. Box I is kept at the odd number position but immediately below box F. There is only one box is kept between box E and box having 25 pens. Box D is kept immediately above the box containing 63 pens. Box E does not contain 63 pens. The number of pens in Box G is equal to the difference between the number of pens in box D and

box I. Box B is kept above the box having 8 pens. Box G contains 21 less pens than box A contains. Only three boxes are kept between box D and the box containing 12 pens. Only two boxes are kept between box H and the box having 12 pens. More than three boxes are kept between box C and box H. The box having pens which is a perfect square of 3 is kept immediately above box C. The number of pens in box D is equal to the sum of the number of pens in box H and the box which is placed at 2<sup>nd</sup> position.

41. Which among the following box contains 42 pens?  
 (a) Box D (b) Box H (c) Box B  
 (d) Box E (e) Box I
42. How many boxes are kept above box F?  
 (a) Three (b) Two (c) Four  
 (d) Five (e) None of these
43. Number of boxes between I and the box having 63 pens is same between the box B and the box?  
 (a) Box G (b) 42 pens (c) 81 pens  
 (d) Box C (e) Both (a) and (c)
44. Box F contains how many pens?  
 (a) 25 (b) 42 (c) 63  
 (d) 81 (e) None of these
45. Total number of pens in the boxes A, G and I is?  
 (a) 153 (b) 149 (c) 155  
 (d) 151 (e) None of these
46. Begusarai, a district in Bihar which has seen the phase of kidnapping, extortion, murder to "The Industrial city of Bihar". Nowadays there are 4 major industries in Begusarai. Growth rate of Begusarai is top amongst all districts of Bihar and 5<sup>th</sup> among all districts of India in year 2017.  
**Which of the following can be inferred from the above statement?**
- I. Opportunities of the employment has been increased in Begusarai.  
 II. There is no case of murder, kidnapping and extortion in 2017.  
 III. People of Begusarai are hardworking and keen to go forward.  
 IV. Top industrialists of India are desirous to have their industry in Begusarai.
- (a) Only II (b) Only I and III (c) Only I  
 (d) Only III and IV (e) None of these

47. **Statement:** Start to think of travelling by train for a holiday. A train journey can give one a better view of places on the way which an air journey cannot give. You can walk around whenever you want, meet other travelers and locals, relax and watch the landscape go peacefully by. Train travel is both a beautiful and affordable way to see the country, and no trip is more scenic than the trip by trains.

**Conclusions:**

- I. While going for a holiday, people want to enjoy the view of the places on the way.  
 II. People should not travel by air when they are going for a holiday.

**Which of the following can be concluded from the given statement?**

- (a) Only I follows (b) Only II follows  
 (c) Both I and II follow (d) None follows  
 (e) Either I or II follows

**Directions: (48-50):** Study the following information carefully and answer the questions which follow-

'T @ U' means 'T is parent of U (either mother or father)'

'T # U' means 'T is sister of U'

'T \$ U' means 'U is grandchild of T'

'T % U' means 'T is brother of U'

'T & U' means 'T is the son-in-law of U'

'T \* U' means 'T is the wife of U'

'T © U' means 'U is the mother of T'

There are some members in a family having three generation. The relation between the different members of the family are defined as follows.

U@G#J

C&I

F%H\*C

B@H

G\*F%H©I

J©A\$D

B\$E

48. If D is the only child of F, then how is D related to U?

- (a) Son (b) Grandson  
 (c) Daughter (d) Grand daughter  
 (e) Can't be determined

49. If A has only one son, then how is J related to F?

- (a) Son (b) Brother-in-law  
 (c) Brother (d) Father (e) None of these

50. If D has no sibling and B has no granddaughter, then how is E related to C?

- (a) Daughter (b) Wife (c) Nephew  
 (d) Son (e) Cannot be determined

## QUANTITATIVE APTITUDE

**Directions (51-56):** Study the table given below and answer the following questions. Some data is missing in the table. Table shows data regarding Rs.20 notes received by 5 different banks during demonetization.

Banks	Total no. of notes received by bank	% of notes on which 100% return is given	Ratio of notes on which (50% return : 80% return) is given	Total value of Rs.20 notes received by bank (in Rs.)
PNB	15,000	-----	5 : 7	-----
SBI	-----	80%	-----	9,00,000
Axis Bank	10,000	-----	1 : 4	-----
BOI	-----	75%	3 : 5	-----
BOB	24,000	-----	-----	4,80,000

**Note: 1. 'Return'** is the amount (face value of note) of notes returned by bank to its customers.

2. Each bank has given minimum of 50% return on all notes received by it.

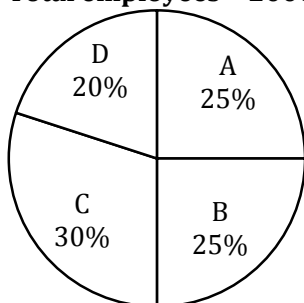
- 51.** If difference of notes on which 50% return is given and on which 80% return is given of PNB is 1000, then find number of notes on which 100% return is given by PNB are what percent of total notes received by BOB?  
 (a) 12.5%      (b) 37.5%      (c) 50%  
 (d) 25%      (e) 62.5%
- 52.** If total number of notes on which BOI gave 100% return and 50% return are 13500, then find total amount received by BOI is how much more or less than total amount received by Axis bank?  
 (a) Rs.1,20,000    (b) Rs.1,00,000    (c) Rs.1,50,000  
 (d) Rs.1,60,000    (e) Rs.1,80,000
- 53.** If ratio of notes on which (50% return : 80% return) is given by BOB is same as ratio of notes on which (50% return : 80% return) is given by Axis bank and number of notes on which BOB gave 100% return are 20% less than total notes received by PNB, then find ratio of notes on which BOB gave 80% return to that of on which it gave 100% return.  
 (a) 2 : 3      (b) 1 : 3      (c) 4 : 5  
 (d) 5 : 7      (e) None of the above.
- 54.** If total number of notes received by BOI is 40% less than total number of notes received by SBI, then find average number of Rs.20 notes received by these 5 banks.  
 (a) 24,700      (b) 25,000      (c) 25,400  
 (d) 24,200      (e) Cannot be determined.
- 55.** If percentage of notes on which 100% return is given by PNB is 50%, then find the amount earned by PNB in this whole transaction.  
 (a) Rs.47,750    (b) Rs.44,500    (c) Rs.41,500  
 (d) Rs.45,750    (e) Rs.48,750
- 56.** If difference of number of notes on which PNB gave 50% return and 80% return is 1500 and number of notes on which Axis bank gave 80% return are 1750 less than number of notes on which PNB gave 50% return, then find total number of notes on which PNB and Axis Bank gave 100% return together.  
 (a) 12000      (b) 13000      (c) 12500  
 (d) 14000      (e) 13500
- 57.** A spend 30% of his monthly salary on house rent, 40% of the remaining salary on clothing and he distributes his remaining monthly salary among his two daughters and a son in the ratio 5 : 5 : 4. If difference of A's monthly expenditure on Clothing and monthly amount given by A to his son is Rs.24000, then find A's annual expenditure on house rent.  
 (a) Rs.500000    (b) Rs.540000    (c) Rs.550000  
 (d) Rs.560000    (e) Rs.600000
- 58.** A can complete a piece of work in 33 days and C is three times more efficient than A. Ratio of efficiency of B to that of C is 3 : 2. If all three starts working together, then find in how many days the work will be completed?  
 (a)  $2\frac{1}{2}$  days      (b) 5 days      (c) 3 days  
 (d) 4 days      (e)  $4\frac{1}{2}$  days
- 59.** A, B & C entered into a partnership business. Amount invested by B is 3 times of amount invested by A and ratio of amount invested by C to that of B is 1 : 2. After 11 months, all 3 withdrew Rs.Y. If ratio of C's profit share to total profit at the end of the year is 35 : 129, then find profit sharing ratio of A to that of B at the end of the year.  
 (a) 19 : 75      (b) 41 : 53      (c) 67 : 27  
 (d) 23 : 71      (e) 31 : 63

60. A vessel contains milk and water in the ratio 3 : 1. When 80l mixture is taken out and completely replaced by milk, then milk becomes 700% of the water in the vessel. Find original quantity of the vessel.  
 (a) 240 lit (b) 280 lit (c) 320 lit  
 (d) 200 lit (e) 160 lit

**Directions (61-65):** Study the pie chart and table given below and answer the following questions.

Pie chart shows the percentage distribution of total employees of a company - X in 4 different departments (A, B, C & D) and table shows the number of male employees in these departments.

**Total employees = 2000**



Departments	Male employees
A	240
B	225
C	350
D	160

61. If 38% of the female employees in C are newly recruited and ratio of male employees to female employees who are newly recruited in C is 3 : 5, then find total number of old employees in C is what percent of total employees in C?  
 (a)  $83\frac{1}{3}\%$  (b)  $74\frac{2}{3}\%$  (c)  $65\frac{2}{3}\%$   
 (d)  $70\frac{2}{3}\%$  (e)  $78\frac{1}{3}\%$
62. If ratio of male employees to female employees in company - Y is 4 : 3 and male employees in company - Y are 300% more than male employees in C of company - X, then find total employees in company - Y are how much more or less than that of in company - X?  
 (a) 450 (b) 800 (c) 560  
 (d) 630 (e) 750
63. If 16% female employees of B left B and joined D, then find the percentage change in no. of female employees in D after female employees of B joined D.  
 (a)  $25\frac{2}{3}\%$  (b)  $34\frac{2}{3}\%$  (c)  $18\frac{1}{3}\%$   
 (d)  $30\frac{2}{3}\%$  (e)  $35\frac{1}{3}\%$

64. If male employees in company - K are 425 more than female employees in B in company - X, then find average number of female employees in A, C & D in company - X are how much less than male employees in company - K?  
 (a) 400 (b) 450 (c) 360  
 (d) 480 (e) 520
65. If ratio of employees who are in (18-40) age group to employees who are in (40+) age group in A, B, C & D in company - X is 13 : 12, 13 : 37, 4 : 1 & 33 : 7 respectively, then find ratio of total no. of employees of (18 - 40) age group to total no. of employees of (40+) age group employees in company - X.  
 (a) 2 : 1 (b) 9 : 5 (c) 5 : 4  
 (d) 3 : 2 (e) None of the above.

**Directions (66-72):** Find the wrong number in the following number series.

66. 8, 10, 20, 70, 320, 1570, 7830  
 (a) 7830 (b) 10 (c) 8  
 (d) 320 (e) 1570
67. 18, 20, 43, 133, 537, 2691, 16163  
 (a) 43 (b) 16163 (c) 133  
 (d) 537 (e) 2691
68. 124, 140, 108, 156, 92, 172, 78  
 (a) 108 (b) 124 (c) 78  
 (d) 92 (e) 140
69. 260, 380, 510, 618, 759, 856, 1008  
 (a) 759 (b) 1008 (c) 260  
 (d) 510 (e) 618
70. 267, 343, 610, 953, 1563, 2515, 4079  
 (a) 4079 (b) 953 (c) 343  
 (d) 267 (e) 2515
71. 36, 80, 166, 340, 690, 1392, 2798  
 (a) 690 (b) 36 (c) 340  
 (d) 1392 (e) 80
72. 30, 100, 230, 490, 1010, 2050, 4130  
 (a) 30 (b) 4130 (c) 1010  
 (d) 490 (e) 2050
73. Ratio of present age of A to that of B is 2 : 5, ratio of present age of B to that of C is 25 : 18 and ratio of present age of C to that of D is 12 : 13. If D is 11 years younger than B, then find present age of A.  
 (a) 24 years (b) 20 years (c) 28 years  
 (d) 30 years (e) 18 years
74. Perimeter of a right angled triangle is 60m and length of hypotenuse of right angled triangle is 25m. If base of the right angled triangle is the smallest side, then find length of smallest side.  
 (a) 10m (b) 18m (c) 21m  
 (d) 25m (e) 15m

75. Shopkeeper sells two articles - M & N. He marks article - M 20% above its cost price and he gave 5% discount on it. Cost price of article - N is 20% more than cost price of article - M. If shopkeeper sold article - M at Rs.285 and article - N at 15% profit, then find selling price of article - N.

- (a) Rs.345      (b) Rs.230      (c) Rs.460  
(d) Rs.414      (e) Rs.322

**Directions (76-80):** The following questions are accompanied by two statements (I) and (II). You have to determine which statements(s) is/are sufficient/necessary to answer the questions.

- (a) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the question.  
(b) Statement (II) alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.  
(c) Both the statements taken together are necessary to answer the question, but neither of the statements alone is sufficient to answer the question.  
(d) Either statement (I) or statement (II) by itself is sufficient to answer the question.  
(e) Statements (I) and (II) taken together are not sufficient to answer the question.

76. Let  $t$  be total number of balls in a bag. Balls are of 3 colors - black, white and red. Find  $t$ .

- (I) when one ball is drawn then Probability of getting a black ball is  $\frac{1}{6}$ , a red ball is  $\frac{1}{6}$  & a white ball is  $\frac{2}{3}$ .  
(II) If one white ball is lost and a ball is drawn, then probability of not getting a white ball is  $\frac{8}{23}$ .

77. Shivam and Deepak invested in a partnership business in the ratio of 4 : 5. Find the profit share of Shivam.

- (I) Shivam invested Rs.12000 and period of investment of Shivam and Deepak is 10 months and 4 months respectively.  
(II) Ratio of period of investment of Shivam and Deepak is 5 : 2 and Deepak's profit share is Rs.12000 less than Shivam's profit share.

78. Calculate the marked price of item?

- (I) Shopkeeper marked the article 80% above its cost price and shopkeeper earned Rs.100 profit on the article.  
(II) Ratio of marked price and discount allowed on the article is 3 : 1.

79. Calculate the rate of interest.

- (I) Pankaj earned Rs.4500 as interest, when he invested Rs.6000.  
(II) Pankaj invested equal amount at SI and at CI. After 2 years, CI received by Pankaj is Rs.90 more than the SI received by Pankaj.

80. Find the volume of cylinder.

- (I) Curved surface area of cylinder is  $1760 \text{ cm}^2$  and total surface area of cylinder is 70% more than its curved surface area.  
(II) Volume of cylinder is twice of that of cone. Radius of cylinder and cone is equal and ratio of height of cylinder to that of cone is 2 : 3. Height of cone is 30 cm.

**Directions (81-85):** In the following questions, two quantities (I) and (II) are given. You have to solve both the quantities and mark the appropriate answer.

81. **Quantity I:** In how many ways a committee of 4 members with at least 2 women can be formed from 8 men and 4 women?

**Quantity II:** How many 3-digit numbers which are divisible by 3 can be formed from 0,1,2,3,4,5,6,7,8,9, such that 3-digit number always ends with an even number?

- (a) Quantity I < Quantity II  
(b) Quantity I  $\leq$  Quantity II  
(c) Quantity I > Quantity II  
(d) Quantity I  $\geq$  Quantity II  
(e) Quantity I = Quantity II or no relation.

82. **Quantity I:** A man invested Rs.5900 for 3 years in a scheme offering R% p.a. at SI and received Rs.3186 as interest after 3 years. If the man invested Rs.7900 at  $(R+5)\%$  p.a. at SI for 3 years, then find interest received by man (in Rs.).

**Quantity II:** A man invested Rs.X at 13% p.a. at CI for 2 years and interest received by him after 2 years is Rs.2325.96. Find X (in Rs.).

- (a) Quantity I < Quantity II  
(b) Quantity I  $\leq$  Quantity II  
(c) Quantity I > Quantity II  
(d) Quantity I  $\geq$  Quantity II  
(e) Quantity I = Quantity II or no relation.

83. **Quantity I:** Ratio of CP to MP of an article is 19 : 30. Shopkeeper allowed 24% discount and earned 20% profit on selling the article. If SP of the article is Rs.912, then find difference between amount of profit earned and amount of discount allowed (in Rs.).

**Quantity II:** Shopkeeper marked an article 70% above its cost price and he allowed 40% discount on it. If shopkeeper sold the article at Rs.183.6, then find sum of amount of profit earned and amount of discount allowed (in Rs.).

- (a) Quantity I < Quantity II  
 (b) Quantity I  $\leq$  Quantity II  
 (c) Quantity I > Quantity II  
 (d) Quantity I  $\geq$  Quantity II  
 (e) Quantity I = Quantity II or no relation.

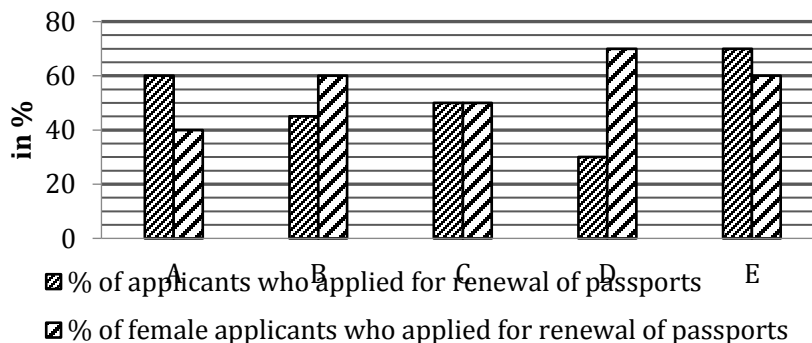
**84. Quantity I:** A boat can cover distance of 480 km each in downstream and in upstream in total 11 hours. If ratio of speed of boat in still water to that of stream is 11 : 1, then find speed of boat in still water (in km/hr.).

**Quantity II:** A boat can cover a distance of 350 km in downstream in 3.5 hours and can cover a distance of 380 km in upstream in 5 hours. Find speed of boat in still water (in km/hr.).

- (a) Quantity I < Quantity II  
 (b) Quantity I  $\leq$  Quantity II  
 (c) Quantity I > Quantity II  
 (d) Quantity I  $\geq$  Quantity II  
 (e) Quantity I = Quantity II or no relation.

**Directions (86-91):** Study the bar chart given below and answer the following questions.

Bar chart shows the percentage of applicants who applied for renewal of passports on 5 different passport centers (A, B, C, D & E) and percentage of female applicants who applied for renewal of passports out of total applicants who applied for renewal of passports.



**Note:** Total number of applicants on a particular center = Number of applicants for new passport on that center + Number of applicants for renewal of passport on that center.

**86.** If total number of applicants in E are 70% of total number of applicants in A and ratio of male to female applicants who applied for new passports in A & E is 7 : 3 & 2 : 1 respectively, then find ratio of total female applicants in A to total female applicants in E.  
 (a) 85 : 91      (b) 90 : 91      (c) 90 : 93  
 (d) 88 : 91      (e) None of the above.

**87.** If difference between male and female who applied for new passports from C is 800 and ratio of male to female who applied for new passports from C is 2 : 3, then find total female who applied for passports from C is what percent of total male who applied for passports from C?  
 (a)  $120\frac{2}{9}\%$       (b)  $122\frac{2}{9}\%$       (c)  $125\frac{2}{9}\%$   
 (d)  $116\frac{2}{9}\%$       (e)  $130\frac{2}{9}\%$

**85. Quantity I:** B's present age is 60% more than A's present age and ratio of present age of B to that of C is 5 : 2. D is 8 years younger than B and D's present age is twice of that of C. Find average of present age of A, B, C & D (in years).

**Quantity II:** Present age of R is equal to average of present age of P & Q. 4 years hence, age of P is twice of age of Q at that time. If R is 15 years younger than P, then find age of younger person among P, Q & R.

- (a) Quantity I < Quantity II  
 (b) Quantity I  $\leq$  Quantity II  
 (c) Quantity I > Quantity II  
 (d) Quantity I  $\geq$  Quantity II  
 (e) Quantity I = Quantity II or no relation.

**88.** If difference between male and female who applied for renewal of passports from A is 2400, then find number of applicants who applied for new passport from A.  
 (a) 9000      (b) 6000      (c) 7000  
 (d) 10000      (e) 8000

**89.** If total applicants from B are 5000 less than total applicants from E and male applicants who applied for renewal of passports from B is 3600, then find total number of applicants who applied for new passports from B & E together  
 (a) 18500      (b) 21500      (c) 15500  
 (d) 19500      (e) 24500

90. If total applicants from C & E together are 30000 and female applicants who applied for renewal of passports from C are 800 more than that of from E, then find average number of applicants who applied for new passports from C & E.

- (a) 9000                      (b) 8000                      (c) 6500  
(d) 4000                      (e) 11500

91. If ratio of applicants who applied for new passports from A to that of C is 2 : 3, then find total candidates who applied from C is what percent more than total candidates who applied from A?

- (a) 80%                      (b) 50%                      (c) 90%  
(d) 40%                      (e) 20%

92. When 2 cards are drawn randomly from a pack of cards, then find the probability of getting at most 1 ace card.

- (a)  $\frac{209}{221}$                       (b)  $\frac{10}{13}$                       (c)  $\frac{215}{221}$   
(d)  $\frac{16}{17}$                       (e)  $\frac{220}{221}$

93. Ayush invested Rs.75000 in a scheme offering R% p.a. SI for 5 years and Rs.50000 in another scheme offering 12%p.a. CI compounding annually for 2 years. If difference in 2<sup>nd</sup> year CI and 2<sup>nd</sup> year SI is Rs.2220, then find value of R%.

- (a) 4%                      (b) 8%                      (c) 6%  
(d) 12%                      (e) 14%

94. Train - Y crosses Train - X while running in same direction in 120 seconds and Train - Y crosses Train - X in  $\frac{40}{3}$  seconds while running in opposite direction. If Train - X is running at 120 km/hr, then find speed of Train - Y (in km/hr).

- (a) 150                      (b) 180                      (c) 200  
(d) 160                      (e) None of the above.

95. A two digit number increased by 27 when its digits are reversed and square of digit at units place is 33 more than the square of the digit at tens place of the original number respectively. Find the original number.

- (a) 69                      (b) 58                      (c) 25  
(d) 14                      (e) None of the above.

**Directions (96-100):** Study the passage given below and answer the following questions.

There are 3 cities - Delhi, Dhaka and Bangkok. Total distance between Delhi - Dhaka, Dhaka - Bangkok and Delhi - Bangkok is 19800 km. Distance between Dhaka - Bangkok is 80% of the distance between Delhi - Bangkok and ratio of distance between Delhi - Dhaka to distance between Bangkok - Dhaka is 27 : 32.

Fares of 3 different flight operators (A, B & C) on these 3 routes (Delhi - Dhaka, Dhaka - Bangkok and Delhi - Bangkok) are -

**Delhi - Dhaka:** Fare of C is 25% more than that of B and fare of A is Rs.2700 less than that of B. Ratio of fare of A to that of C is 3 : 5.

**Delhi - Bangkok:** Average fare of A & B is Rs.20000 and fare of C is Rs.8000 more than average fare of A & B. Average fare of B & C is Rs.26000.

**Dhaka - Bangkok:** Fare of B is Rs.16000 and ratio of fare of A to that of B to that of C is 6 : 5 : 8.

96. If Veer wants to travel from Delhi - Dhaka and then Dhaka - Bangkok without changing flight operator, then which flight operator would be the cheapest option among A, B & C for Veer.

- (a) A                      (b) B                      (c) C  
(d) Either A or B                      (e) Either A or C

97. If Deepak is travelling from Dhaka - Bangkok and Bangkok - Delhi from C, then find the amount paid by Deepak per km for the entire trip.

- (a) Rs. 3.11/km                      (b) Rs. 3.98/km                      (c) Rs. 3.42/km  
(d) Rs. 3.62/km                      (e) Rs. 3.01/km

98. For which of the following trip, the fare will be maximum?

- (a) A, Delhi - Bangkok  
(b) C, Delhi - Dhaka  
(c) B, Dhaka - Bangkok  
(d) A, Dhaka - Bangkok  
(e) B, Delhi - Dhaka

99. On Dhaka - Bangkok route, which flight operator is charging lowest fare per km?

- (a) A                      (b) B                      (c) C  
(d) Either B or C                      (e) Cannot be determined.

100. Find average fare of A, B & C on Delhi - Dhaka route.

- (a) Rs.12000                      (b) Rs.11500                      (c) Rs.10400  
(d) Rs.11200                      (e) Rs.10800

## ENGLISH LANGUAGE

**Directions (101-105):** Read the passage carefully and answer the questions based on the passage.

Enjoyed by humans since prehistoric times, music has been variously described as the food of love, a shorthand for emotion, and the universal language of humankind. For

some, those seemingly rare individuals who do not express an enthusiasm for music are viewed with deep suspicion, like those who don't eat chocolate, who are unmoved by Shakespearean drama, or who fail to express delight over an Ashes victory. Yet recently the assumption that the

enjoyment of music is a near-universal human trait has been questioned, with evidence that some people simply don't derive pleasure from music, and that this does not reflect or result from a general lack of pleasure in life's activities. It is evident that these systems evolved to process stimuli of biological significance: the ability to discriminate tones in human speech provides information about the gender, size and emotional state of the speaker, and \_\_\_\_\_(1)\_\_\_\_\_ in some languages. Music is assumed to be a fortuitous by-product of this evolutionary development, and is more fully processed in the brain's right hemisphere, which is more associated with the representation of emotions than the left hemisphere.

It has been theorised that aesthetic responses to music may derive from the similarity of musical tones to tonal characteristics of human speech associated with different emotional states. If so, it would be hypothesised that the pleasure one finds in music would be related to skills in and enjoyment of social intercourse. Conversely, a lack of musical appreciation would predict deficiencies in social engagement: in Shakespeare's words, for the man that hath no music in himself, "the motions of his spirit are dull as night and his affections dark as Erebus: Let no such man be trusted". The inability to enjoy music has been investigated by a team of Spanish researchers, who started with the assumption that the condition may result from deficits in music perception – termed amusia – or a more general inability to derive pleasure from everyday activities – formally labelled anhedonia.

In Current Biology the research team reported on their investigation of the hypothesis that those who do not enjoy music may exhibit broader abnormalities of the systems of the brain involved in reward, motivation and arousal. They examined three groups of participants with high, average and low pleasure ratings in response to music. They undertook a monetary incentive delay task, which required them to respond quickly to targets in order to earn or avoid losing real money. The results confirmed that some otherwise healthy and happy people with normal music perception report that they do not enjoy music and show no autonomic responses to its presentation. This occurs in the presence of a normal behavioural and physiological response to monetary rewards, which demonstrates that a lack of enjoyment of music is not associated with general dysfunction in the brain's reward network. This demonstration of the existence of a domain-specific anhedonia – in this case, specific musical anhedonia – suggests that there are individual differences in access to the brain's reward system.

- 101.** How has the author biologically connected music with emotions?
- general improper functioning of brain to lead to imbalance of emotions thus resulting in music anhedonia
  - both of them are processes within the right hemisphere of the brain
  - reduction in the activity of certain hemisphere of the brain affects emotions thus reducing joy arising from music
  - both (a) and (b)
  - all are correct
- 102.** Which of the following statement is not correct in context of the study conducted in relation to music anhedonia?
- there were certain complete normal and healthful participants who didn't enjoy music
  - they deduced that even within a usual brain functioning and response mechanism, it was possible not to enjoy music
  - researchers had used monetary incentive within the study they conducted
  - lack of ability to enjoy could be clearly related to malfunctioned responses towards rewards
  - not feeling the pleasure of music might be related with larger malfunctioning within the brain
- 103.** Which of the following statement can be inferred from the passage given above?
- Specific musical anhedonics show reduced functional connectivity between cortical regions associated with auditory processing.
  - While most people enjoy music and find it rewarding, there is substantial individual variability in the experience and degree of music-induced reward.
  - While music may be the universal language, it doesn't speak to everyone.
- only (iii)
  - only (i) and (ii)
  - only (ii) and (iii)
  - all of the above
  - none of these
- 104.** What would be the presumption drawn in case there exists a connection between response to music and characteristics of human speech?
- lack of brain connectivity with fluency of speech might result to anhedonia
  - music would fail to acquire reward value if a person isn't able to identify emotions through speech
  - a person enjoying social dealings would find pleasure in music
  - subjects could be insensible to music if they lack the ability to speak
  - none of these

**105.** Which of the following phrases could fit in the blank (1), to make the statement grammatically correct and contextually meaningful?

- (a) sensitivity based on their responses
- (b) measuring their level of sensitivity
- (c) origins of specific musical anhedonia
- (d) differentiates meaning of utterances
- (e) none of these

**Directions (106-110):** In each of the given questions, a pair of words has been given which is then followed by three statements. Find the statements where both the words grammatically and contextually fit in the given statements.

**106. Equip: Arm**

- (a) A vassal needed economic resources to \_\_\_\_\_ the cavalry he was bound to contribute to his lord to fight his frequent wars.
  - (b) Readers may not even notice some of the more \_\_\_\_\_ elements like word balloons that get cut off by the panel borders.
  - (c) The stick was used to launch the missile with more force and accuracy than could be accomplished by simply hurling it with the \_\_\_\_\_ alone
- (a) Only A      (b) Only B      (c) Both A & B  
(d) Both B & C      (e) All of the above

**107. Ponder: Study**

- (a) Take a few minutes and \_\_\_\_\_ the question before you jump to a conclusion.
  - (b) Conjoint repression of civil and religious liberty had made thoughtful men \_\_\_\_\_ matters of church polity.
  - (c) The purpose of this \_\_\_\_\_ is to document the structure of a warm front in northeast Europe.
- (a) Only A      (b) Only B      (c) Both B & C  
(d) Both A & B      (e) None of these

**108. Anomaly: Departure**

- (a) Since my son has a history of failing classes, his good grades are a welcome \_\_\_\_\_.
  - (b) It was quite an/a \_\_\_\_\_ when the temperature reached 101 degrees in December in Michigan.
  - (c) The attention of the council was drawn to an/a \_\_\_\_\_ in the existing arrangements for patients suffering from pulmonary tuberculosis.
- (a) Only A      (b) Only B      (c) Only C  
(d) Both A & C      (e) All (A), (B), (C)

**109. Accolade: Recognition**

- (a) Facebook has lost a federal appeal in a lawsuit over facial \_\_\_\_\_ data, setting the

company up to face a massive damages payment over its privacy practices.

- (b) A majority of workers with university degrees say they won't enrol in new training unless they get \_\_\_\_\_ for prior training and experience.
  - (c) For their exceptional bravery the firefighters received \_\_\_\_\_ from both local and national officials
- (a) All A, B & C      (b) Both A & B      (c) Both B & C  
(d) Only C      (e) None of these

**110. Pinnacle: Height**

- (a) He's about the same \_\_\_\_\_ and weight but he's younger.
  - (b) Edward reached the \_\_\_\_\_ of the political world when he was elected prime minister of his country
  - (c) At last we could see Ambadji on a \_\_\_\_\_ ahead of us
- (a) Both A & C      (b) Both B & C      (c) Both A & B  
(d) All A, B, C      (e) Only B

**Directions (111-115):** In each of the given questions, a word has been highlighted in the statement. In the options given below, a pair of words has been given. Find the pair of the word where the first word is the synonym of the highlighted word whereas the second word is the antonym of the given word.

**111. Valour** and sacrifice of the Armed Forces will be honoured at this year's India Day parade, the largest parade outside India to mark the country's independence that brings together thousands of members of the diaspora for one of the biggest cultural extravaganzas in the US.

- (a) timidity: wimpiness      (b) audacity: fortitude  
(c) gallantry: cojone      (d) bravery: cowardice  
(e) none of these

**112.** Veteran attorneys interviewed by the Guardian said Epstein's death would not **impede** federal prosecutors from pursuing conspiracy cases against others.

- (a) extol: substitute      (b) facilitate: hinder  
(c) withstand: surrender      (d) abstruse: remission  
(e) restrain: expedite

**113.** The U.S. **appreciates** Turkey and Russia's efforts to reach a cease-fire in Idlib's de-escalation zone and underlined that the attacks targeting civilians must stop

- (a) asinine: recuperate      (b) rectify: avenge  
(c) acknowledge: disparage      (d) tarnish: eschew  
(e) exaggerate: entail

**114.** During the outing, Isha was seen donning a simple yet **elegant** white kurta and palazzo set with floral print and gold gotta patti work from the house of Sabyasachi.

- (a) diminutive: prolific (b) graceful: gauche  
(c) conceit: timid (d) handy: redundant  
(e) none of these

**115.** Farmers **abhor** selling corn at harvest, Utterback acknowledges. "But getting rid of 2019 corn sooner than later would be prudent — don't hold onto it until next summer," he says.

- (a) commend: derelish (b) applaud: acclaim  
(c) abominate: execrate (d) loathe: admire  
(e) disdain: despise

**Directions (116-120):** Given below are five statements, followed by a set of questions. Answer each of the question based on the given statements.

- (a) Whatever one may (A)/ say of her, no one (B)/ dare call in question (C)/ her honesty of purpose. (D)/ No error (E)  
(b) When Mrs. Paul heard his knock,(A)/ she went to the door and opened it, (B)/but she did not recognize him at first (C)/because she was not wearing her glasses.(D)/ No error (E)  
(c) Following a succession of Nazi defeats and the suicide (A)/of Adolf Hitler, Germany signed the instrument of surrender on May 7, 1945, (B)/in Reims in eastern France. The document stipulated (C)/ that hostilities had to cease tomorrow. (D)/ No Error (E)  
(d) Loui and Satpute will use a similar (A)/physiological test, in addition to (B)/issuing two kinds of surveys, to triple-check that their (C)/ participants truly have musical anhedonia. (D)/ No Error (E)  
(e) We would have enjoyed the (A)/ journey more if the old lady in (B)/the adjacent compartment (C)/ would not have snorted all the time. (D)/ No Error (E)

**116.** Which of the following parts in statement (A) has error?

- (a) C (b) B (c) D  
(d) A (e) No Error

**117.** Which of the following parts in statement (B) has error?

- (a) B (b) C (c) D  
(d) A (e) No Error

**118.** Which of the following parts in statement (C) has error?

- (a) C (b) A (c) B  
(d) D (e) No Error

**119.** Which of the following parts in statement (D) has error?

- (a) A (b) C (c) D  
(d) B (e) No Error

**120.** Which of the following parts in statement (E) has error?

- (a) B (b) D (c) A  
(d) C (e) No Error

**Directions (121-125):** Read the following passage and answer the following questions. Some words are highlighted to help you answer some of the questions.

The last decade has seen many changes and considerable progress in the Indian car industry. The country became the fourth largest market for passenger cars. Domestic sales grew at 8 percent annually, reaching 3.4 million cars in 2018-19. Considering the country's potential and needs, this was not satisfactory. In the previous decade, growth was at 15 percent. Car penetration is only 28 per thousand, far lower than most Southeast Asian countries. The entry of global players into the Indian market and cars being of international standards led to exports increasing to 680,000 vehicles in 2018-19. Safety and emission standards during 2019-20 are similar to Europe, with all vehicles converting to Bharat VI by the end of March 2020. This has meant an increase in the cost of vehicles and \_\_\_\_\_.

The Indian consumer was used to seeing car models remaining unchanged for long periods. Intense competition in the market saw all manufacturers launching or upgrading existing models in fairly short intervals. The industry became more like that of a developed country. Competition also led to better technology benefiting the consumer. The average fuel efficiency of cars increased from about 16 km per litre to 19.2 km per litre. This resulted not only in reducing fuel consumption but also lowered CO2 emissions.

The sale of automatic transmission cars, which was negligible at the start of the decade, increased to 12 percent, largely because of the introduction of the lower cost manual automatic transmission, which gave the benefit of not increasing fuel consumption. Car sales extended beyond bigger cities to rural areas and small towns, a positive sign for the future of this industry. Maruti Suzuki sales in 'rural areas' increased from about 5 percent to 40 percent.

An important **driver** of sales growth was the increasing availability of finance for car purchases. The number of consumers who bought cars with borrowed funds increased from 66 to 80 percent. Non-banking financial institutions became important participants in enabling this growth. A major cause of the slowdown of sales in 2019-20 was the difficulty in the availability of finance due to problems in the financial sector. The decade saw the introduction and acceptance of shared platform operators like Uber and Ola. The emerging young car buyer often preferred not to buy a car so that he could enjoy many other experiences that were now available.

Diesel car sales had risen earlier in the decade, but are now in decline. Meeting Bharat VI norms has added considerably to cost. In addition, the Supreme Court ordered that diesel cars older than 10 years would not be allowed in the NCR. In other cases, where a percentage tax was prescribed, the rate was increased. As car prices increased, the amount of road tax went up. Slowing of growth is related to many customers not being able to afford the higher costs of acquisition.

- 121.** What were the impetus for the decline of the sales growth in car industry at the end of the decade?
- (a) Financial sector of the country was struggling.  
 (b) Launch of shared platform operators such as OLA and Uber.  
 (c) Increase in the cost due to the implementation of BHARAT VI.  
 (d) Restriction of Diesel cars older than 10 years in the NCR region  
 (e) All of these
- 122.** According to the author, what were the reasons that can quote the similarities between the car industry of India and a developed nation?
- (I) Commencement of shared platform operators like Uber and Ola.  
 (II) Existing models were ameliorated and introduced in short interludes.  
 (III) alleviation in fuel consumption led to the depletion of CO2 particulate matter.
- (a) Only (I) (b) Both (I) and (III)  
 (c) Only (II) (d) Both (II) and (III)  
 (e) None of these.
- 123.** Which of the following phrase can be used to fill the blank (A)?
- (a) acceleration in the sales growth  
 (b) leading to switching to alternatives  
 (c) partly explains the slowing of growth  
 (d) amplifying the CO2 emissions  
 (e) None of these.
- 124.** Which of the following statements is FALSE with reference to the passage?
- (I) Bharat VI is an emission standard that brings changes in the Indian automobile industry in terms of pollutant emissions.  
 (II) Imports have increased due to the admittance of foreign companies in Indian economy  
 (III) Domestic sales in automobile industry declined at the end of the decade.
- (a) Both (I) and (III) (b) only (II)  
 (c) Only (III) (d) Only (I)  
 (e) None of these.
- 125.** According to the passage, choose the most suitable word that reflects the synonym of the highlighted word.
- DRIVER**
- (a) straphanger (b) catalyst (c) prototype  
 (d) chauffer (e) None of these.

**Directions (126-130):** In each of the questions given below, a situation has been stated. Answer the question, based on the paragraph.

- 126.** 'X' is a longtime employee true to the company and respected, maybe even revered, by the workforce. But he just does not seem to be supportive of the company's lean initiative. Even worse, 'X' is beginning to negatively influence some employees. 'X' is \_\_\_\_\_ about company's lean initiative?
- (a) empathetic (b) scientific (c) passionate  
 (d) pessimistic (e) discreet
- 127.** 'Y' was a manager at hotel. After his retirement he started his own food outlet in a small town and gained success. Later, due to some construction plans of government, 'Y' has to close down his business in the area. He again purchases the land in another area, starts his business and works for the success of his restaurant, day and night. 'Y' is a \_\_\_\_\_ person?
- (a) hardworking (b) persevering (c) diligent  
 (d) enthusiastic (e) all of the above
- 128.** Two goats came face to face while crossing a narrow bridge. "Let me pass", said one of them. "Never, you get out of my way", said the other goat. They quarrel each other and lost their balance. They fell into the stream down below and died! Both the goats were \_\_\_\_\_.
- (a) intuitive (b) stubborn (c) persuasive  
 (d) epicurean (e) all of the above
- 129.** Today, at the animal shelter where I volunteer, a little boy and his mom, who had adopted a kitten last week, came into our lobby carrying big bags full of food, toys, blankets, and other supplies we desperately need. The boy's mom said, "Today is his birthday. Instead of birthday presents, he asked his dad and me to help donate to the shelter. The boy was \_\_\_\_\_.
- (a) dramatic (b) creative (c) courageous  
 (d) generous (e) none of the above
- 130.** Bob decided to try his skates, for he had received a pair of shiny new ones for Christmas. His dog, Spot, went with him. When Bob reached the pond, he did not stop to test the ice. He was having a delightful time when suddenly Spot began to bark, for his keen ears had caught the sound of cracking ice. Bob did not heed him, but kept on skating. Suddenly the ice gave way. Spot dashed to the place where his little master had disappeared and with some difficulty succeeded in pulling him out. Spot was a \_\_\_\_\_ dog.
- (a) honest (b) faithful (c) leader  
 (d) cultured (e) notorious

**Directions (131-135):** Read the passage given below and answer the questions based on the information provided in the passage. Certain words have been highlighted to aid in answering the questions.

The shooting down of a passenger plane by Iran's military on Wednesday, a few hours after it launched missile attacks on U.S. troops in Iraq, is the most tragic outcome of the recent spike in U.S.-Iran tensions. The Ukrainian jet with 176 aboard was hit by an Iranian surface-to-air missile shortly after it took off from Tehran's Imam Khomeini Airport. After initially rejecting western assertion that an Iranian missile brought down the plane, Tehran on Saturday said one of its soldiers fired the missile, mistaking the jet for an enemy aircraft "as it turned to a sensitive area". This is not the first time U.S.-Iran tensions have led to an aviation disaster. In 1988, in the last stage of the Iran-Iraq war, a U.S. Navy warship shot down an Iran Air flight over the Gulf, killing all 290 passengers. Then the U.S. troops said they mistook the plane for a military aircraft that was going to attack the ship. Iran says the same today. In both incidents, innocents, who did not have anything to do with the conflict, became victims.

This time it was U.S. President Donald Trump's reckless decision to assassinate Soleimani that pushed both (A). After launching missiles at U.S. troops in Iraq in retaliation for the General's killing, Iran's missile defence systems were on high alert, anticipating **retaliatory** American air strikes. Iran blames "human error" for the attack on the passenger plane. But whatever the context is, it cannot abdicate responsibility for what happened. Ukraine International Airlines says the flight took off after clearance from the airport. The airline also rejects the Iranian military's claim that the plane veered off its route. Iran's admission and apology is a step in the right direction. But it should carry out, along with international investigators, a thorough probe into what led to the "accident", and punish whoever is responsible for the "human error". Such mistakes are unacceptable even in war. Iran should have put in place the highest safety measures and followed international protocols while preparing itself for enemy retaliation. Clearly it did not do so. And innocent people paid a price for Iran's mistake. Both Iran and the U.S. should also ask themselves whether the confrontational path they have chosen since Mr. Trump unilaterally pulled the U.S. out of the Iran nuclear deal, in May 2018, was worth the risk. Both countries were on the brink of an all-out war early this week. At least 226 people, mostly Iranians, have already lost their lives in tragedies related to the Soleimani killing (over 50 were killed in a stampede at the funeral). If Iran is sincere in its apology, it should not only unearth what happened and punish the culprits but also take immediate steps to reduce tensions with the U.S.

31. What are the steps that Iran can take in order to bring justice to the victims of the Plane crash?
- (a) Wage a full-fledged war against the Americans and eliminate the attackers of Soleimani.

- (b) Prevent any plane from entering the airspace of Iran to disrupt the aviation network worldwide.
- (c) Increase the oil prices to bleed countries financially and show the world the might of Iran.
- (d) Enable a thorough investigation to unravel the sequence of events which led to the tragic crash in order to punish the guilty as well as de-escalate with America to prevent such future events.
- (e) (d) and (c)

132. Which of the following phrase could fit in the blank (A), to make the statement grammatically correct and contextually meaningful?

- (a) to rethink whether their capability to educate people was lacking.
- (b) countries to have an all-time high cooperation in the fields of military and technology,
- (c) countries to the brink of a war.
- (d) to make friends with Iran to win the military games being organized this year.
- (e) None of the above

133. What was the reason given by the Iranian government for the accidental shooting down of the civilian aircraft?

- (a) The plane had an American flag painted on its wing causing the soldiers to think it was an enemy plane.
- (b) The plane had strayed into a sensitive zone prompting the attack which resulted in the devastating accident
- (c) The flight had taken off without clearance from the Tehran's Imam Khomeini Airport and was declared a threat to national security.
- (d) There was an intelligence input regarding the presence of Americas top general being present in the plane and the attack was a way to kill him
- (e) (b)& (d)

134. Which of the following word is similar to **retaliatory** as mentioned in the passage given above?

- (a) redemption (b)vengeance (c)brisk  
(d) hostility (e) None of the above

135. Which of the statements true in the options given below with respect to the passage?

- (a) Iran took onus of the accident as soon as the news started to do rounds in the media.
- (b) The aircraft was shot down without human intervention as Iran had activated emergency wartime protocols.
- (c) President Trump withdrew from the Iran nuclear deal without consulting Iran.
- (d) It is the for the first time that such a kind of aviation disaster has taken place in Iran.
- (e) None of the above

**Directions (136-140):** Read the passage carefully and answer the questions based on the passage.

2010 was an exciting year for ecommerce. Among other innovations, smartphones and tablets started \_\_\_\_\_ **(A)** \_\_\_\_\_ and, in no time, these devices became the de facto choice for people to make online purchases, inspiring a flurry of technological developments. This set the tone for a decade in which online retail exploded. **(B)** This was the phase during which we **(1) estimated** BigBasket, in 2011, at a time the **(2) launched** worth of the **(3) ecommerce** market in India was **(4) pegged** at \$6.3 billion. By 2017, it grew to \$38.5 billion and, by 2026, it is projected to touch \$200 billion. **(C)** *As we step into the new decade, here's my take on some definitive trends that will shape the Indian retail sector in the next few years, and pave the way for this growth.*

For a country with the second-highest base of internet users in the world, India surprisingly falls behind when it comes to the percentage of people who shop online. Today, \_\_\_\_\_ **(D)** \_\_\_\_\_ in India shop online while the remaining prefer to use the internet only for product research, communication, entertainment and other purposes. What this means is that retailers are sitting on a **(E)habitable** goldmine of potential customers and have the opportunity to tap into over \$50 million worth of ecommerce transactions, driven by over 500 million first-timers to the internet and online shopping; a majority of these users are from 'Bharat', the India of small towns and rural areas. According to a Google-AT Kearney report, by the end of next year, there would be around 175 million online shoppers in India.

36. Which of the following words given in the options should come at the place marked as (A) in the above passage to make it grammatically correct and meaningful? Also, the word should fill in the two sentences given below to make them contextually correct and meaningful.

- (I) As the tumour grows, cells towards its centre, being deprived of vital nutrients, cease \_\_\_\_\_ and become quiescent.
- (II) This obsession with food choice often leads people to cut out the wrong ones, \_\_\_\_\_ the continuation of new diets.
- (a) affiliating      (b) proliferating      (c) enriching  
(d) alleviating      (e) None of these

137. The sentence given in (B) has four words given in bold. Amongst the given bold words which of the followings must interchange to make the sentence grammatically and contextually correct and meaningful?

- (a) 1-2                      (b) 2-3                      (c) 2-4  
(d) 3-4                      (e) None of these.

138. In the above passage, a sentence (C) is given in Italics. There may or may not be an error in one part of the sentence. Choose the part which has an error in it as your answer. If there is no error, then choose option (e) as your answer.

- (a) As we step into the new decade,  
(b) here's my take on some definitive trends that will shape  
(c) shape the Indian retail sector in the next few years,  
(d) and pave the way for this growth.  
(e) No error

139. Choose the most suitable phrase for blank (D) to make the sentence grammatically and contextually correct.

- (a) ecommerce market is being driven by electronics  
(b) India's retail universe and the motto will be embracing  
(c) Technology has already enabled consumers  
(d) just 10 percent of the 500 million active internet users  
(e) None of these

140. A word is given in bold in (E). Choose the word which should replace the word given in bold to make the sentence correct and meaningful. If no change is required, choose option (e) as your answer.

- (a) virtual                      (b) ablaze                      (c) abrasive  
(d) veritable                      (e) No change required

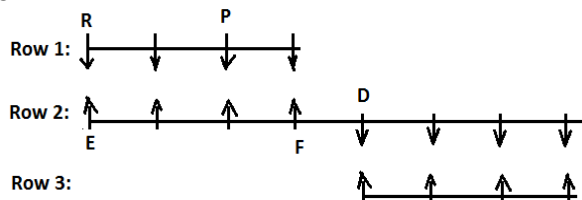


# Solutions

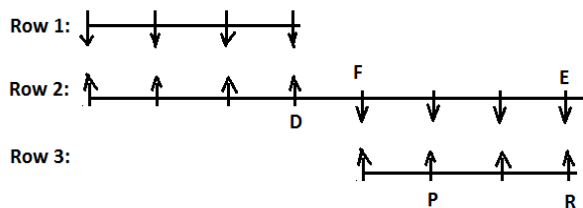
## REASONING ABILITY

**Directions (1-5):** E faces the one who sits second to the right of P. No one sits on the left of E. Only one person sits between P and R. Only two person sits between R and the one who faces F. D sits immediate right of F. D does not sits at the end of the row.

### Case 1

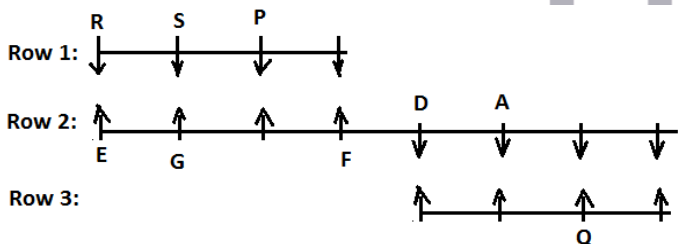


### Case 2

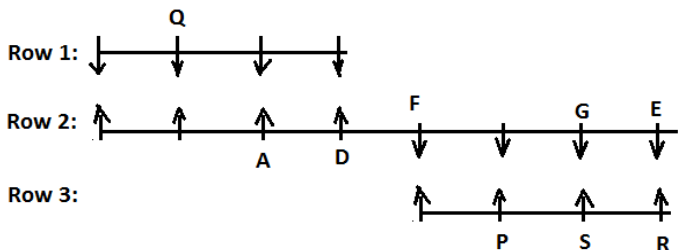


Q sits second to the right of the one who faces D. A face the one who sits on the immediate left of Q. G faces S but does not sits at the end of the row. P is not the immediate neighbour of G.

### Case 1

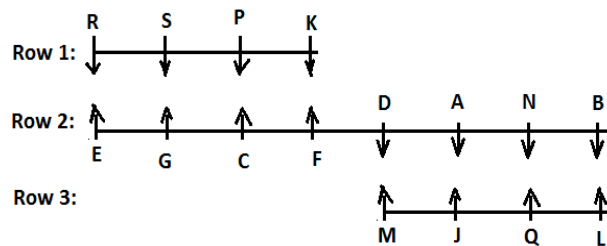


### Case 2

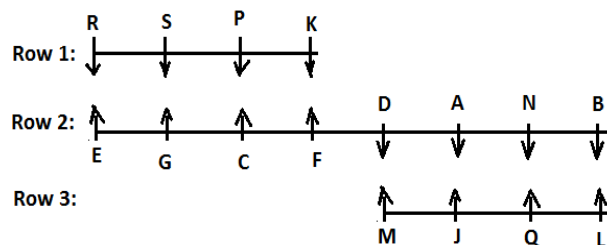


Only one person sits between K and S. K faces the one who sits third to the right of N. J and M are immediate neighbours. J does not faces D. Only two person sits between M and L. More than two persons sits between B and C, who does not faces L.

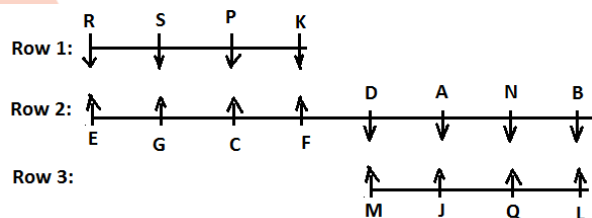
### Case 1



### Case 2



C does not face south. So case 2 gets eliminated.



1. (c);
2. (b);
3. (c);
4. (d);
5. (c);

**Directions (6-10): Logic:** As a first step let's first understand the logic behind the Output. Words are arranged from right end and numbers are arranged from left end. In each step one word and one number are arranged.

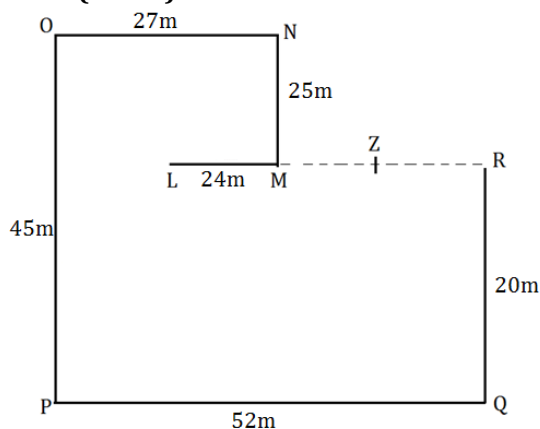
**Word** - Words are arranged in ascending order from left to right according to the English alphabetical order. In the first step the word starting with the letter having higher place value in the English alphabet is arranged first on the right end and also the letters of the word are arranged in increasing alphabetical order within the word.

**Number**- Numbers are arranged in ascending order from left to right. In the first step the highest number is arranged first and then in the second step 2<sup>nd</sup> highest numbered gets arranged and so on till the last step and also after rearranging the numbers add 5 in the even number and subtract 5 in the odd numbers.

**Input: IMRE 40 69 RBHI 86 PMCN 25 KDSM 57 VATW**  
 Step I: 91 IMRE 40 69 RBHI PMCN 25 KDSM 57 ATVW  
 Step II: 64 91 IMRE 40 PMCN 25 KDSM 57 ATVW BHIR  
 Step III: 52 64 91 IMRE 40 25 KDSM ATVW BHIR CMNP  
 Step IV: 45 52 64 91 IMRE 25 ATVW BHIR CMNP DKMS  
 Step V: 20 45 52 64 91 ATVW BHIR CMNP DKMS EIMR  
 Step V is the last step of the rearrangement.

6. (a); 7. (d); 8. (b);  
 9. (a); 10. (d);  
 11. (c); 12. (b);

**Directions (13-15):**

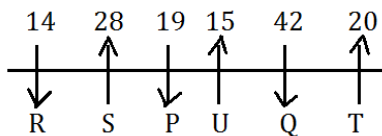


13. (c);  
 14. (c);  
 15. (e);

**Directions (16-20):**

16. (b); I. N % O (False) II. O & M (True)  
 17. (b); I. A \* D (False) II. D & B (True)  
 18. (a); I. H & K (True) II. T \* J (False)  
 19. (c); I. B & G (False) II. G @ B (False)  
 20. (a); I. M & L (True) II. V \* W (False)

**Direction (21-25):**



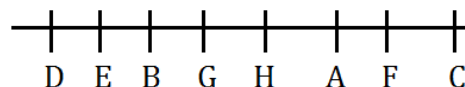
21. (d); 22. (d); 23. (c);  
 24. (a); 25. (b);

**Direction (26-30):** In this new pattern coding decoding each letter, except vowel, is assigned a number from 1-6 So, B-1, C-2, D-3, F-4, G-5, H-6, J-1, K-2, L-3, M-4, N-5, P-6, Q-1, R-2, S-3, T-4, V-5, W-6, X-1, Y-2, Z-3.

Also, each vowel is assigned different digits starting from the digit code of Z. So, for vowels the digit codes are - A-3, E-4, I-5, O-6, U-7.

26. (e); 27. (d); 28. (e);  
 29. (b); 30. (b);

31. (c);



32. (d); Only (I) can be assumed from the given statement as it is mentioned in the given statement that rooftop solar power technology is showing growth.  
 33. (e); Both I and II follows as salary is an important factor for encouraging students to opt teaching as a career option rather than job and changing the eligibility criterion to graduation for being a teacher as generally the students choose their career option after graduation.

**Direction (34-38):**

8 yrs 4 yrs 6 yrs 3 yrs 7 yrs 5 yrs  
 CEO > CMD > MD > GM > CFO > FO  
 6 lakh 14 lakh 4 lakh 7 lakh 5 lakh 9 lakh

34. (b); 35. (a); 36. (b);  
 37. (b); 38. (d);

**Direction (39-40):**

39. (a); For I: Yes, it can be inferred from the given statements as it is clearly mentioned punctuality and sincerity are one of the key points which will surely reviewed.  
 For II: No, it is clear from the given statements that there will be increment but percentage cannot be inferred.  
 For III: No, as it is mentioned by manager that hard work and dedication towards work will be applauded. But, Is there some employee who have done their work with complete determination and enthusiasm, it cannot be inferred. We can assume it but it cannot be inferred from it.  
 40. (c); For I: Yes, it weakens the statement of manager as it is said by manager that increment will be based on performance i.e. hard work and determination. But 15% for all those employees who have completed 1 year undermines the statement by manager.  
 For II: No, it strengthens the statement by manager as performance chart has been prepared and appraisal will be done accordingly.  
 For III: Yes, it weakens because it is mentioned that punctuality is one of the key factor and if those who is punctual and those who gets relaxation time and both are considered as same, then it's a partiality for the punctual coming employee.

**Directions (41-45):** There is only one box is kept between box E and box having 25 pens. Box D is kept immediately above the box containing 63 pens. Box E does not contain 63 pens. Only three boxes are kept between box D and the box containing 12 pens.

Position of box	Case 1		Case 2		Case 3	
	Box	No. of pens	Box	No. of pens	Box	No. of pens
9th	D		D			
8th		63		63		
7th					D	
6th			E			63
5th		12		12		
4th		25		25		25
3rd						12
2nd	E				E	
1st						

Only two boxes are kept between box H and the box having 12 pens. More than three boxes are kept between box C and box H. The box having pens which is a perfect square of 3 is kept immediately above box C. The number of pens in box D is equal to the sum of the number of pens in box H and the box which is placed at 2<sup>nd</sup> position. (i.e. Box H contains 63 pens and 2<sup>nd</sup> position box contains 9 pens so total number of pens in box D is  $(63+9)=72$  pens but it is given that 9<sup>th</sup> position box contains number of pens which is a multiple of 10). So, case 1 and case 2 gets eliminated.

Position of box	Case 1		Case 2		Case 3	
	Box	No. of pens	Box	No. of pens	Box	No. of pens
9th	D	72	D	72		
8th	H	63	H	63		
7th					D	72
6th			E		H	63
5th		12		12		
4th		25		25		25
3rd						12
2nd	E	9		9	E	9
1st	C		C		C	

Only two boxes are kept between the box having 42 pens and box A. Box I is kept at the odd number position but immediately below box F. The number of pens in Box G is equal to the difference between the number of pens in box D and box I. Box B is kept above the box having 8 pens. Box G contains 21 less pens than box A contains.

Case 3		
Position of box	Box	No. of pens
9th	G	60
8th	A	81
7th	D	72
6th	H	63
5th	B	42
4th	F	25
3rd	I	12
2nd	E	9
1st	C	8

41. (c); 42. (d); 43. (c);  
44. (a); 45. (a);

46. (b); **For I:** Yes, as it is mentioned in statement that nowadays there are 4 major industries in Begusarai, then it is obvious employment will increase.

**For II:** No, we cannot say that there is no case of murder, kidnapping or extortion, we can only say it has been reduced. But this reduction has touch the figure of zero, it cannot be inferred.

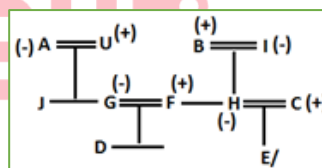
**For III:** Yes, as it is mentioned growth rate of Begusarai is top in Bihar and 5th among all districts in India, and Begusarai has moved from the phase of darkness. It clearly indicates that people of Begusarai are hardworking and keen to move forward.

**For IV:** No, it has been mentioned that nowadays Begusarai has 4 major industries but we cannot say that top industrialists have desire to have their industry in Begusarai.

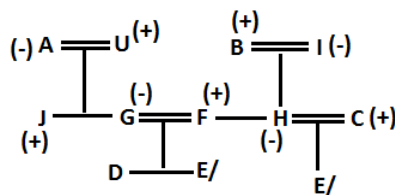
47. (d); I is an assumption. II is a suggestion but not a conclusion. Hence, neither I nor II follows.

**Directions: (48-50):**

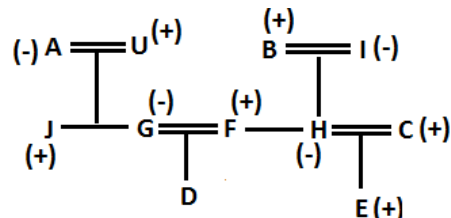
48. (e);



49. (b);



50. (d);



## QUANTITATIVE APTITUDE

**51. (b);** Let number of notes on which 50% return is given and on which 80% return is given of PNB be  $5x$  and  $7x$  respectively.

**ATQ,**

$$7x - 5x = 1000$$

$$x = 500$$

So, number of notes on which 100% return is given by PNB =  $15000 - (7 + 5) \times 500$   
= 9000

$$\text{Required \%} = \frac{9000}{24000} \times 100 = 37.5\%$$

**52. (a);** Let total number of notes received by BOI be  $100x$ .  
So, number of notes on which BOI gave 100% return =  $75x$

And number of notes on which BOI gave 50% return =  $25x \times \frac{3}{8}$

**ATQ,**

$$75x + \frac{75x}{8} = 13500$$

$$\Rightarrow x = 160$$

Hence, total amount received by BOI =  $20 \times 160 \times 100$   
= Rs.3,20,000

And total amount received by Axis bank  
=  $20 \times 10000 = \text{Rs.}2,00,000$

Required difference =  $3,20,000 - 2,00,000$   
= Rs.1,20,000

**53. (c);** Number of notes on which BOB gave 100% return  
=  $\frac{80}{100} \times 15000 = 12,000$

Number of notes on which BOB gave 80% return  
=  $(24000 - 12000) \times \frac{4}{5} = 9,600$

$$\text{Required ratio} = \frac{9600}{12000} = 4 : 5$$

**54. (d);** Total number of notes received by SBI

$$= \frac{9,00,000}{20} = 45,000$$

Total number of notes received by BOI

$$= \frac{60}{100} \times 45000 = 27,000$$

$$\text{Required average} = \frac{15,000 + 45,000 + 10,000 + 27,000 + 24,000}{5}$$

$$= \frac{1,21,000}{5} = 24,200$$

**55. (e);** Number of notes on which 100% return is given by PNB =  $\frac{50}{100} \times 15000 = 7500$

Number of notes on which 50% return is given by PNB =  $(15000 - 7500) \times \frac{5}{12} = 3125$

Number of notes on which 80% return is given by PNB =  $15000 - 7500 - 3125 = 4375$

Required amount =  $(15000 \times 20) - (7500 \times 20) - (3125 \times 10) - (4375 \times 16)$   
=  $300000 - 150000 - 31250 - 70000$   
= Rs.48,750

**56. (e);** Let number of notes on which PNB gave 50% return and 80% return be  $5x$  and  $7x$  respectively.

**ATQ,**

$$7x - 5x = 1500$$

$$x = 750$$

So, number of notes on which PNB gave 100% return =  $15000 - (7x + 5x)$   
=  $15000 - 12 \times 750 = 6000$

Now, number of notes on which Axis bank gave 80% return =  $5 \times 750 - 1750$   
= 2000

So, number of notes on which Axis bank gave 100% return =  $10000 - 2000 - 2000 \times \frac{1}{4}$   
= 7500

Required number of notes =  $6000 + 7500$   
= 13500

**57. (b);** Let A's monthly salary be Rs.100x

So, A's expenditure on house rent =  $30x$

And, A's expenditure on clothing

$$= (100x - 30x) \times \frac{40}{100} = 28x$$

Monthly amount given by A to his son =  $(100x - 30x - 28x) \times \frac{4}{14} = 12x$

**ATQ,**

$$28x - 12x = 24000$$

$$x = 1500$$

A's annual expenditure on house rent =  $30 \times 1500 \times 12$   
= Rs.5,40,000

**58. (c);** Let efficiency of A be  $x$  units/day.

So, efficiency of C =  $\frac{400}{100} \times x$

=  $4x$  units/day

And, efficiency of B =  $4x \times \frac{3}{2}$

=  $6x$  units/day

Now, total work =  $33 \times x = 33x$  units

$$\text{Required days} = \frac{33x}{x+6x+4x} = 3 \text{ days}$$

**59. (d);** Let amount invested by A be Rs. $x$

So, amount invested by B =  $3 \times x$

= Rs.3x

And, amount invested by C =  $3x \times \frac{1}{2}$

= Rs.1.5x

Now, profit sharing ratio of A : B : C

$$= ((x \times 11) + ((x - Y) \times 1)) : ((3x \times 11) + ((3x - Y) \times 1)) : ((1.5x \times 11) + ((1.5x - Y) \times 1))$$

$$= (12x - Y) : (36x - Y) : (18x - Y)$$

**ATQ,**

$$\frac{18x-Y}{12x-Y+36x-Y+18x-Y} = \frac{35}{129}$$

$$\Rightarrow \frac{18x-Y}{66x-3Y} = \frac{35}{129}$$

$$\Rightarrow 774x - 43Y = 770x - 35Y$$

$$\Rightarrow x = 2Y$$

$$\text{Required profit sharing ratio} = \frac{12x-Y}{36x-Y}$$

$$= \frac{24Y-Y}{72Y-Y} \Rightarrow 23 : 71$$

**60. (e);** Let initial quantity of milk and water in the vessel be  $30x$  lit and  $10x$  lit respectively.

$$\text{Quantity of milk taken out from the vessel} = 80 \times \frac{3}{4} = 60 \text{ lit}$$

$$\text{Quantity of water taken out from the vessel} = 80 \times \frac{1}{4} = 20 \text{ lit}$$

**ATQ,**

$$\frac{(30x-60)+80}{10x-20} = \frac{700}{100}$$

$$\Rightarrow x = 4$$

Hence, required original quantity of the vessel =  $30x + 10x = 160$  lit

**61. (b);** Number of female employees in C who are newly recruited

$$= \left( \left( 2000 \times \frac{30}{100} \right) - 350 \right) \times \frac{38}{100} = 95$$

Number of male employees in C who are newly recruited =  $95 \times \frac{3}{5} = 57$

$$\text{Required \%} = \frac{\left( \left( 2000 \times \frac{30}{100} \right) - (95+57) \right)}{2000 \times \frac{30}{100}} \times 100$$

$$= \frac{600-152}{600} \times 100 = 74\frac{2}{3}\%$$

**62. (a);** Male employees in company - Y =  $\frac{400}{100} \times 350 = 1400$

$$\text{Female employees in company - Y} = 1400 \times \frac{3}{4} = 1050$$

$$\text{Required difference} = (1400 + 1050) - 2000 = 450$$

**63. (c);** Female employees who left B

$$= \left( \left( 2000 \times \frac{25}{100} \right) - 225 \right) \times \frac{16}{100} = 44$$

$$\text{Female employees in D} = \left( 2000 \times \frac{20}{100} \right) - 160 = 240$$

$$\text{Required \%} = \frac{(240+44)-240}{240} \times 100 = 18\frac{1}{3}\%$$

**64. (b);** Male employees in company - K

$$= \left( \left( 2000 \times \frac{25}{100} \right) - 225 \right) + 425 = 700$$

Average number of female employees in A, C & D in company - X

$$= \frac{1}{3} \times \left( \left( 2000 \times \frac{75}{100} \right) - (240 + 350 + 160) \right)$$

$$= \frac{1}{3} \times (750) = 250$$

$$\text{Required difference} = 700 - 250 = 450$$

**65. (d);** Employees who are in (18-40) age group in A

$$= \left( 2000 \times \frac{25}{100} \right) \times \frac{13}{25} = 260$$

Employees who are in (18-40) age group in B

$$= \left( 2000 \times \frac{25}{100} \right) \times \frac{13}{50} = 130$$

Employees who are in (18-40) age group in C

$$= \left( 2000 \times \frac{30}{100} \right) \times \frac{4}{5} = 480$$

Employees who are in (18-40) age group in D

$$= \left( 2000 \times \frac{20}{100} \right) \times \frac{33}{40} = 330$$

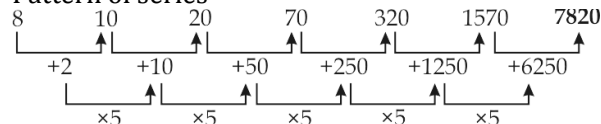
Employees who are in (40+) age group in A, B, C & D in company - X

$$= 2000 - (260 + 130 + 480 + 330) = 800$$

$$\text{Required ratio} = \frac{(260+130+480+330)}{800} = 3 : 2$$

**66. (a);** Wrong number = 7830

Pattern of series -



So, there should be 7820 in place of 7830.

**67. (b);** Here, the pattern followed is

$$18 \times 1 + 2 = 20$$

$$20 \times 2 + 3 = 43$$

$$43 \times 3 + 4 = 133$$

$$133 \times 4 + 5 = 537$$

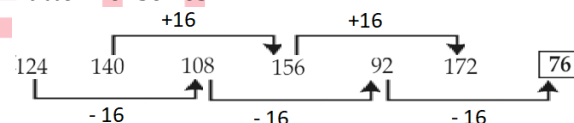
$$537 \times 5 + 6 = 2691$$

$$2691 \times 6 + 7 = 16153$$

So, wrong number is 16163 which should be replaced by 16153

**68. (c);** Wrong number = 78

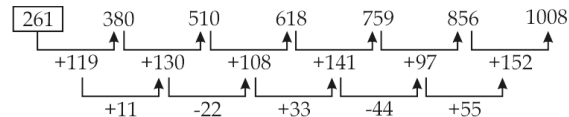
Pattern of series -



So, there should be 76 in place of 78.

**69. (c);** Wrong number = 260

Pattern of series -



So, there should be 261 in place of 260.

**70. (e);** Wrong number = 2515

Pattern of series -

$$267 + 343 = 610$$

$$343 + 610 = 953$$

$$610 + 953 = 1563$$

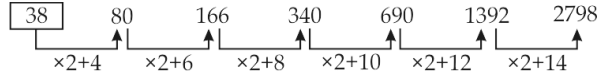
$$953 + 1563 = 2516$$

$$1563 + 2516 = 4079$$

So, there should be 2516 in place of 2515.

71. (b); Wrong number = 36

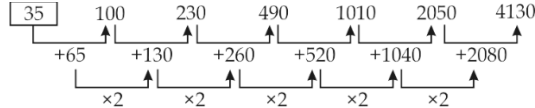
Pattern of series -



So, there should be 38 in place of 36.

72. (a); Wrong number = 30

Pattern of series -



So, there should be 35 in place of 30.

73. (b); Let present age of A and B be  $20x$  years and  $50x$  years respectively.

So, present age of C =  $50x \times \frac{18}{25}$

=  $36x$  years

And, present age of D =  $36x \times \frac{13}{12}$

=  $39x$  years

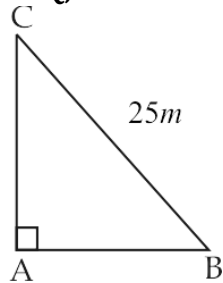
**ATQ,**

$50x - 39x = 11$

$x = 1$

Hence, present age of A =  $20x = 20$  years

74. (e); **ATQ,**



Perimeter of triangle ABC = 60

$AB + BC + CA = 60$

$AB + 25 + CA = 60$

$\Rightarrow AB + CA = 35$

Now, let length of AB be  $x$  m. (as AB is the smallest side)

So, length of CA =  $(35 - x)m$

Now,

$(AB)^2 + (CA)^2 = (BC)^2$

$(x)^2 + (35 - x)^2 = (25)^2$

$\Rightarrow x^2 - 35x + 300 = 0$

$\Rightarrow x = 15, 20$

So, length of smallest side is 15m.

75. (a); Let cost price of article - M be Rs.  $100x$ .

So, marked price of article - M =  $100x \times \frac{120}{100}$

= Rs.  $120x$

And, selling price of article - M =  $120x \times \frac{95}{100}$

= Rs.  $114x$

**ATQ,**

$114x = 285 \Rightarrow x = 2.5$

Hence, cost price of article - N =  $\frac{120}{100} \times 100 \times 2.5$

= Rs.  $300$

So, selling price of article - N =  $300 \times \frac{115}{100} = \text{Rs. } 345$

76. (c); Let number of black, red and white balls be  $a$ ,  $b$  &  $c$  respectively.

**From I:**

**ATQ,**

$\frac{a}{a+b+c} = \frac{1}{6}$

$\Rightarrow 5a = b + c \dots(i)$

And,  $\frac{b}{a+b+c} = \frac{1}{6}$

$\Rightarrow 5b = a + c \dots(ii)$

And,  $\frac{c}{a+b+c} = \frac{2}{3}$

$\Rightarrow c = 2a + 2b \dots(iii)$

On solving (i), (ii) & (iii), we get:

$a : b : c = 1 : 1 : 4$

**From II:**

**ATQ,**

$\frac{c-1}{a+b+c-1} = \frac{15}{23}$

$\Rightarrow 8c = 15a + 15b + 8$

**From I & II:**

Let  $a$ ,  $b$  &  $c$  be  $x$ ,  $x$  &  $4x$  respectively.

$\Rightarrow 32x = 15x + 15x + 8$

$\Rightarrow x = 4$

Hence,  $t = 24$

So, **statement I & II** together are necessary to answer the question.

77. (b); **From I:**

Amount invested by Deepak =  $12000 \times \frac{5}{4}$

= Rs.  $15000$

Profit sharing ratio of Shivam to that of Deepak =  $(12000 \times 10) : (15000 \times 4)$

=  $2 : 1$

**From II:**

Let amount invested by Shivam and Deepak be Rs.  $4x$  and Rs.  $5x$  respectively.

And let period of investment of Shivam and Deepak be  $5y$  months and  $2y$  months respectively.

Now, profit sharing ratio of Shivam to that of Deepak =  $(4x \times 5y) : (5x \times 2y) = 2 : 1$

Now, let total profit be Rs.  $P$ .

**ATQ,**

$\frac{2-1}{3} \times P = 12000$

$\Rightarrow P = \text{Rs. } 36000$

Hence, profit share of Shivam =  $\frac{2}{3} \times 36000 = \text{Rs. } 24000$

Hence, **statement II** alone is sufficient to answer the question.

**78. (c); From I:**

Let cost price of the article be Rs.100x.

So, marked price of the article =  $100x \times \frac{180}{100}$

= Rs.180x

And selling price of the article = Rs.(100x + 100)

**From II:**

Let marked price and discount allowed on the article be Rs.3y and Rs.y respectively.

**From I & II:**

$3y = 180x$

$\Rightarrow y = 60x$

ATQ,

$100x + 100 = 180x - 60x$

$\Rightarrow x = 5$

So, marked price of the article = 180x

= Rs.900

Hence, **statements I and II** together are sufficient to answer the question.

**79. (e);** Let rate of interest be R% p.a.**From I:**

Let period of investment be t years.

**ATQ,**

(if sum is invested at SI);  $\frac{6000 \times t \times R}{100} = 4500$

$\Rightarrow tR = 75$

(if sum is invested at CI);  $6000 \left(1 + \frac{R}{100}\right)^t = 10500$

**From II:**

Let amount invested by Pankaj at SI and at CI be Rs.100x

**ATQ,**

$\left(P \left(1 + \frac{R}{100}\right)^2 - 1\right) - \left(\frac{P \times R \times 2}{100}\right) = 90$

$\Rightarrow PR^2 = 900000$

Hence, **statements I and II** together are not sufficient to answer the question.

**80. (a); From I:**

Let radius and height of cylinder be r cm and h cm respectively.

**ATQ,**

$2\pi rh = 1760$

$\Rightarrow rh = 280 \dots(i)$

And,  $2\pi r(r + h) = \frac{170}{100} \times 1760$

$\Rightarrow r^2 + rh = 476 \dots(ii)$

On solving (i) & (ii), we get:

$r = 14, h = 20$

Hence, volume of cylinder =  $\pi r^2 h = 12320 \text{ cm}^3$

**From II:**

Height of cylinder =  $30 \times \frac{2}{3} = 20 \text{ cm}$

**ATQ,**

$\pi r^2 \times 20 = 2 \times \frac{1}{3} \pi r^2 \times 30$

It can't be solved further.

Hence, **statement I** alone is sufficient to answer the question.

**81. (c); Quantity I:**

Total number of ways =  $({}^8C_2 \times {}^4C_2) + ({}^8C_1 \times {}^4C_3) + ({}^4C_4)$

=  $168 + 32 + 1 = 201$

**Quantity II:**

3-digit numbers which are divisible by 3 and ends with an even number = (102, 108, 114, -----, 996)

Required number of 3 - digit numbers =  $\frac{996-102}{6} + 1$

= 150

So, Quantity I > Quantity II.

**82. (a); Quantity I:****ATQ,**

$\frac{5900 \times R \times 3}{100} = 3186$

$\Rightarrow R = 18\%$

Required interest =  $\frac{7900 \times (18+5) \times 3}{100} = \text{Rs.}5451$

**Quantity II:**

Equivalent rate of interest of 13% p.a. for 2 years

at CI =  $13 + 13 + \frac{13 \times 13}{100} = 27.69\%$

**ATQ,**

$\frac{X \times 27.69}{100} = 2325.96$

$\Rightarrow X = \text{Rs.}8400$

So, Quantity I < Quantity II.

**83. (c); Quantity I:**

Let CP & MP of an article be Rs.19x and Rs.30x respectively.

**ATQ,**

$19x \times \frac{120}{100} = 912$

$\Rightarrow x = 40$

Required difference =  $30x \times \frac{24}{100} - 19x \times \frac{20}{100}$

=  $7.2x - 3.8x = \text{Rs.}136$

**Quantity II:**

Let cost price of the article be Rs.100x

So, marked price of the article =  $100x \times \frac{170}{100}$

= Rs.170x

And, selling price of the article =  $170x \times \frac{60}{100}$

= Rs.102x

**ATQ,**

$102x = 183.6$

$\Rightarrow x = 1.8$

Required sum =  $170x \times \frac{40}{100} + (102x - 100x)$

=  $68x + 2x = \text{Rs.}126$

So, Quantity I > Quantity II.

**84. (e); Quantity I:**

Let speed of boat in still water & speed of stream be '11x km/hr.' and 'x km/hr.' respectively.

**ATQ,**

$$\frac{480}{11x-x} + \frac{480}{11x+x} = 11$$

$$\Rightarrow x = 8$$

So, speed of boat in still water = 11x = 88 km/hr.

**Quantity II:**

Let speed of boat in still water & speed of stream be 'a km/hr.' and 'b km/hr.' respectively.

**ATQ,**

$$\frac{350}{3.5} = (a + b)$$

$$\Rightarrow (a + b) = 100 \quad \dots(i)$$

$$\text{And, } \frac{380}{5} = (a - b)$$

$$\Rightarrow (a - b) = 76 \quad \dots(ii)$$

On solving (i) & (ii), we get:

$$a = 88 \text{ km/hr.}$$

So, Quantity I = Quantity II.

**85. (c); Quantity I:**

Let A's present age be 10x years.

$$\text{So, B's present age} = 10x \times \frac{160}{100}$$

$$= 16x \text{ years}$$

$$\text{And, C's present age} = 16x \times \frac{2}{5} = 6.4x \text{ years}$$

$$\text{And, D's present age} = 2 \times 6.4x$$

$$= 12.8x \text{ years}$$

**ATQ,**

$$16x - 12.8x = 8$$

$$\Rightarrow x = 2.5$$

$$\text{Hence, required average} = \frac{10x+16x+6.4x+12.8x}{4}$$

$$= 11.3x = 28.25 \text{ years}$$

**Quantity II:**

Let present age of P be p years.

So, present age of R = (p - 15) years

**ATQ,**

$$\text{Present age of Q} = (2 \times (p - 15)) - p$$

$$= (p - 30) \text{ years}$$

$$\text{Now, } (p + 4) = 2 \times (p - 30 + 4)$$

$$\Rightarrow p = 56$$

Hence, present age of R = (p - 15) years

$$= 41 \text{ years}$$

And, present age of Q = (p - 30) years

$$= 26 \text{ years}$$

So, required age = 26 years

So, Quantity I > Quantity II.

**86. (b);** Let total number of applicants in A be 100x.

So, total number of applicants in E = 70x

Female applicants who applied for renewal of passports from A =  $100x \times \frac{60}{100} \times \frac{40}{100} = 24x$

Female applicants who applied for new passports from A =  $100x \times \frac{40}{100} \times \frac{3}{10} = 12x$

Female applicants who applied for renewal of passports from E =  $70x \times \frac{70}{100} \times \frac{60}{100} = 29.4x$

Female applicants who applied for new passports from E =  $70x \times \frac{30}{100} \times \frac{1}{3} = 7x$

$$\text{Required ratio} = \frac{24x+12x}{29.4x+7x} = \frac{36x}{36.4x} = 90 : 91$$

**87. (b);** Let number of male and female who applied for new passports from C be 2x and 3x respectively.

**ATQ,**

$$3x - 2x = 800$$

$$x = 800$$

Total number of applicants for passports from C

$$= (3 \times 800 + 2 \times 800) \times \frac{100}{50} = 8000$$

Total female who applied for passports from C

$$= 8000 \times \frac{50}{100} \times \frac{50}{100} + (3 \times 800) = 4400$$

Total male who applied for passports from C

$$= 8000 - 4400 = 3600$$

$$\text{Required \%} = \frac{4400}{3600} \times 100 = 122\frac{2}{9}\%$$

**88. (e);** Let total number of applicants in A be 100x.

**ATQ,**

$$100x \times \frac{60}{100} \times \left( \frac{60}{100} - \frac{40}{100} \right) = 2400$$

$$12x = 2400$$

$$x = 200$$

Hence, number of applicants who applied for new passport from A =  $100 \times 200 \times \frac{40}{100} = 8000$

**89. (a); ATQ,**

$$\text{Total applicants from B} = 3600 \times \frac{100}{40} \times \frac{100}{45}$$

$$= 20000$$

Total applicants from E = 20000 + 5000 = 25000

$$\text{Required number of applicants} = 20000 \times \frac{55}{100} +$$

$$25000 \times \frac{30}{100} = 18500$$

**90. (c);** Let total number of applicants from C & E be 100x & 100y respectively.

**ATQ,**

$$100x + 100y = 30000$$

$$x + y = 300 \quad \dots(i)$$

$$\text{Now, } 100x \times \frac{50}{100} \times \frac{50}{100} - 100y \times \frac{70}{100} \times \frac{60}{100} = 800$$

$$25x - 42y = 800 \quad \dots(ii)$$

On solving (i) & (ii), we get:

$$x = 200, y = 100$$

Required average

$$= \frac{1}{2} \times \left( (100 \times 200 \times \frac{50}{100}) + (100 \times 100 \times \frac{30}{100}) \right)$$

$$= \frac{1}{2} \times (10000 + 3000) = 6500$$

**91. (e);** Let total number of applicants from A & C be  $100x$  &  $100y$  respectively.

**ATQ,**

Applicants who applied for new passports from A  
 $= 100x \times \frac{40}{100} = 40x$

Applicants who applied for new passports from C  
 $= 100y \times \frac{50}{100} = 50y$

$$\text{Now, } \frac{40x}{50y} = \frac{2}{3} \Rightarrow \frac{x}{y} = \frac{5}{6} \Rightarrow y = \frac{6x}{5}$$

$$\begin{aligned} \text{Required \%} &= \frac{100 \times \frac{6x}{5} - 100x}{100x} \times 100 \\ &= \frac{120x - 100x}{100x} \times 100 = 20\% \end{aligned}$$

**92. (e);** Required probability  $= \left( \frac{{}^{48}C_1 \times {}^4C_1 + {}^{48}C_2}{52C_2} \right)$   
 $= \frac{192 + 1128}{1326} = \frac{220}{221}$

**93. (c);** 2<sup>nd</sup> year CI

$$\begin{aligned} &= \left( 50000 \left( 1 + \frac{12}{100} \right)^2 - 50000 \right) - \left( 50000 \times \frac{12}{100} \right) \\ &= 12720 - 6000 = \text{Rs.}6720 \end{aligned}$$

$$\text{Now, 2<sup>nd</sup> year SI} = 6720 - 2220 = \text{Rs.}4500$$

$$\text{Now, } R = \frac{4500}{75000} \times 100 = 6\%$$

**94. (a);** let speed of train Y be 's' kmph & length of train X & Y be a & b m respectively

$$\text{ATQ, } \frac{a+b}{120} = (s - 120) \times \frac{5}{18} \dots\dots\dots(i)$$

$$\frac{\frac{a+b}{3}}{\frac{40}{3}} = (s + 120) \times \frac{5}{18} \dots\dots\dots(ii)$$

On dividing (i) by (ii)

$$\frac{1}{9} = \frac{s-120}{s+120}$$

$$S = 150 \text{ kmph}$$

**95. (e);** Let unit's digit and ten's digit of the original number be 'x' and 'y' respectively.

So, original number =  $10y + x$

**ATQ,**

$$10x + y - (10y + x) = 27$$

$$\Rightarrow 9x - 9y = 27$$

$$x - y = 3 \dots(i)$$

$$\text{And, } x^2 - y^2 = 33$$

$$(x - y)(x + y) = 33 \dots(ii)$$

On solving (i) & (ii), we get:

$$(x + y) = 11 \dots(iii)$$

On solving (i) & (iii), we get:

$$x = 7, y = 4$$

So, original number = 47

**Sol (96-100):** Let distance between Delhi - Bangkok be  $10x$  km.

So, Distance between Dhaka - Bangkok =  $10x \times \frac{80}{100} = 8x$  km

And, distance between Delhi - Dhaka =  $8x \times \frac{27}{32} = \frac{27x}{4}$  km

**ATQ,**

$$10x + 8x + \frac{27x}{4} = 19800$$

$$\Rightarrow x = 800$$

**Delhi - Dhaka fare:**

Let fare of B be Rs.4a

So, fare of C =  $4a \times \frac{125}{100} = \text{Rs.}5a$

And, fare of A = Rs. (4a - 2700)

Now,

$$\frac{4a - 2700}{5a} = \frac{3}{5}$$

$$\Rightarrow a = 2700$$

**Delhi - Bangkok fare:**

Total fare of A & B =  $20000 \times 2 = \text{Rs.}40000$

Fare of C =  $8000 + 20000 = \text{Rs.}28000$

Fare of B =  $26000 \times 2 - 28000 = \text{Rs.}24000$

Fare of A =  $40000 - 24000$

= Rs.16000

**Dhaka - Bangkok fare:**

Fare of B = Rs.16000

Fare of A =  $16000 \times \frac{6}{5} = \text{Rs.}19200$

Fare of C =  $16000 \times \frac{8}{5} = \text{Rs.}25600$

Routes	Distance (in km)	A's fare (in Rs.)	B's fare (in Rs.)	C's fare (in Rs.)
Delhi - Dhaka	5400	8100	10800	13500
Delhi - Bangkok	8000	16000	24000	28000
Dhaka - Bangkok	6400	19200	16000	25600

**96. (b);** Total fare if Veer uses A for his trip =  $8100 + 19200$

$$= \text{Rs.}27300$$

Total fare if Veer uses B for his trip =  $10800 + 16000$

$$= \text{Rs.}26800$$

Total fare if Veer uses C for his trip =  $13500 + 25600$

$$= \text{Rs.}39100$$

So, the cheapest option for Veer is flight operator B.

**97. (d);** ATQ,

Total fare paid by Deepak =  $25600 + 28000$   
 $= \text{Rs.}53600$

$$\text{Required amount} = \frac{53600}{6400 + 8000} = \text{Rs. } 3.62/\text{km}$$

98. (d); ATQ,

Fares for (A, Delhi - Bangkok) = Rs.16000

Fares for (C, Delhi - Dhaka) = Rs.13500

Fares for (B, Dhaka - Bangkok) = Rs.16000

Fares for (A, Dhaka - Bangkok) = Rs.19200

Fares for (B, Delhi - Dhaka) = Rs.10800

So, for (A, Dhaka - Bangkok) fares will be maximum.

99. (b); ATQ,

Per km fare of A =  $\frac{19200}{6400}$  = Rs.3/km

Per km fare of B =  $\frac{16000}{6400}$  = Rs.2.5/km

Per km fare of C =  $\frac{25600}{6400}$  = Rs.4/km

So, per km fare of B is lowest.

100. (e); Required average =  $\frac{8100+10800+13500}{3}$  = Rs.10800

## ENGLISH LANGUAGE

101. (b); To validate the answer, refer to the first paragraph, which mentions, "*Music is assumed to be a fortuitous by-product of this evolutionary development, and is more fully processed in the brain's right hemisphere, which is more associated with the representation of emotions than the left hemisphere.*" Referring to the quoted text, we can infer that the statement given in option (b) is appropriate in context of the given question. Hence, option (b) is the most suitable answer choice.

102. (d); The answer can be validate from various statements given in paragraph four. Among the given statements, only the statement (d) cannot be inferred from the passage. Hence, option (d) is the most suitable answer choice.

103. (c); The entire passage is centered around inability of certain people to enjoy music inspite of having normal brain functioning. Here, the most suitable statement to justify the central idea of the passage would be "*While music may be the universal language, it doesn't speak to everyone*". Also, the statement (ii) is correct in context of the passage. Hence, option (c) is the appropriate answer to the given question.

104. (c); To validate the answer, refer to the second paragraph, which mentions, "*It has been theorised that aesthetic responses to music may derive from the similarity of musical tones to tonal characteristics of human speech associated with different emotional states. If so, it would be hypothesised that the pleasure one finds in music would be related to skills in and enjoyment of social intercourse. Conversely, a lack of musical appreciation would predict deficiencies in social engagement*". Referring to the quoted text, we can infer that the statement given in option (c) is correct in context of the given question.

105. (d); Among the given phrases, the most appropriate phrase to fit in the given blank will be "". Apart from this, no other phrase could make a grammatically correct and contextually meaningful statement. Hence, option (d) is the most suitable answer choice.

106. (a); Here, only in sentence (A) both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.

Equip: "supply with the necessary items for a particular purpose."

Arm: "each of the two upper limbs of the human body from the shoulder to the hand."

AND "a thing comparable to an arm in form or function, typically something that projects from a larger structure."

107. (d); Here, only in sentences (A) & (B), both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.

Study: a detailed investigation and analysis of a subject or situation.

Ponder: think about (something) carefully, especially before making a decision or reaching a conclusion

108. (e); Here, both the words fit in all the three statements to make the sentences grammatically and contextually correct. Hence, option (e) is the most suitable answer choice.

Anomaly: "something that deviates from what is standard, normal, or expected."

Departure: "a deviation from an accepted, prescribed, or usual course of action" / "the action of leaving, especially to start a journey

- 109. (c);** Here, only in sentences (A) & (B), both the words fit in to form a contextually and grammatically correct statement. Hence, option (a) is the most suitable answer choice.  
Accolade: "an award or privilege granted as a special honour or as an acknowledgement of merit." / "a touch on a person's shoulders with a sword at the bestowing of a knighthood"  
Recognition: "identification of someone or something or person from previous encounters or knowledge" / "acknowledgement of the existence, validity, or legality of something" / "appreciation or acclaim for an achievement, service, or ability"
- 110. (e);** Both the words fit in only in statement B to form a grammatically and contextually correct statement. Hence, option (e) is the most suitable answer choice.  
Pinnacle: the most successful point; the culmination/ a high, pointed piece of rock  
Height: the measurement of someone or something from head to foot or from base to top./
- 111. (d);** Among the given words, "**bravery**" is synonym of valour and **cowardice** is antonym of valour. Hence, option (d) is the most suitable answer choice.
- 112. (e);** Among the given words, "**restrain**" is synonym of impede and **expedite** is antonym of impede. Hence, option (e) is the most suitable answer choice.
- 113. (c);** Among the given words, "**acknowledge**" is synonym and **disparage** is antonym of **appreciates**. Hence, option (c) is the most suitable answer choice.
- 114. (b);** Among the given words, "**graceful**" is synonym and **gauche** is antonym of **elegant**. Hence, option (b) is the most suitable answer choice.
- 115. (d);** The correct answer choice will be (d). Here, 'loathe' is synonym of 'abhor' whereas 'admire' is its antonym.  
Abhor: regard with disgust and hatred.  
Loathe: feel intense dislike or disgust for
- 116. (a);** Here, the error lies in part (C) of the statement, where "dare call" will be replaced with "dares to call". Here, 'dare' has been used as main verb and will therefore qualify the singular noun, which is 'no one'. 'Dare' will then be followed by 'to+v1'. But when 'dare' and 'need' are used as modal auxiliary, then we do not add '-s' to make it singular. Then we direct use 'to' after them. Hence, option (a) is the most suitable answer choice.
- 117. (d);** Here, "his" will be replaced with "him" because verbs like "heard, watch, behold, see, let, make, bid" will be followed by objective case pronouns and in case we use infinitive then it is used without "to" (bare infinitive). Hence, option (d) is the most suitable answer choice.
- 118. (d);** Here, the error lies in the last part of the statement where "tomorrow" will be changed to "the next day" because in indirect narration, 'tomorrow' is changes to 'on the tomorrow' or 'the next day'. Hence, option (d) is the most suitable answer choice.
- 119. (e);** The given statement is grammatically correct and does not require any changes. Hence, option (e) is the most suitable answer choice.
- 120. (b);** Here, the error lies in part (D) of the statement where "would not" will be replaced by "had not" because in cases of situations denoting unfulfilled wishes/ desires of past, in conditional clause, we use 'if+subject+had+v3' or 'had+subject+v3'. Hence, option (b) is the most suitable answer choice.
- 121. (e);** The answer for the given question can be traced fourth and fifth paragraph "*A major cause of the slowdown of sales in 2019-20 was the difficulty in the availability of finance due to problems in the financial sector. The decade saw the introduction and acceptance of shared platform operators like Uber and Ola...Diesel car sales had risen earlier in the decade, but are now in decline. Meeting Bharat VI norms has added considerably to cost. In addition, the Supreme Court ordered that diesel cars older than 10 years would not be allowed in the NCR*". Hence, option (e) is the correct answer choice.
- 122. (d);** The answer can be verified from the 2<sup>nd</sup> paragraph. Refer to the lines "*Intense competition in the market saw all manufacturers launching or upgrading existing models in fairly short intervals. The industry became more like that of a developed country. Competition also led to better technology benefiting the consumer. The average fuel efficiency of cars increased from about 16 km per litre to 19.2 km per litre. This resulted not only in reducing fuel consumption but also lowered CO2 emissions.*" Hence, option (d) is the correct answer choice.

**123. (c);** The most appropriate phrase to complete the given blank is “partly explains the slowing of growth”. The previous sentence of the blank mentions about the implementation of Bharat VI which is a measure for safety and emission standards. Further the sentence states that due Bharat VI there has been an increase in the cost of vehicles; thus, this should ultimately result in the decline of the sales growth. Hence, option (c) will be most viable choice to complete the given sentence.

**124. (b);** Statement (II) is incorrect as in the given passage it is stated that “The entry of global players into the Indian market and cars being of international standards led to exports increasing to 680,000 vehicles in 2018-19.’ Statements (I) and (III) are true in the context. Hence, option (b) is the correct answer choice.

**125. (b);** The most suitable word that expresses the meaning of the highlighted word is “catalyst”. Hence, option (b) is the correct answer choice. Driver means a factor which causes a particular phenomenon to happen or develop.

**Straphanger** means any user of such public transportation. Catalyst means a person or thing that precipitates an event.

prototype means a first or preliminary version of a device or vehicle from which other forms are developed.

Chauffer means a person employed to drive a private automobile or limousine for the owner.

**126. (d);** ‘X’ was although a valuable employee for the company yet his attitude towards company’s initiative was negative and he wanted to develop similar feeling among his colleagues. Hence, ‘pessimist’ which means ‘tending to see the worst aspect of things or believe that the worst will happen’ best defines ‘X’s’ attitude towards the initiative.

Empathetic: showing an ability to understand and share the feelings of another

Scientific: based on or characterized by the methods and principles of science

Passionate: having, showing, or caused by strong feelings or beliefs.

Discreet: intentionally unobtrusive

**127. (e);** Here, as per the given situation, all the given options define ‘Y’ as a person. Hence, option (e) is the most suitable answer choice.

**128. (b);** As per the given situations, both the goats were not willing to give way to each other and therefore has to face the consequences. From the situation, we can infer that the goats were stubborn. Hence, option (b) is the most suitable answer choice.

Intuitive: using or based on what one feels to be true even without conscious reasoning; instinctive

Stubborn: having or showing dogged determination not to change one’s attitude or position on something

Persuasive: good at persuading someone to do or believe something through reasoning or the use of temptation

Epicurean: relating to or suitable for an epicure.

**129. (d);** Among the given options, “generous” which means “showing kindness towards others.” defines the nature of the child who willingly visited the animal shelter for donation. Hence, option (d) is the most suitable answer choice.

Creative: having good imagination or original ideas

Courageous: not deterred by danger or pain; brave

Dramatic: (of an event or circumstance) sudden and striking

**130. (b);** Among the given options, “faithful” is the most suitable answer choice to define the nature of the dog which was loyal towards its owner. Hence, option (b) is the most suitable answer choice.

Honest: free of deceit; truthful and sincere.

Faithful: remaining loyal and steadfast

Cultured: characterized by refined taste and manners and good education

Notorious: famous or well known, typically for some bad quality or deed.

**131. (d);** Reading the second paragraph of the passage, we can conclude the answer to be (c). The lines have been mentioned below for reference:

**“But it should carry out, along with international investigators, a thorough probe into what led to the “accident”, and punish whoever is responsible for the “human error.” “If Iran is sincere in its apology, it should not only unearth what happened and punish the culprits but also take immediate steps to reduce tensions with the U.S.”**

- 132. (c);** The given passage talks about data protection law implemented In California and hence the only option to satisfy it will be (c).
- 133. (b);** Reading the last paragraph of the passage, we can deduce the answer to be (b). The lines have been mentioned below for reference:  
**“After initially rejecting western assertion that an Iranian missile brought down the plane, Tehran on Saturday said one of its soldiers fired the missile, mistaking the jet for an enemy aircraft “as it turned to a sensitive area.”**
- 134. (b);** Among the given words, ‘**vengeance**’ which means characterized by a desire for revenge is similar to ‘**retaliatory**’. Hence, option (b) is the most suitable answer choice.  
 Hostility: unfriendliness or opposition  
 Redemption: the action of saving or being saved from sin, error, or evil.  
 Brisk: active and energetic.
- 135. (c);** Reading the last paragraph of the passage, we can conclude the answer to be (c). The lines have been mentioned below for reference:  
**“Mr. Trump unilaterally pulled the U.S. out of the Iran nuclear deal, in May 2018, was worth the risk.”**  
 Rest of the options given in the passage are untrue or do not make any contextual sense.
- 136. (b);** The most suitable word to fill the blank (A) as well as the blanks of the given sentences is “proliferating” which means increase rapidly in number; multiply. All the other words are irrelevant. Hence, option (b) is the correct answer choice.
- 137. (a);** To make the sentence grammatically and contextually correct, interchange the words positions at (1) and (2) i.e., estimated and launched. All the other words are correct. Hence, option (a) is the correct answer choice.
- 138. (e);** All the parts of the italicized sentence are correct. Hence, option (e) is the most suitable answer choice.
- 139. (d);** The given sentence consist a conjunction “while” which is used to indicate a contrast in the sentence. The latter part of the sentence “*while the remaining prefer to use the internet only for product research, communication, entertainment and other purposes*” indicates that the initial part of the sentence must mention a dichotomy. Thus, among the given options, option (d) becomes the most viable answer choice.
- 140. (a);** The most suitable word to replace the highlighted incorrect word is “virtual”. “virtual” means almost or nearly as described, but not completely or according to strict definition. All the other words are either grammatically incorrect or contextually meaningless.



**50+**

# BANK PO | CLERK

**2016-2020 PREVIOUS YEARS'**

**Memory Based Book**

Useful for SBI, IBPS, RRB, RBI & Other Bank Exams

**eBOOK**

**English Edition**

SBI PO | Clerk: 14 Sets  
IBPS PO | Clerk: 16 Sets  
IBPS RRB PO | Clerk: 16 Sets  
RBI Grade B | Assistant: 8 Sets

**VERSION**  
**3.0**

**6000+**  
Questions  
Detailed Solutions of  
English | Quant |  
Reasoning

**500+**  
Exclusive  
BANKING & STATIC  
Awareness Questions

### REASONING ABILITY

**Directions (1-5):** Study the following information carefully and answer the questions which follow-

Eight persons S, T, U, V, W, X, Y and Z live on 8 different floors in a building the ground floor is numbered 1 then numbered 2 till numbered 8. They like different colours i.e., red, pink, orange, blue, grey, green, yellow and purple.

There are four floors between W's floor and S's floor. W lives on an odd numbered floor. S like Yellow colour. There are two floors between T's and W's floor. The one who likes Grey colour lives on immediate above the floor on which S lives. U lives immediate above Y. The one who likes red colour lives on floor numbered one. There is no floor between T's floor and Z's floor. V does not live immediate above or below to W's floor. Only one person lives between the persons who like yellow and purple colours. The one who likes pink colour lives immediate above the floor on which the person who likes Grey colour. Z likes blue colour but does not live below to T. X likes Green colour.

- On which floor Z lives?  
(a) Third (b) Fourth (c) Fifth  
(d) Sixth (e) Seventh
- How many floors are below the floor on which Y lives?  
(a) Three (b) Four (c) Five  
(d) Six (e) Seven
- Who among the following lives on the second floor?  
(a) X (b) V (c) Y  
(d) U (e) S
- Which colour is liked by V?  
(a) Orange (b) Pink (c) Grey  
(d) Red (e) Purple
- Which of the following is true with respect to T?  
(a) T likes Orange colour and lives on 4<sup>th</sup> floor?  
(b) T like Pink colour and lives on 8<sup>th</sup> floor  
(c) T like Purple colour and lives on 4<sup>th</sup> floor  
(d) T like Grey colour and lives on 7<sup>th</sup> floor  
(e) T like Red colour and lives on 8<sup>th</sup> floor

**Direction (6-10):** Study the following information to answer the given question.

- Eight friends E, F, G, H, L, M, N and O are seated in a straight line, facing north, but not necessarily in the same order.
- O sits at the extreme right end of the line. Only four people sit between O and G.
- Both F and M are immediate neighbours of G.

- Only two people sit between M and L. L is not an immediate neighbor of O.
  - N sits second to left of E.
- What is the position of L with respect to G?  
(a) Third to the right (b) To the immediate left  
(c) Second to the right (d) Fourth to the right  
(e) Second to the left
  - Based on the given arrangement, which of the following is true with respect to N?  
(a) Only three persons sit between N and O.  
(b) None of the given options is true.  
(c) Only one person sits to the right of N.  
(d) E sits to immediate right of N.  
(e) Both L and F are immediate neighbours of N
  - Who amongst the following people represents the person seated at the extreme left end of the line?  
(a) E (b) N (c) L  
(d) F (e) H
  - How many persons are seated between O and E?  
(a) Two (b) Three (c) None  
(d) Four (e) One
  - Who amongst the following sit exactly between M and L?  
(a) E, N (b) F, O (c) F, G  
(d) E, G (e) H, N

**Directions (11-15):** In each question below is given a group of letters followed by four combinations of digits/symbols numbered (1), (2), (3) and (4). You have to find out which of the combinations correctly represents the group of letters based on the following coding system and mark the number of that combination as the answer. If none of the four combinations correctly represents the group of letters, mark 5), ie 'None of these', as the answer.

Letter	L	F	J	T	A	H	I	M	R	E	K	D	U	B	P
Digit/Symbol	3	7	#	\$	4	9	1	8	2	@	6	%	©	*	5

**Conditions:**

- If the first letter is a consonants and the last letter is a vowel their codes are to be interchanged.
- If both the first and the last letters is Vowel both are to be coded as +.
- If both the first and the last letters is Consonant and in between there are two or more vowels are to be coded as 8.
- If the first letter is vowel and the last letter is a consonant, both are to be coded as the code for the consonant.

11. EFHKL B  
(a) @7963\* (b) \*7963\* (c) @7963@  
(d) \*7S63@ (e) none of these.
12. FTAMIR  
(a) 7\$4812 (b) 7\$1842 (c) 7\$8882  
(d) 7\$189% (e) none of these.
13. DKPRTB  
(a) \*652\$% (b) %652\$% (c) +652\$+  
(d) \*652\$\* (e) none of these
14. UPJTRA  
(a) 45#\$2@ (b) @5#\$24 (c) @5#\$2@  
(d) +5#\$2+ (e) none of these
15. HLEKBI  
(a) 13@6\*9 (b) 93@6\*1 (c) 13@6\*1  
(d) 93@6\*9 (e) None of these

**Directions (16-20):** Study the following information and answer the questions given.

In a certain code language 'lu ja ka hu' means 'will you meet us', 'fa ka la ju' means 'will today maximum temperature', 'la fu ja ju' means 'meet today the temperature' and 'ju lu na fu' means 'temperature of the us'. then

16. What is the code of 'today' in this code language?  
(a) ju (b) la (c) fa  
(d) ka (e) cannot be determined
17. What is the code of 'you' in this code language?  
(a) hu (b) lu (c) ka  
(d) ja (e) cannot be determined
18. What is the code of 'you of maximum'?  
(a) ha hu fu (b) fa hu na (c) fu lu na  
(d) hu fa la (e) cannot be determined
19. What is the code of 'us' in this code language?  
(a) hu (b) lu (c) ja  
(d) ka (e) cannot be determined
20. What is the code of 'meet' in this code language?  
(a) hu (b) lu (c) ja  
(d) ka (e) cannot be determined

**Directions (21-25):** In the following questions, the symbols @, ©, %, \$ and \* are used the following meaning as illustrated below:

- 'A©B' means 'A is smaller than Q'.  
'A@B' means 'A is either smaller than or equal to Q'.  
'A%B' means 'A is greater than Q'.  
'A \$ B' means 'A is either greater than or equal to Q'.  
'A \* B' means 'A is equal to Q'.

Now in each of these questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer

- (a) if only Conclusion I is true.  
(b) if only Conclusion II is true.  
(c) if either Conclusions I or II is true.  
(d) if neither Conclusions I nor II is true.  
(e) if both Conclusions I and II are true.

21. **Statements:** B © T, T \* M, M % F  
**Conclusions:** I. B © M II. B © F
22. **Statements:** M \* R, R % T, T \$ K  
**Conclusions:** I. K @ M II. K © M
23. **Statements:** W © D, D @ H, H \* N  
**Conclusions:** I. N \$ D II. W © N
24. **Statements:** W @ D, D \$ R, R © K  
**Conclusions:** I. R \* W II. R % W
25. **Statements:** F \$ J, J % V, V © N  
**Conclusions:** I. N \$ F II. N % J

**Directions (26-30):** Each of the questions below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and answer-

- (a) If the data in statements I alone is sufficient to answer the question while the data in statement II are not sufficient to answer the question.  
(b) If the data in statement II alone is sufficient to answer the question while the data in statement I are not sufficient to answer the question.  
(c) If the data in either statement I alone or statement II alone are sufficient to answer the question.  
(d) If the data even in both statement I and statement II together are not sufficient to answer the question.  
(e) If the data in both statement I and statement II together are necessarily to answer the question.
26. Among 6 persons U, V, W, X, Y and Z, who are sitting around circle facing to the centre. Who sits immediate right of W?  
**Statements:**  
I. X sits second to the left of Y and opposite to U but not near to W.  
II. Only one person is seated between U and V. Y is seated near to Z.
27. How P is related to R?  
**Statements:**  
I. Q is father-in-law of R, who is mother of S. P is grandmother of S.  
II. T is father of P, who is son-in-law of U. U has only one grand-daughter R, who is also a grand-daughter of T.
28. Who among P, Q, R, S, T, and U is the tallest?  
**Statements:**  
I. S and R are taller than P but shorter than U. Q is taller than T.  
II. U is shorter than T but taller than Q and S. while P is not tallest.
29. In which direction is Q from of P.  
**Statements:**  
I. Q is towards north of O, which is towards the east of P.  
II. R is towards east of M and P is towards the west of T.
30. How many person are sitting in a row?

**Statements:**

I. A is on 16<sup>th</sup> position from the right end of the row. M is on 8<sup>th</sup> position from the left end of the row.

II. A is 18<sup>th</sup> from the left end and 20<sup>th</sup> from the right end of the row.

**Directions: (31-35):** Study the following information carefully and answer the questions given below:

Six girls – A, B, C, D, E and F are sitting in a row facing North and six boys – P, Q, R, S, T and U are sitting in a different row facing South, but not necessarily in the same order. Each girl in a row is facing exactly one boy from the other row. The following information is known about them.

P sits second to the right of the person who sits opposite B. B does not sit at any end of the row. C and D are immediate neighbors of B, and one of them sits at an extremes. E sits second to the left of D but not opposite R.

P is a neighbor of R but is not opposite F. Neither Q nor T are adjacent to P. T is adjacent to either R or Q but not both. U is a neighbor of the person who sits opposite E.

31. Who sits opposite C?

- (a) S (b) P (c) R  
(d) Q (e) T

32. Who sits second to the left of R?

- (a) S (b) T (c) P  
(d) Q (e) U

33. If S and D interchange their positions, then who sits to the immediate left of D?

- (a) U (b) R (c) P  
(d) T (e) Q

34. Four of the following five are alike in a certain way and so form a group. Find the one which does not belong to that group?

- (a) U, A (b) P, B (c) D, S  
(d) C, R (e) D, T

35. Which of the following is true, according to the given information?

- (a) U and C are at the extremes.  
(b) R sits second to the right of S.  
(c) T sits to the immediate right of Q.  
(d) B sits second to the left of A.  
(e) All the above

**Directions (36-37):** Triangle represents ▲(1) and circle represents ●(0). If triangle appears in unit's place then its value is 1. If it appears in 10's place its value is doubled to 2 like that it continues. Questions based on this

For example:

$$\triangle = 1$$

$$\triangle \bullet \triangle = 4, 0, 1 = 4 + 0 + 1 = 5$$

$$\triangle \bullet = 2$$

36. How will you represent '13' in this code language?

- (a) ▲▲●▲  
(b) ●▲▲●  
(c) ●▲▲▲  
(d) ●▲●  
(e) ▲

37. What will be the code for ▲▲●▲▲?  
(a) 19 (b) 20 (c) 22  
(d) 27 (e) 25

**Directions (38-40):** Study the following information carefully and answer the questions which follow–

'P – Q' means 'P is father of Q'

'P ÷ Q' means 'P is sister of Q'

'P × Q' means 'P is mother of Q'

'P + Q' means 'P is brother of Q'

38. Which of the following means 'A is nephew of B'?

- (a) A + C – B × K (b) B ÷ H – A + D  
(c) B ÷ G – A ÷ R (d) B + T × A ÷ E  
(e) None of these

39. Which of the following means 'P is grandfather of J'?

- (a) J ÷ W – U – P (b) P × G + J ÷ A  
(c) P – B ÷ J ÷ R (d) P – T – J ÷ S  
(e) None of these

40. How is R related to B in the expression 'B ÷ C – S + R'?

- (a) nephew or niece (b) niece  
(c) nephew (d) None of these  
(e) Cannot be determined

**Directions (41 – 45):** Answer the questions on the basis of the information given below.

A number arrangement machine when given an input of words, rearranges them following a particular rule in each step. The following is an illustration of input and steps of rearrangement.

**Input : 98 Bite 102 Legal 88 54 Mango 21 Cool Zing.**

Step1: Bite 98 Legal 88 54 Mango 21 Cool Zing 102

Step2: Cool Bite Legal 88 54 Mango 21 Zing 102 98

Step3: Legal Cool Bite 54 Mango 21 Zing102 98 88

Step4: Mango Legal Cool Bite 21 Zing 102 98 88 54

Step5: Zing Mango Legal Cool Bite102 98 88 54 21

This is the final arrangement and step 5 is the last step for this input. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input for the questions.

**Input: Kite 19 54 Give 31 Right 72 87 Dream Ace.**

41. In step-3, what is position of 'Ace' from the left end?

- (a) Third (b) Fifth (c) Second  
(d) Sixth (e) First

42. In step-5, how many Letters/Numbers are between Dream and 72?

- (a) Five (b) Two (c) Four  
(d) Six (e) Three

43. 'Kite Give Dream Ace Right 87 72 54 31 19' in which of the following step?

- (a) Step-2 (b) Step-4 (c) Step-5  
(d) There is no such Step  
(e) Step-3

44. In Step-2, which of the following letter/number is 5<sup>th</sup> right of Kite?

- (a) 31 (b) Give (c) Right  
(d) 87 (e) 54

45. How many steps would be needed to complete the arrangement?

- (a) Four (b) Two (c) Seven  
(d) Six (e) Five

**Directions (46-50):** Study the following information carefully and answer the questions given below:

P, Q, R, S, T and V are six students studying in a class. Each of them has a different height and weight. The tallest is not the heaviest. T is taller than only P but lighter than R. Q is taller than S and P and heavier than only T and V. P is

lighter than only S. T is heavier than V. S is taller than V and Q is not the tallest.

46. How many of them are heavier than T?

- (a) One (b) Two  
(c) Three (d) Five  
(e) None of these

47. How many of them are shorter than Q?

- (a) Two (b) Four  
(c) Three (d) Five  
(e) None of these

48. Who among them is the tallest?

- (a) V (b) P  
(c) T (d) R  
(e) None of these

49. Who, among them is third from top if arranged in descending order of height?

- (a) Q (b) V  
(c) S (d) Data inadequate  
(e) None of these

50. Who among them is the lightest?

- (a) V (b) T  
(c) P (d) R  
(e) None of these

## QUANTITATIVE APTITUDE

**Directions (51-55):** What will come in place of the question mark (?) in the following number series?

51. 7 151 223 259 277 ?

- (a) 268 (b) 295 (c) 286  
(d) 259 (e) None of these

52. 27 30.2 23.8 33.4 20.6 ?

- (a) 30.2 (b) 36.6 (c) 39.8  
(d) 17.4 (e) None of these

53. 5 4 6 15 56 ?

- (a) 280 (b) 275 (c) 270  
(d) 265 (e) 285

54. 7 10 21 52 121 ?

- (a) 256 (b) 270 (c) 254  
(d) 252 (e) None of these

55. 5 3 4 ? 38

- (a) 8.5 (b) 6 (c) 7.5  
(d) 8 (e) 10

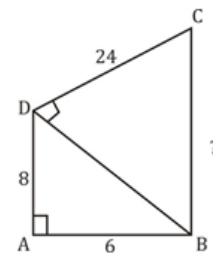
56. Distance between A and B is 24 km a boat travels from A to B and comes back in 6 hour. The speed of boat in still water is thrice the speed of stream. Find the speed of boat.

- (a) 3 km/hr (b) 11 km/hr (c) 7 km/hr  
(d) 12 km/hr (e) 9 km/hr

57. A rectangular grassy plot is 112 m by 78 m. It has a gravel path 2.5 m wide all round it on the inside. Find the cost of area of the path which has the cost of constructing it at Rs. 2 per square metre?

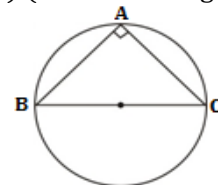
- (a) Rs. 1500 (b) Rs. 1600 (c) Rs. 1750  
(d) Rs. 1850 (e) None of these

58. Find length of BC ?  $\angle CDB = \angle DAB = 90^\circ$



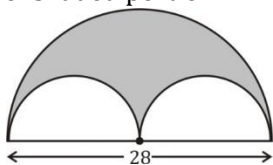
- (a) 24 (b) 26 (c) 22  
(d) 28 (e) 27

59. Circumference of circle is 44 meter. Find the area of triangle ? (in  $m^2$ ) (Given- one angle of triangle is  $45^\circ$ )



- (a) 49                      (b)  $49\sqrt{2}$                       (c)  $98\sqrt{2}$   
 (d) 98                      (e) None of these

60. Find the area of shaded portion ?



- (a) 154                      (b) 196                      (c) 156  
 (d) 198                      (e) None of these

61. A bag contains 4 red, 5 yellow and 6 green balls. 3 balls are drawn randomly.

What is the probability that the balls drawn contain no yellow ball?

- (a)  $\frac{24}{91}$                       (b)  $\frac{33}{91}$                       (c)  $\frac{12}{65}$   
 (d)  $\frac{17}{182}$                       (e) None of these

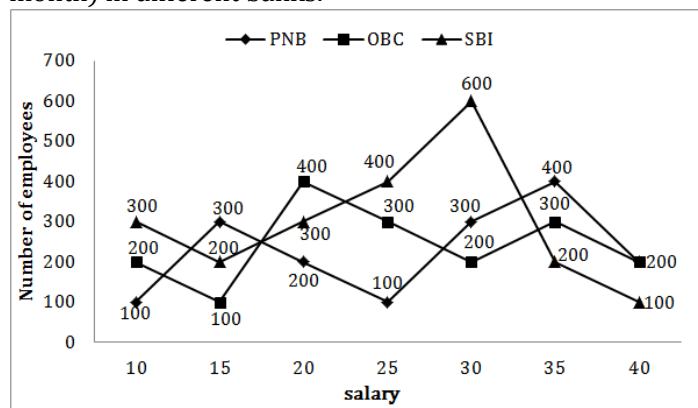
**Directions (62 - 66) :** In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer.

- (a) if  $x > y$                       (b) if  $x \geq y$                       (c) if  $x < y$   
 (d) if  $x \leq y$   
 (e) if  $x = y$  or no relation can be established between 'x' and y.

62. I.  $4x + 7y = 42$                       II.  $3x - 11y = -1$   
 63. I.  $9x^2 - 29x + 22 = 0$                       II.  $y^2 - 7y + 12 = 0$   
 64. I.  $3x^2 - 4x - 32 = 0$                       II.  $2y^2 - 17y + 36 = 0$   
 65. I.  $3x^2 - 19x - 14 = 0$                       II.  $2y^2 + 5y + 3 = 0$   
 66. I.  $x^2 + 14x + 49 = 0$                       II.  $y^2 + 9y = 0$

**Directions (67-71):** Read the following graph carefully and answer the questions given below.

Number of employees and their salaries (in thousands per month) in different banks.



67. What is the average salary of employees of PNB?  
 (a) Rs. 26125                      (b) Rs. 24525  
 (c) Rs. 23186                      (d) Rs. 25625  
 (e) None of these

68. Which bank has the lowest number of employees?  
 (a) SBI                      (b) PNB                      (c) OBC  
 (d) PNB and OBC                      (e) None of these

69. What is the respective ratio between the total salary of Rs. 15000 salaried employees to the total salary of Rs. 35000 salaried employees?

- (a) 1 : 3                      (b) 2 : 3                      (c) 1 : 1  
 (d) 4 : 1                      (e) 2 : 7

70. The number of employees of OBC drawing salary Rs. 20000 is approximately what percent of the number of employees of SBI drawing salary Rs. 30000 month?

- (a) 75%                      (b)  $33\frac{1}{2}$                       (c)  $16\frac{2}{3}$   
 (d) 80%                      (e)  $66\frac{2}{3}$ %

71. Total salary of Rs. 20000 salaried employees is what percent of the total salary of 25000 salaried employees?

- (a) 92                      (b) 90                      (c) 94  
 (d) 86                      (e) None of these

**Directions (72-76):** Study the table carefully to answer the questions that follow.

Number of animals in grasslands of four different countries in five different years

Year	Country											
	South Africa			China			Sri Lanka			England		
	Tiger	Lion	Bear	Tiger	Lion	Bear	Tiger	Lion	Bear	Tiger	Lion	Bear
1990	145	156	250	320	346	436	280	468	255	423	342	234
1995	134	165	354	445	256	542	354	354	343	368	136	345
2000	120	135	324	583	325	454	433	345	545	354	267	456
2005	110	184	285	466	475	322	343	324	546	562	235	567
2010	160	224	264	411	535	534	535	532	453	349	345	324

72. What is the average of the number of tigers in the grassland of Sri Lanka over all the years together?

- (a) 386                      (b) 389                      (c) 369  
 (d) 276                      (e) None of these

73. What is the difference between the total number of lions and bears in the grassland of England in the year 2005 and the number of tigers in the grassland of South Africa in the year 1995?

- (a) 597                      (b) 558                      (c) 677  
 (d) 668                      (e) None of these

74. The total number of animals together in the grassland of China in the year 1990 is approximately what per cent of the total number of bears in the grassland of Sri Lanka over all the years together?

- (a) 44%                      (b) 56%                      (c) 41%  
 (d) 47%                      (e) 51%

75. If 35 per cent of the total number of animals in the grassland of China in the year 2010 died due to an epidemic, how many animals remained in the grassland of China in the year 2010?

- (a) 976                      (b) 952                      (c) 986  
 (d) 962                      (e) None of these

76. What is three-fourths of the total number of lions in the grasslands of all the four countries in the year 2000?  
(a) 848 (b) 868 (c) 804  
(d) 824 (e) None of these
77. The salaries of A, B and C are in the ratio 1 : 3 : 4. If the salaries are increased by 5%, 10% and 15% respectively, then the increased salaries will be in the ratio  
(a) 20 : 66 : 95 (b) 21 : 66 : 95  
(c) 21 : 66 : 92 (d) 19 : 66 : 92  
(e) None of these
78. Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bottom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time, the third pipe alone can empty the cistern?  
(a) 90 minutes (b) 100 minutes (c) 110 minutes  
(d) 120 minutes (e) None of these
- Directions (79-83):** Each question below is followed by two statements I and II. You have to determine whether the data given in the statement is sufficient to answer the question. You should use the data and your knowledge of Mathematics to choose between the possible answers. Give answer—
- (a) If the question can be answered by using statement I alone but cannot be answered by statement II alone.  
(b) If the question can be answered by using statement II alone but cannot be answered by statement I alone.  
(c) If both statements I and II together are required to answer the question.  
(d) If the answer can be found by using any of the two statements alone.  
(e) If both the statements together are not sufficient to answer the question.
79. What will be the cost of painting a rectangular wall?  
I. Cost of painting is Rs 10 per square meter.  
II. Perimeter of wall is 60 m.
80. Age of A is one third of age of B. What are their ages?  
I. After 10 years the ratio between age of A and B will be 3 : 7.  
II. 10 years ago the ratio of their ages was 1 : 5.
81. What is the length of a train?  
I. It takes 8 seconds to cross a man.  
II. It takes 20 seconds to cross a 50-meter-long bridge with the same speed.
82. What is sum of two numbers a and b?  
I.  $a - z = 20$   
II.  $z - b = 20$
83. What is the age of A and B?  
I. Age of A is 80% of the age of C.  
II. Age of B is 60% of the age of C
84. The ages of Ranjana and Rakhi are in the ratio of 15 : 17 respectively. After 6 years, the ratio of their ages will be 9 : 10. What will be the age of Ranjana after 6 years?  
(a) 40 years (b) 30 years (c) 34 years  
(d) 36 years (e) None of these
85. The simple interest accrued on an amount of Rs. 20000 at the end of 3 years is Rs. 7200. What would be the compound interest accrued on the same amount at the same rate in the same period?  
(a) Rs. 8342.36 (b) Rs. 8098.56  
(c) Rs. 8246.16 (d) Rs. 8112.86  
(e) None of these
86. A pipe can empty a tank in 40 minutes. A second pipe with diameter twice as that of the first is also attached with the tank to empty it. The two together can empty the tank in ;  
(a) 8 minutes (b)  $13\frac{1}{3}$  minutes  
(c) 30 minutes (d) 38 minutes  
(e) None of these
87. A shopkeeper purchased a TV for Rs. 2,000 and a radio for Rs. 750. He sells the TV at a profit of 20% and the radio at a loss of 5%. The total loss or gain is  
(a) Gain Rs. 352.50 (b) Gain Rs. 362.50  
(c) Loss Rs. 332 (d) Loss Rs. 300  
(e) None of these
88. 8 men and 4 women together can complete a piece of work in 6 days. Work done by a man in one day is double the work done by a woman in one day. If 8 men and 4 women started working and after 2 days, 4 men left and 4 new women joined. In how many more days will the work be completed?  
(a) 5 days (b) 8 days (c) 6 days  
(d) 4 days (e) 9 days
89. A, B and C started a business with their investments in the ratio 1 : 2 : 4. After 6 months A invested the half amount more as before and B invested same the amount as before while C withdrew  $\frac{1}{4}$  th of his investment. Find the ratio of their profits at the end of the year.  
(a) 5 : 12 : 13 (b) 5 : 11 : 14  
(c) 5 : 12 : 14 (d) 5 : 12 : 10  
(e) None of these
90. Richa's science test consist of 85 questions from three sections- i.e. A, B and C. 10 questions from section A, 30 questions from section B and 45 question from section C. Although, she answered 70% of section A, 50% of section B and 60% of section C correctly. She did not pass the test because she got less than 60% of the total marks. How many more questions she would have to answer correctly to earn 60% of the marks which is passing grade?  
(a) 4 (b) 2 (c) 5  
(d) 6 (e) 8

91. The average age of 28 men is 27 years. If the age of one more man is added to it, the average increases by 1 year. What is the age of the new man?  
 (a) 28 years (b) 42 years  
 (c) 56 years (d) 54 years  
 (e) None of these
92. Ms Deepti Jain invests 11% of her monthly salary, i.e., Rs. 5236 in Fixed Deposits. Later she invests 19% of her monthly salary on Life Insurance Policies, also she invests another 7% of her monthly salary on Mutual Funds. What is the total annual amount invested by Ms Deepti Jain?  
 (a) Rs. 21134 (b) Rs. 17612 (c) Rs. 10567  
 (d) Rs. 35224 (e) None of these
93. A committee of 3 members is to be selected out of 3 men and 2 women. What is the probability that the committee has atleast one woman?  
 (a)  $\frac{1}{10}$  (b)  $\frac{9}{20}$  (c)  $\frac{9}{10}$   
 (d)  $\frac{1}{20}$  (e) None of these
94. A and B together can complete a piece of work in 12 days. A alone can complete in 20 days. If B does the work only half a day daily, then in how many days A and B together will complete the work?  
 (a) 10 days (b) 20 days (c) 11 days  
 (d) 15 days (e) None of these
95. A train is moving at a speed of 132 km/hour. If the length of the train is 110 metres, how long will it take to cross a railway platform 165 metres long?  
 (a) 5 second (b) 7.5 second (c) 10 second  
 (d) 15 second (e) 9 second
96. 15 litres of a mixture contains alcohol and water in the ratio 1 : 4. If 3 litres of water is mixed in it, the percentage of alcohol in the new mixture will be  
 (a) 15 (b)  $16\frac{2}{3}$  (c) 17  
 (d)  $18\frac{1}{2}$  (e) None of these
97. Two pipes A and B can fill a cistern in 30 minutes and 45 minutes respectively. Both pipes are opened. The cistern will be filled in just 20 min, if the pipe B is turned off after  
 (a). 5 min (b). 9 min (c). 10 min  
 (d). 15 min (e). None of these
98. 2 men and 3 boys can do a piece of work in 10 days while 3 men and 2 boys can do the same piece of work in 8 days. In how many days can 2 men and 1 boy do the same piece of work?  
 (a)  $12\frac{1}{2}$  days (b) 24 days (c) 32 days  
 (d)  $11\frac{1}{2}$  days (e) None of these
99. A man sets out on cycle from Delhi to Faridabad, and at the same time another man starts from Faridabad on cycle for Delhi. After passing each other they complete their journeys in  $2\frac{6}{7}$  and  $5\frac{3}{5}$  hours respectively. At what rate does the second man cycle if the first man cycles at 14 kmph?  
 (a) 10 kmph (b) 5 kmph (c) 7 kmph  
 (d) 8 kmph (e) None of these
100. The length of rectangular floor is twice its breadth. If Rs 256 is required to paint the floor at the rate Rs 2 per sq m, then what would be the length of floor?  
 (a) 16 m (b) 8 m (c) 12 m  
 (d) 32 m (e) 20 m

## ENGLISH LANGUAGE

**Directions (101–108):** Read the following passage carefully and answers the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions

There is no fool so great a fool as a knowing fool. But to know how to use knowledge is to have wisdom." Businesses continue to face challenging times. In this uncertainty, some leaders have lost their way due to **egregious** moral and ethical missteps. Others have reached career dead ends due to their inability to see the big picture from a higher not-so-common perspective. Many of these leaders are undoubtedly intelligent. But they're not wise.

Our minds work on a lower and higher level. The lower level deals with the concrete - our immediate physical environment, information, facts and logic. Our lower mind supports us to be aware, conceptual and reflective. Our lower mind is rational, analytical, opinionated, busy and

often sceptical. It is bound by time and space. We use our lower mind to make sense of our complicated and emotional world. The lower mind is the stuff of business schools, "operations-focused" education and experiential learning. The lower mind delivers reductionist thinking and mechanistic, **conventional** approaches to life. The main drawback of living in the lower mind is that it only reflects your internal map of reality. It is like being stuck in your own intellectual zip code, never moving beyond your nine-digit thoughts, beliefs, assumptions, expectations and world views. It is like living in one town, knowing it completely, and never venturing outside the borders of that town. Intelligent people are generally engaged with their lower mind and left-brain thinking. The lower mind focuses on one corner of the painting. Wisdom does not arise from this place. The higher mind considers the abstract. It involves intuition, aspiration, heart, soul and spirit and connects

with the Universal mind, with Universal truth, with beauty and with goodness. Our higher mind speaks in the language of ideas, ideals, symbols, principles and impulses. It is loving. It guides us to the truth.

The higher mind sees the threads woven between the mental, physical, emotional, spiritual, psychological and social aspects of our life. The higher mind sees the entire painting - the place from which wisdom arises. Wise leaders access both their lower and higher minds. Wise leaders understand they are spiritual beings living in a human form. They allow their lower minds to access their higher, helping them to access intuition and impressions that provide insights into the bigger picture of life. Wise leaders understand the importance of focus, presence, self-discipline, meditation, study, loving service and creative expression. They seek to grasp the next higher level of awareness. They venture outside their historical map of reality - willing to jettison their old, "safe" beliefs, assumptions, expectations and worldviews - to explore the possible and the unknown. They're open to knowing what they don't know. Wise leaders understand that spiritual and personal growth means connecting with higher concepts and energies, be they values, ideas, ideals, potentials, archetypes, higher guidance or intuition. The wise leader develops the capacity to not only connect with these higher concepts, but also to seek to ground them into forms, tasks, projects, relationships and details that inform the way they lead.

Wise leaders don't stop with experience, but transcend experience - both their own and others' - in a way that they spend an appreciative amount of time and energy in deep self-reflection and thoughtful consideration around their experience, leading to higher insights, enhanced value and a deeper sense of self-awareness. Proust Wise leadership is not about having experiences but consciously learning from those experiences. The process of learning from experience leads to a process of inquiry - looking with curiosity, not judgment, into the who, what, when, where, how and - most importantly - the why of their experiences. Inquiry is a matter of punctuation; it's about question marks, not full stops. It is about curiosity. Wise leaders understand how connections between diverse elements can create something new. They are adept at using analogy and metaphor and seek to recognize patterns, spot trends, draw connections and **discern** the big picture even when there seem to be nothing there. A wise leader interacts with her world in terms of a richer and more varied spectrum of possibilities and opportunities. A wise leader understands the importance of relationships - human and otherwise. A wise leader is a systems thinker, a gestalt thinker, a holistic thinker. Wise leaders are comfortable being oriented to their right brain, as well as to their heart and soul. Inquiry, for the wise leader, is not about "futurizing the past" - using their past experiences, the known, the tried and true - to explain present experiences that are un-common, un-usual,

un-familiar. They understand that inquiry involves delving deeply into the self, even parts of the self that, heretofore, might have been unknown, in order to search for new insights, **perspectives** and understanding - seeking familiarity with the unknown. For wise leaders, inquiry means creating an internal space unencumbered by old thoughts, beliefs and premises - a new, clear, inviting and open space - entering into a fresh realm without preconception or expectation and being informed with new learning, new sense, new meaning, new WHYs and new HOWs. In other words, new wisdom.

101. Which of the following is true regarding wisdom?
- People with wisdom are sceptical and opinionated.
  - People with Wisdom have conventional approach to life.
  - Wisdom is what's left after we've run out of personal opinions.
  - The abilities to plan or create an idea, solve a problem, be logical in your creativity and make favorable results in a bad situation.
  - All of these.
102. Which of the following is false in context of the passage?
- Lower mind lacks emotional and spiritual intelligence.
  - For wise leader inquiry means new wisdom.
  - People who lack wisdom but are intelligent don't have access to higher mind.
- Only 1.
  - Both (1) and (2)
  - Both (3) and (1).
  - only (3)
  - None of these.
103. What is the main drawback(s) of living only in the lower mind?
- Person is unable to have a conventional approach to life.
  - Person is opinionated and sceptical.
  - Never been able to transcend beyond our beliefs and assumption.
  - People stop having experiences.
  - Not able to understand the importance of relationships.
104. What is the difference between intelligence and wisdom?
- People with wisdom don't have rational thinking.
  - Intelligent people are not reflective.
  - People with wisdom have access to both the minds.
  - People with wisdom never make mistakes.
  - People with wisdom are not sceptical unlike the one who are intelligent.

**Directions (105-106):** Which of the following words is nearest in the meaning to words as given in bold letters?

**105. EGGREGIOUS**

- (a) Imperceptible (b) Conspicuous  
(c) Conceal (d) Trivial  
(e) Trifling

**106. CONVENTIONAL**

- (a) Distinctive (b) Orthodox  
(c) Complex (d) Inept  
(e) Original

**Directions (107-108):** Which of the following words is most opposite in the meaning to words as given in bold letters?

**107. DISCERN**

- (a) Perceive (b) Detect (c) Recognize  
(d) Confound (e) Behold

**108. PERSEPECTIVE**

- (a) Panorama (b) Prospect (c) Aspect  
(d) Stance (e) Blindness

**Directions (109 –116):** Read the following passage carefully and answers the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions

This is a problem that society must fix; we are supposed to be an equal education system. It is Hispanic and black students who aren't performing at the level of white and Asian students. Certain races or groups shouldn't be the only ones successful in school.

According to the interview with Greg Duncan and Richard Murnane, Rohan Mascarenhas stated that, one of the reasons why children achieve good grades in school is because they are in after-school programs. Parents with higher income sign their kids up for the after school. They do this so that their child can learn more throughout the day not just in school. After-school programs also help children one on one, who are struggling in school. The rich take advantage of these after school programs. The students with low-income struggle with their reading and writing, they can't afford to go to after-school programs. This is why they continue to struggle and don't receive the proper help that they need.

When I was in elementary school I attended after-school, which helped me because it kept me in honors class. I was able to get the extra help I needed during this time and improved my academic performance. Its important to attended after-school because it focuses on academic activities. Parents with higher income pay for tutors to come over and teach their child. While low income parents don't reach out to any tutors. If students with lower income could receive some money from the government to help them pay for after schools and tutors, it would help them to perform better and succeed in school as well. The government can

help if they make after school programs free for any student. The more students to join after- schools, the better results they will have in test scores in school.

Would you send your child to a Public or a Private school? Which would your income lead you to? Most high-income parents put their child in private schools; its class size is smaller than public schools. Public school classes ranges from 25 to 30 students. That's too many students for one teacher to handle. One of the benefits of private school is that class size is from 15 to 20 students. This allows students to receive more attention in class, and receive more work as well. The level of teaching is different between the two. Private school teachers often have their graduate degree or their **doctrine** degree, while public school teachers must have a bachelor's degree with a master in their subject. The level of education however, is more difficult for private than for public school. Parents with low income tend to put their child in public schools because it's free. Help from the government is what makes public schools run well and not shut down. Private schools charge tuition for each student, so this helps them raise enough money and not rely so much for government funds.

There is a gap in achievement between low-income students and high-income students. Students who come from **affluent** families perform higher in school compared to lower income families. About 82 percent of high school graduates who come from high-income families attend colleges, in comparison to 52 percent of graduates from low-income families. A study shown by Martha Bailey and Susan Dyhorski showed that over the last 20 years the percent of children from higher income who completed college increased by 21 percent, while low income increased by only 4 percent. This is not a significant change for low-income students, showing that this is a cycle.

Study show that this cycle continues and stays with the student into college. The rate of White graduates who were college ready in English was 77 percent, whereas African American was half of that, they were 35 percent ready. This is because students who come from families with low-income are attending high schools with teachers who are inexperienced and that do not offer the courses needed to prep them for college. These schools lack the resources they need to ensure their students are ready for higher education. The percent of 18-24 year olds **enrolled** in college is 58 percent, while Hispanic is less than half of that at 19 percent and black at 14 percent.

The income gap has not **narrowed** over time. Changes within the government and education system need to be made to close this gap in schools. It is essential to increase academic achievement. All students should be held to the same high expectations and all be given the same resources and tools to help them through K-12 grade. This will prepare them for their college and future careers.

**109.** Which one of the following is/are the reason(s) why students with higher income succeed more than those with low income?

- (1) Poor students don't go to after school programs because they can't afford it unlike the rich students.  
 (2) As poor students go to public schools.  
 (3) Different level of education.  
 (a) Only (1)  
 (b) Both (1) and (2).  
 (c) Only (2)  
 (d) Both (1) and (3)  
 (e) All of these.

**110.** What can be the most suitable title for the passage?

- (a) Dilemma of low income students.  
 (b) 'Education' only for rich.  
 (c) The widening gap between rich and poor.  
 (d) Education and Inequality between Rich and Poor.  
 (e) Need for reforming education system.

**111.** How the gap between rich and poor students can be abridged?

- (a) By increasing the number of public schools.  
 (b) By waiving the fees of private sector schools.  
 (c) By narrowing the income gap.  
 (d) By encouraging poor students to join after school programs.  
 (e) By reducing the class size in public schools.

**112.** Which of the following is false in context of the passage?

- (a) Black students are not performing better than the Asian students.  
 (b) Not being able to reach out to tutor is one of the reasons for bad performance of poor people.  
 (c) More attention to students is paid in private compared to public.  
 (d) Private sector teachers are more qualified hence the performance is better.  
 (e) Number of students are too much to handle in public school.

**Directions (113-114):** Which of the following words is nearest in the meaning to words as given in bold letters?

**113. AFFLUENT**

- (a) Penurious (b) Impecunious (c) Destitute  
 (d) Deprived (e) Opulent

**114. NARROWED**

- (a) Wide (b) Broad (c) Spacious  
 (d) Capacious (e) Constricted

**Directions (115-116):** Which of the following words is farthest in the meaning to words as given in bold letters?

**115. DOCTRINE**

- (a) Creed (b) Dogma (c) Belief  
 (d) Conviction (e) Scepticism

**116. ENROLLED**

- (a) Catalogue (b) Directory (c) Expatriate  
 (d) Avow (e) Volunteer

**Directions: (117-121):** In these questions, a sentence or a part of sentence is underlined. Below are given alternatives to the underlined part which may **improve the sentence**.

**117.** In order to earning decent living, we need to have a good job which pays substantial amount of money

- (a) earned decency life (b) earning decency live  
 (c) earn a decent living (d) earned decently life  
 (e) No correction required

**118.** As the lawyer was too personally involved, the judge decided to removed him from the case.

- (a) remove himself from the  
 (b) removes him from the  
 (c) remove him from the  
 (d) remove him on the  
 (e) No correction required

**119.** Once the event is over, many people claim credit for success and disowning the responsibility for failure.

- (a) of success and disowning  
 (b) for success but disowning  
 (c) for success but disown  
 (d) for success while disowned  
 (e) No correction required

**120.** To practice any art properly require extra ordinary patience especially at the beginning.

- (a) Required extraordinarily patience  
 (b) Requires extraordinary patience  
 (c) Requiring extraordinary patience  
 (d) Requiring extraordinarily patience  
 (e) No correction required

**121.** If he was to decide to go to college, I for one, would recommend that he went to Yale University.

- (a) If he were to decide to go to college  
 (b) had he decide to go to college  
 (c) In the event that he decides to go to college  
 (d) Supposing he was, to decide to go to college  
 (e) No correction required.

**Directions (122-126):** The Following questions have two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

**122.** As many as fifteen people had \_\_\_\_\_ me at the security check when I was travelling from Delhi \_\_\_\_\_ San Francisco.

- (a) Approached, to  
 (b) Apprehended, from  
 (c) Accosted, to  
 (d) Assumed, from  
 (e) None of these

123. People avoid eating non-vegetarian food \_\_\_\_\_ there is excess protein and fat that may be \_\_\_\_\_ for a good health.  
 (a) because ,pernicious  
 (b) as,counter-productive  
 (c) since ,harmful  
 (d) notwithstanding, harmful  
 (e) None of these
124. Indian economy has seen many \_\_\_\_\_ but this one will surely sound the death \_\_\_\_\_ for us.  
 (a) downswings , bed (b) downturns , knell  
 (c) fluctuations , alarm (d) aberrations, siren  
 (e) None of these.
125. I was lucky to have \_\_\_\_\_ the plane crash and come out \_\_\_\_\_.  
 (a) survived , non-injured  
 (b) lived , squeamishly  
 (c) survived , unscathed  
 (d) lived through , unpetulant  
 (e) None of these.
126. It is a given that Japan would stem its economic \_\_\_\_\_ by doling \_\_\_\_\_ largesse to its people.  
 (a) downslide , in (b) downturn , out  
 (c) slide , up (d) slowdown , after  
 (e) None of these

**Directions (127-136):** In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Seed quality is an..(127)..aspect of crop production. For ages, farmers have traditionally been selecting and..(128)..good quality seed, since it was in their interest to do so. They knew and understood the importance of quality seed in production.

However, with the advent of green revolution technology, based..(129)..on high-yielding dwarf varieties of wheat and rice, mainstream thinking changed. Agricultural scientists, for reasons that remain..(130)..began to doubt, the ability of farmers to maintain seed quality..(131)... Aided by the World bank, the ministry of agriculture launched of national seeds project in 1967. Under the project, spread into three phases, seed processing plants were..(132)..up in nine states. Six states were covered under phase three. All the huge processing plants were..(133)..to do was to provide 'certified' seeds of food crops, mainly self-pollinating crops, to farmers. In mid-1980s, the International Rice Research Institute (IRRI) in the philippines concluded a study which..(134)..that there was hardly any difference in the crop yields from transplanted rice and form the crop shown by broadcasted seeds. one would wonder why, in the first instance, were the, farmers, asked to..(135)..over to

transplanting paddy? The answer is simple-probably, to help the mechanical industries grow. since rice, is the staple food in Asia, tractor sales could any grow if there was a way to move the machine in the rice fields. No wonder, the sales of tractors, puddlers, reapers and other associated..(136)..soared in the rice growing areas.

127. (a) Irrational (b) main (c) brilliant  
 (d) important (e) empathetic
128. (a) maintaining (b) trusting (c) selling  
 (d) processing (e) creating
129. (a) necessarily (b) exceptionally (c) primarily  
 (d) regularly (e) truly
130. (a) unexplained (b) doubt (c) some  
 (d) true (e) sad
131. (a) himself (b) sometimes (c) proper  
 (d) improve (e) themselves
132. (a) established (b) created (c) set  
 (d) wound (e) thought
133. (a) tried (b) mattered (c) meaning  
 (d) supposed (e) expect
134. (a) renounced (b) showed (c) meaning  
 (d) supposed (e) expect
135. (a) shift (b) make (c) turn  
 (d) mull (e) switch
136. (a) sell (b) equipment (c) people  
 (d) technique (e) creatures

**Directions (137-140):** Rearrange the following seven sentences (A), (B), (C), (D), (E), (F) and (G) in the proper sequence to form a meaningful paragraph; then answer the questions given below them:

- A. However, achieving success is often preceded with frustration and sometimes learning to accept one's weaknesses as well as celebrating and building on strengths.
- B. While toddlers and preschoolers need constant supervision, school age children become gradually ready for more independence.
- C. Watching them try new activities, cheering them on at athletic events and applauding their accomplishments at recitals are usually some of the high points for most parents.
- D. When well equipped parents can be excellent coaches for their child no matter what the endeavor.
- E. Raising school age children can be awesome.
- F. However, learning to make good choices and exercise self-discipline does not come easily for many.
- G. Parents need to impart a moral code that the child gradually internalizes.

- 137.** Which of the following should be the SECOND sentence after the rearrangement?  
 (a) A (b) B (c) C  
 (d) D (e) E
- 138.** Which of the following should be the FIRST sentence after the rearrangement?  
 (a) A (b) C (c) B  
 (d) G (e) E

- 139.** Which of the following should be the FIFTH sentence after the rearrangement?  
 (a) E (b) D (c) B  
 (d) F (e) A
- 140.** Which of the following should be the FOURTH sentence after the rearrangement?  
 (a) A (b) B (c) C  
 (d) F (e) D

## Solutions

### REASONING ABILITY

**Direction (1-5):**

Floor	Person	Color
8	U	Pink
7	Y	Grey
6	S	Yellow
5	Z	Blue
4	T	Purple
3	V	Orange
2	X	Green
1	W	Red

1. (c); 2. (d); 3. (a);  
 4. (a); 5. (c);

**Direction (6-10):**

L F G M N H E O

—— Facing North

6. (e); 7. (b); 8. (c);  
 9. (c); 10. (c);

**Direction (11-15):**

- 11. (b);** Since the first letter is vowel and the last letter is consonant, so both are to be coded as code of consonant i.e. of B which is \*.
- 12. (c);** Since first and last letters are consonants and in between there are two vowels, so both the vowels are to be coded as 8. So the code is 7\$8882.
- 13. (e); Explanation:**  
 Converting the letters into symbols the code is,  
 D K P R T B  
 % 6 5 2 \$ \*
- 14. (d); Explanation:**  
 Since 1st and last letters are vowels, so both are to be coded as +. So the code is +5#\$2+
- 15. (a); Explanation:**  
 Since 1st letter is a consonant and last is a vowel, so their codes are to be interchanged. So the code for HLEKBI is 13@6\*9.

**Direction (16-20):** Will → ka

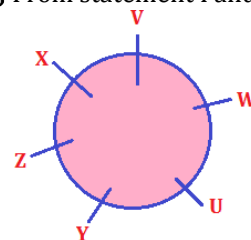
Meet → ja  
 Us → lu  
 You → hu  
 Today → la  
 temperature → ju  
 the → fu  
 of → na  
 maximum → fa

16. (b); 17. (a); 18. (b);  
 19. (b); 20. (c);

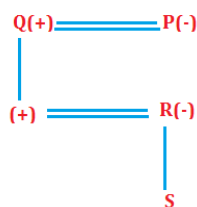
**Direction (21-25):** © → <

@ → ≤  
 % → >  
 \$ → ≥  
 ★ → =

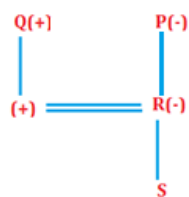
- 21. (a);**  $B < T = M > F$   
 $B < M$  (True)  $B < F$  (False)
- 22. (b);**  $M = R > T \geq K$   
 $K \leq M$  (False)  $K < M$  (True)
- 23. (e);**  $W < D \leq H = N$   
 $N \geq D$  (True)  $W < N$  (True)
- 24. (d);**  $W \leq D \geq R < K$   
 $R = W$  (False)  $R > W$  (False)
- 25. (d);**  $F \geq J > V < N$   
 $N \geq F$  (False)  $N > J$  (False)
- 26. (e);** From statement I and II both :



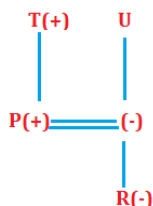
27. (b); From I: P is mother in law of R. or mother of R.



or

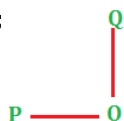


From II: P is father of R.



28. (d);

29. (a);



30. (b); Total 37 persons sitting in a row.

Direction (31-35):

Boys	USPQRT
Girls	FEADBC

31. (e);

32. (b);

33. (c);

34. (e);

35. (a);

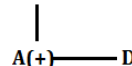
Direction (36-37):

36. (a)

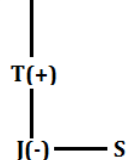
37. (d);  $16+8+0+2+1=27$

Direction (38-40):

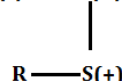
38. (b); B(-) — H(+)



39. (d); P(+)



40. (e); B(-) — C(+)



Direction (41-45):

Input: Kite 19 54 Give 31 Right 72 87 Dream Ace.

Step1: Ace Kite 19 54 Give 31 Right 72 Dream 87.

Step2: Dream Ace Kite 19 54 Give 31 Right 87 72.

Step3: Give Dream Ace Kite 19 31 Right 87 72 54.

Step4: Kite Give Dream Ace 19 Right 87 72 54 31.

Step5: Right Kite Give Dream Ace 87 72 54 31 19.

'Step-5' is the final step of this input.

41. (a);

42. (b);

43. (d);

44. (c);

45. (e);

Direction (46-50): Height  $\rightarrow R > Q > S > V > T > P$

Weight  $\rightarrow S > P > R > Q > T > V$

46. (e);

47. (b);

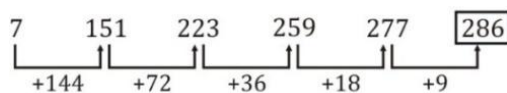
48. (d);

49. (c);

50. (a);

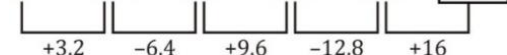
### QUANTITATIVE APTITUDE

51. (c); Pattern is —



$\therefore ? = 286$

52. (b); 27, 30.2, 23.8, 33.4, 20.6, 36.6



$\therefore ? = 36.6$

53. (b); Pattern is

$$5 \times 1 - 1 = 4$$

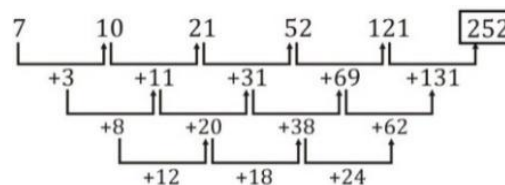
$$4 \times 2 - 2 = 6$$

$$6 \times 3 - 3 = 15$$

$$15 \times 4 - 4 = 56$$

$$56 \times 5 - 5 = 275$$

54. (d); Pattern is —



$\therefore ? = 252$

55. (e); Pattern is,

$$5 \times 1 - 2 = 3$$

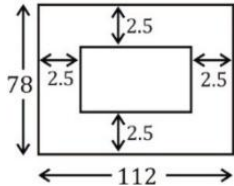
$$3 \times 2 - 2 = 4$$

$$4 \times 3 - 2 = 10$$

$$10 \times 4 - 2 = 38 \Rightarrow ? = 10$$

56. (e); Let speed of stream be  $x$  km/hr.  
 $\therefore$  speed of boat in still water is  $3x$  km/hr  
 $\therefore$  ATQ,  
 $\frac{24}{3x+x} + \frac{24}{3x-x} = 6$   
 $\frac{24}{4x} + \frac{24}{2x} = 6 \Rightarrow \frac{6}{x} + \frac{12}{x} = 6$   
 $x = \frac{18}{6} = 3$  km/hr  
 $\therefore$  Speed of boat in still water = 9 km/hr

57. (d);



$$\therefore \text{Required cost} = [112 \times 78 - 107 \times 73] \times 2$$

$$= \text{Rs. } 1850$$

58. (b); Length of BD by pythagores theorem

$$BD = \sqrt{8^2 + 6^2}$$

$$= \sqrt{64 + 36} = 10$$

$$\therefore \text{Length of BC}$$

$$= \sqrt{(24)^2 + (10)^2}$$

$$= \sqrt{576 + 100}$$

$$= \sqrt{676}$$

$$= 26$$

59. (a); Let radius of circle be  $r$  meter

$$\therefore 2\pi r = 44$$

$$2 \times \frac{22}{7} \times r = 44$$

$$r = 7 \text{ cm}$$

$$\therefore BC = 14 \text{ m}$$

$$\therefore AB = AC = 7\sqrt{2} \text{ m}$$

$$\therefore \text{Area of } \Delta ABC$$

$$= \frac{1}{2} \times 7\sqrt{2} \times 7\sqrt{2} = 49 \text{ m}^2$$

60. (a); Radius of bigger semicircle = 14  
 & radius of smaller semicircle = 7

$$\therefore \text{Required area}$$

$$= \frac{1}{2} [\pi(14)^2 - 2 \times \pi(7)^2]$$

$$= \frac{1}{2} [196\pi - 98\pi]$$

$$= \frac{1}{2} \times 98\pi = 154$$

61. (a); There are four cases  $\rightarrow 3R, (1R, 2G), (2R, 1G), 3G$

$$\therefore \text{Required probability}$$

$$= \frac{{}^4C_3 + {}^4C_1 \times {}^6C_2 + {}^4C_2 \times {}^6C_1 + {}^6C_3}{{}^{15}C_3}$$

$$= \frac{4+4 \times 15+6 \times 6+20}{\frac{91 \times 5}{2}}$$

$$= \frac{4+60+36+20}{\frac{91 \times 5}{2}}$$

$$= \frac{120}{91 \times 5} = \frac{24}{91}$$

62. (a);  $4x + 7y = 42$  ... (i)  
 $3x - 11y = -1$  ... (ii)  
 Multiplying (i) by 3 and (ii) by 4  
 $12x + 21y = 126$  ... (iii)  
 $12x - 44y = -4$  ... (iv)

Solving (iii) & (iv)

$$x = 7 \text{ \& } y = 2$$

$$\therefore x > y$$

63. (c); I.  $9x^2 - 29x + 22 = 0$   
 $9x^2 - 18x - 11x + 22 = 0$   
 $9x(x-2) - 11(x-2) = 0$   
 $\therefore x = 2$  or  $\frac{11}{9}$   
 II.  $y^2 - 7y + 12 = 0$   
 $y^2 - 3y - 4y + 12 = 0$   
 $y(y-3) - 4(y-3) = 0$   
 $y = 3, 4$   
 $\therefore y > x$

64. (d); I.  $3x^2 - 12x + 8x - 32 = 0$   
 $3x(x-4) + 8(x-4) = 0$   
 $\therefore x = 4, \frac{-8}{3}$   
 II.  $2y^2 - 17y + 36 = 0$   
 $2y^2 - 9y - 8y + 36 = 0$   
 $y(2y-9) - 4(2y-9) = 0$   
 $\therefore y = 4, \frac{9}{2}$   
 $\therefore y \geq x$

65. (a); I.  $3x^2 - 19x - 14 = 0$   
 $3x^2 - 21x + 2x - 14 = 0$   
 $3x(x-7) + 2(x-7) = 0$   
 $\therefore x = 7$  or  $\frac{-2}{3}$   
 II.  $2y^2 + 5y + 3 = 0$   
 $2y^2 + 2y + 3y + 3 = 0$   
 $2y(y+1) + 3(y+1) = 0$   
 $y = -1$  or  $\frac{-3}{2}$   
 $\therefore x > y$

66. (e); I.  $x^2 + 2 \times 7 \times x + (7)^2 = 0$   
 $\therefore (x+7)^2 = 0$   
 $\therefore x = -7$   
 II.  $y(y+9) = 0$   
 $\therefore y = 0$  or  $-9$   
 $\therefore$  No relation.

67. (e); Average salary =  $\frac{1000 \times 43000}{1600} = 26875$

68. (b); Number of employees in :  
 PNB = 1600  
 OBC = 1700  
 SBI = 2100

69. (e); Required ratio =  $15000 \times 600 : 35000 \times 900$   
 $= 2 : 7$

70. (e); Required percentage =  $\frac{400}{600} \times 100$   
 $= 66\frac{2}{3}\%$

71. (b); Required percentage =  $\frac{20000 \times 900}{25000 \times 800} \times 100 = 90\%$

72. (b); Required No. =  $\frac{280+354+343+535+433}{5} = 389$

73. (d); Required difference =  $(235 + 567) - 134 = 668$

74. (e); Required % =  $\frac{320+346+436}{255+343+545+546+453} \times 100$   
 $= \frac{1102}{2142} \times 100 \approx 51\%$

75. (d); Required animals  
 $= \frac{65}{100} \times (411 + 535 + 534) = 962$

76. (c); Required No. of lions =  $\frac{3}{4} (135 + 325 + 345 + 267)$   
 $= 804$

77. (c); Let their salaries be 100, 300 and 400  
 Their new salaries = 105 : 330 : 460  
 $= 21 : 66 : 92$

78. (b); Work done by the third pipe in 1 min.  
 $= (1/50) - [(1/60) + (1/75)] = [(1/50) (3/100)]$   
 $= (1/100)$   
 $\therefore$  The third pipe can alone fill the tank in 100 minutes.

79. (e); Both the statements together is not sufficient.

80. (d); Both statements alone is sufficient.

Let age of A is x and age of B is y.  
 $\therefore 3x = y \quad \dots (i)$

From statement I:  $\frac{x+10}{y+10} = \frac{3}{7} \dots (ii)$

Solving equations (i) and (ii),  $x = 20, y = 60$

From statement II:

$$= \frac{x-10}{y-10} = \frac{1}{5}$$

$$\Rightarrow 5x - 50 = y - 10$$

$$\Rightarrow 5x - y = 40 \text{ (iii)}$$

From equations (i) and (iii),  $x = 20, y = 60$

81. (c); Let length the train be x.

From statement I:

$$\text{Speed} = \frac{x}{8}$$

From statement II:

$$\text{Speed} = \frac{x+50}{20}$$

Solving this,  $x = \frac{400}{12} = \frac{100}{3}$  meter

82. (e); From I and II we find  $a + b = 2z$   
 we can not find  $a + b$  from I and II together.

83. (e); Let age of A, B and C be x year, y year and z year respectively

Data is not sufficient.

From statement I:

$$x = \frac{80}{100} \times z$$

From statement II:

$$y = \frac{60}{100} \times z$$

From these two equations  $\frac{x}{y} = \frac{4}{3}$  but cannot find x

and y separately.

84. (d); Let the present age of Ranjana and Rakhi be 15x and 17x

$$\frac{15x+6}{17x+6} = \frac{9}{10}$$

$$x = 2$$

$\therefore$  Age of Ranjana after 6 years

$$= 15 \times 2 + 6 = 36 \text{ years.}$$

85. (b); S.I. = 7200

$$R = \frac{S.I \times 100}{P \times T} = \frac{7200 \times 100}{20,000 \times 3} = 12\%$$

$$C.I = 20000 \left[ \left( 1 + \frac{12}{100} \right)^3 - 1 \right]$$

$$= 8098.56$$

86. (a); Here volume of water emptied by the second pipe will be 4 times to that of first Hence, Time take will be 1/4 of the first pipe. When both the pipes are open the part of the tank emptied in 1 minute = 1/8 Hence the tank will be emptied in 8 minutes.

87. (b); Total CP = 2000 + 750 = 2750

$$\text{Total SP} = \frac{120}{100} \times 2000 + \frac{95}{100} \times 750$$

$$= 2400 + 712.5$$

$$= 3112.5$$

$$\therefore \text{Total gain} = 3112.5 - 2750 = 362.5 \text{ Rs.}$$

88. (a); Let Man = x

Woman = 2x

$$\therefore \frac{8}{x} + \frac{4}{2x} = \frac{1}{6}$$

$$\frac{20}{2x} = \frac{1}{6}$$

$$x = 60$$

$$\therefore \text{Man} = 60, \text{ woman} = 120$$

$$\text{Required No. of days} = \frac{\frac{2}{3}}{\frac{4}{60} + \frac{8}{120}}$$

$$= \frac{2 \times 120}{3(16)}$$

$$= 5 \text{ days}$$

89. (c); Let their investment be x, 2x and 4x

$$\therefore A \rightarrow 6x + 6 \times \left( x + \frac{x}{2} \right) = 6x + 9x = 15x$$

$$B \rightarrow 6 \times 2x + 6 \times 4x = 36x$$

$$C \rightarrow 6 \times 4x + 6 \times \left( 4x - \frac{1}{4} \times 4x \right) = 24x + 18x =$$

$$42x$$

$$\therefore \text{Required Ratio} = 15 : 36 : 42$$

$$= 5 : 12 : 14$$

90. (b); Number of questions attempted correctly =

$$70\% \text{ of } 10 + 50\% \text{ of } 30 + 60\% \text{ of } 45$$

$$= 7 + 15 + 27 = 49$$

$$\text{Passing grade} = (60/100) * 85 = 51$$

$$\text{Reqd. Ans} = 51 - 49 = 2$$

91. (c); Age of new man = 28 + 28 = 56 years

92. (b); 11% → 5236  
1% → 476  
∴ (11 + 19 + 7) = 37% → 17612 Rs.

93. (c); Probability =  $\frac{2c_1 \times 3c_2 + 2c_2 \times 3c_1}{5c_3}$   
 $= \frac{2 \times 3 + 1 \times 3}{10} = \frac{9}{10}$

94. (d);  $B = \frac{1}{\frac{1}{12} - \frac{1}{20}} = \frac{1}{\frac{5-3}{60}}$   
B = 30 days  
∴ Required No. of days =  $\frac{1}{\frac{1}{20} + \frac{1}{60}}$   
 $= \frac{60}{4} = 15$  days

95. (b);  $\frac{132 \times 5}{18} = \frac{100 + 165}{t}$   
 $t = \frac{275 \times 18}{132 \times 5}$   
t = 7.5 seconds

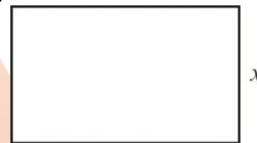
96. (b);  $\frac{3x}{12x+3} = \frac{3x}{15x}$   
∴ New ratio = 1 : 5  
∴ Required % =  $\frac{1}{6} \times 100\%$   
 $= \frac{50}{3}\% = 16\frac{2}{3}\%$

97. (d);  $\begin{matrix} 3 \text{-----} A \text{-----} 30 \\ 2 \text{-----} B \text{-----} 45 \end{matrix} \begin{matrix} \diagup \\ \diagdown \end{matrix} 90$   
Let B turned off after T min  
 $2T + 3 \times 20 = 90$   
T = 15 min

98. (a);  $(2M + 3B)10 = (3M + 2B)B$   
 $20M + 30B = 24M + 16B$   
 $2M = 7B$   
∴  $10B = 10$  days  
∴  $B = \frac{1}{100}$  days  
∴  $2M + 1B = 7B + B$   
 $= 8B$   
 $= \frac{8}{100} = \frac{2}{25}$   
∴ Required No. of days =  $12\frac{1}{2}$  days

99. (a); Ratio of their speeds =  $\sqrt{\frac{28}{5}} : \sqrt{\frac{20}{7}}$   
∴  $\sqrt{\frac{28}{5}} \rightarrow 14$   
∴  $\sqrt{\frac{20}{7}} \rightarrow \frac{14}{\sqrt{28}} \times \sqrt{5} \times \frac{\sqrt{20}}{\sqrt{7}}$   
 $= \frac{14}{2\sqrt{7}} \times \sqrt{5} \times \frac{2\sqrt{5}}{\sqrt{7}} = \frac{14 \times 5}{7} = 10$  kmph

100. (a); Area =  $2x^2$  m<sup>2</sup>



$\therefore 2x^2 \times 2 = 256$   
 $x^2 = 64$   
 $x = 8$   
∴ Required length =  $2 \times 8 = 16$  m

**ENGLISH LANGUAGE**

101. (c);      102. (e);      103. (c);  
104. (c);      105. (b);      106. (b);  
107. (d);      108. (e);      109. (e);  
110. (d);      111. (e);      112. (d);  
113. (e);      114. (e);      115. (e);  
116. (c);  
117. (c); 'Earn a decent living' is the only suitable syntax to be used. It means 'to earn well' that fulfils the sentence's context.  
118. (c); After 'to' we should use 'V<sub>1</sub>' to show purpose.  
119. (c); 'Disowning' is the improper usage. We have to use 'disown' here so that syntax gets correct  
120. (b); 'Art' is singular subject, so it should agree with a singular verb. Hence, 'requires' is suitable expression.  
121. (a); To express the subjunctive mood. Auxiliary 'were' is used in the sentence.

122. (c); Accost means to approach someone with an allegation or blame, so 3rd option is the most appropriate one.  
123. (c); Harmful-not good for health, so 3<sup>rd</sup> option is most appropriate one  
124. (b); downturns means- a decline in economic, knell means -the sound of a bell  
125. (c); survived means- continue to live or exist, unscathed means- without suffering any injury, damage, or harm.  
126. (b); downturn, out "dole out" is the correct phrase which means to help someone with money and gifts.  
127. (d);      128. (a);      129. (c);  
130. (a);      131. (e);      132. (c);  
133. (d);      134. (b);      135. (e);  
136. (b); For questions (136-140) THE CORRECT SEQUENCE IS ECADBF  
137. (c);      138. (e);      139. (c);  
140. (e);

**50+**

# **BANK PO | CLERK**

**2016-2020 PREVIOUS YEARS'**

**Memory Based Book**

Useful for SBI, IBPS, RRB, RBI & Other Bank Exams

**eBOOK**

**English Edition**

SBI PO | Clerk: 14 Sets  
IBPS PO | Clerk: 16 Sets  
IBPS RRB PO | Clerk: 16 Sets  
RBI Grade B | Assistant: 8 Sets

**VERSION**  
**3.0**

**6000+**  
Questions  
Detailed Solutions of  
English | Quant |  
Reasoning

**500+**  
Exclusive  
**BANKING & STATIC**  
Awareness Questions

**REASONING ABILITY**

**Directions (1-5):** Study the following information carefully and answer the questions given below.

There are eight members i.e. A, B, C, D, E, F, G and H are sitting around a square table such that four of them like flowers i.e. Lily, Rose, orchid and Sunflower and four of them like fruits i.e. Mango, Kiwi, Apple, Banana but not necessarily in the same order. Those who like Fruits sit at the corner and those who like flower sit at the middle of the table. Some of them face inside and some of them face outside.

The one who likes Orchid sits third to the right of H. A sits second to the right of the one who likes Orchid. A is not the immediate neighbour of H. The one who likes Banana is an immediate neighbour of A. The one who likes Banana sits opposite to the one who likes Kiwi. H does not like Kiwi. The one who likes Apple sits second to the left of the one who likes Kiwi, who is not the immediate neighbour of A. B sits third to the right of the one who likes Apple. F likes Lily. Only one person sits between B and the one who likes Sunflower. F faces the one who likes Sunflower. E and G sit opposite to each other. E does not like Banana. C sits second to the right of G. C does not face Inside. C and D face same direction as G.

1. A like which of the following item?  
(a) Mango (b) Rose (c) Kiwi  
(d) Sunflower (e) None of these
2. Who among the following sits second to the right of C?  
(a) The one who likes Kiwi  
(b) D  
(c) The one who likes Banana  
(d) The one who likes Lily  
(e) Both a and b
3. Which of the following is not true regarding F?  
(a) F faces the one who likes Sunflower.  
(b) F and G face opposite direction.  
(c) F sits second to the right of the one who likes Orchid.  
(d) F and E are immediate neighbours.  
(e) All are correct
4. How many persons sit between A and B when counted from the left of A?  
(a) Three (b) One (c) Two  
(d) Four (e) None of these
5. Who among the following sits third to the left of D?  
(a) H (b) C (c) G  
(d) B (e) None of these

**Directions (6-10):** Study the following information carefully to answer the given questions.

A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: **95 11 76 21 89 42 64 31**

Step I: 02 76 21 89 42 64 31 04

Step II: 03 02 76 42 64 31 04 01

Step III: 04 03 02 42 64 04 01 01

Step IV: 06 04 03 02 04 01 01 02

Step IV, is the last step.

**Input:** 75 12 10 94 84 32 63 42 54 22

6. How many steps are required to complete the given arrangement?  
(a) III (b) V (c) IV  
(d) VI (e) None of these
7. How many elements are there between '03' and '42' in step-II?  
(a) Two (b) One (c) Three  
(d) Four (e) None of these
8. Which number would be at the fourth position from the left end in the last step of the output?  
(a) 04 (b) 05 (c) 64  
(d) 02 (e) None of these
9. What is the sum of the third element from the left in step II and 2<sup>nd</sup> from the right in the last step?  
(a) 78 (b) 76 (c) 65  
(d) 83 (e) None of these
10. What is the difference between the third element from the right in step IV and the fourth element from the left in step III?  
(a) 21 (b) 24 (c) 28  
(d) 19 (e) None of these

**Directions (11-15):** Study the following information carefully and answer the questions given below.

Six Horses i.e. A, B, C, D, E, F are standing in a row facing north at a distance which is a successive multiple of 4 in an increasing order from the left. Horse F is second to the right of Horse C. The total distance between Horse E and D is 52m. Only one Horse stands in between Horse B and Horse E. Horse F and Horse D are Standing next to each other. Horse A and Horse F are not standing next to Horse B. Now Horse B starts moving towards north direction after

moving 10m it takes a right turn and stops at point T after moving 28m. Horse A starts moving in east direction and after going 12m it turns right and move 20m and then again turn right and move 72m and stops there at point H. Horse C starts moving in south direction and after moving 10m it takes a left turn and moves 20m then it again takes a left turn and moves 5m. From there it takes a right turn and moves 24m and stops at point V.

11. What is the shortest distance between Point V and point H?  
 (a) 10m (b) 15m (c) 5m  
 (d) 20m (e) None of these
12. In which direction and at what distance is point H with respect to F's initial position?  
 (a) 20m south (b) 20m, North  
 (c) 2m, Southeast (d) 20m, Northwest  
 (e) None of these
13. If horse D, moves 5m in the south direction and reaches point K then point V is in which direction with respect to point K?  
 (a) Southeast (b) North (c) East  
 (d) West (e) None of these
14. What is the total distance between Horse E and Horse A?  
 (a) 74m (b) 80m (c) 84m  
 (d) 88m (e) None of these
15. In which direction is point T with respect to point H?  
 (a) North (b) Southwest (c) South  
 (d) East (e) Northwest

**Direction (16-20):** Study the following information and answer the given questions:

In alphabetical series each consonant is assigned a different number from 1-7 (for ex- B is coded as 1, C-2.....J-7) and again those numbers get repeated (for ex- K-1, L-2.....so on).

Besides the above information, following operations are to be applied for coding the words given in the questions below.

**Each letters of the given questions will be coded as per the given conditions:**

- I. Vowels appearing before 'M' in the Alphabetical series will be coded as '\*\*'.
- II. Vowels appearing after 'M' in the alphabetical series will be coded as '\$\$'.
- III. Number preceded by vowel will be coded as '#1'.
- IV. No. followed by vowel will be coded as '@#'.

16. What will possibly be the code for 'NORMAL'?
- (a) '#1\$\$@##2\*\*@#
  - (b) '#1\$\$@##1\*\*@#
  - (c) '#3\$\$@##1\*\*@#
  - (d) '#1\$#@##1\*\*@#
  - (e) None of these

17. What will possibly be the code for 'EMBARKS'?
- (a) '\*\*@##1\*\*@#12
  - (b) '\*\*@##1\*\*@#31
  - (c) '\*\*@##1\*\*@#41
  - (d) '\*\*@##1\*\*@#11
  - (e) None of these
18. What will possibly be the code for 'SMITTLE'?
- (a) 1#1\*\*@#2#1\*\*
  - (b) 1#1\*\*@#2#11\*
  - (c) 1#1\*\*@#2#1\*1
  - (d) 2#1\*\*@#2#1\*\*
  - (e) None of these
19. What will possibly be the code of 'ANNUAL'?
- (a) '\*\*@##1\$\$\*\*@#
  - (b) \*1@##1\$\$\*\*@#
  - (c) \*\*##@1\$\$\*\*@#
  - (d) \*2@##1\$\$\*\*@#
  - (e) None of these
20. What is the code for 'PROM'?
- (a) 5#1\$\$@# (b) 2#1\$\$@#
  - (c) 4#1\$\$@# (d) 6#1\$\$@#
  - (e) None of these

**Directions (21-25):** Study the following information carefully and answer the questions:

There are three compartments A, B, C such as compartment A is in west of compartment B and compartment A and compartment B is in west of compartment C. Twelve boxes P, Q, R, S, V, X, Y, Z, K, L, M, N are placed in three different compartments such as four boxes are placed in each compartment. And these four boxes are placed one above another. Only one box is placed in between V and Z in compartment B. R is placed on top in compartment A. Box Y is in the immediate west of L. Box L is placed between box M and N. M is placed above N. Two boxes are placed between R and S in same compartment. Box Q is placed immediately above P in the same compartment. Box X is placed above box V and Z in the same compartment. Box V is placed above box Z.

These boxes are shifting in other compartments as per the cards drawn and only two cards drawn at a time -

- I. If both the card drawn is heart then the box placed at the top in compartment B will be interchanged with the box placed at the bottom of Compartment C.
- II. If among the card drawn one is diamond and another is spade then the box which is second from the bottom in Compartment A will be inter changed with box placed at second from the top in Compartment C.
- III. If among the two cards drawn one is Club and another is Heart then the box placed at top and the box placed at the bottom will be interchanged in compartment B.
- IV. If among the two cards drawn one is club and another is diamond then the box which is third from the bottom in compartment B is interchanged with the box which is third from the top in compartment A.

The Cards Drawn are---

1. Club-Heart
2. Heart-Heart
3. Club-Diamond
4. Spade-Diamond

**Note-** The cards will be drawn in the given serial order.

21. Which of the following box is placed at the bottom of Compartment C after the rearrangement?  
 (a) Box K (b) Box L (c) Box M  
 (d) Box Z (e) None of these
22. Which of the following is to the west of box P after the rearrangement?  
 (a) Box Q (b) Box R (c) Box M  
 (d) Box S (e) None of these
23. Which of the following box is kept at the top in compartment B after the rearrangement?  
 (a) Box X (b) Box N (c) Box Y  
 (d) Box V (e) None of these
24. How many boxes are below box V in its respective compartment after the rearrangement?  
 (a) Three (b) Two (c) One  
 (d) None (e) None of these
25. Which of the following combination of 'Box-compartment' before the rearrangement is correct?  
 (a) Box R- C (b) Box N- A (c) Box V- C  
 (d) Box N- C (e) All are correct
26. Statement- Indian Metrological Department has forecasted that there will be a situation of flood in City A within the next 15 days.  
 Course of Action- I. The population of city A should move to city B within next 15 days to get rid of the problem.  
 II. The people of city A are advised to preserve necessary items for future consumption.  
 (a) Only II (b) Both I and II  
 (c) Only I (d) Neither I nor II  
 (e) None of these

**Direction (27-30):** There are two rows given and to find out the resultant of a particular row we need to follow the following steps: -

Step 1: If an even number is followed by an odd number then the resultant will be the addition of both the numbers.  
 Step 2: If an odd number is followed by a perfect square then the resultant will be the difference of that square number and the odd number.

Step 3: If an odd number is followed by another odd number (but not a perfect square) then the resultant will be the addition of both the numbers.

Step 4: If an odd number is followed by an even number (but not a perfect square) then the resultant comes by multiplying the numbers.

Step 5: If an even number is followed by another even number then the resultant will be the division of first number by the second number.

27. Find the sum of two rows

8	4	1
11	6	7

- (a) 78 (b) 52 (c) 64  
 (d) 76 (e) None of the above

28. If the sum of the resultants of two rows is 46. Then find the value of X.

9	2	7
24	4	X

- (a) 16 (b) 27 (c) 8  
 (d) 15 (e) None of the above

29. Find the difference between the resultant of first and second row.

13	3	7
4	11	12

- (a) 117 (b) 126 (c) 157  
 (d) 96 (e) None of the above

30. Find the multiplication of the resultant of first and second row.

21	19	8
16	13	9

- (a) 110 (b) 85 (c) 100  
 (d) 120 (e) None of the above

**Directions (31-34):** Study the following information carefully and answer the questions.

Six subjects Hindi, English, chemistry, Mathematics, Physics and Biology are taught at a coaching institute. Each subject was given a definite and continuous time slots. (i.e. there is no gap between two consecutive subjects). In a day a total 14 hours class was scheduled. A subject can start its slot from a whole hour or half hour only (i.e. a subject can start from 4 pm, 4 : 30 pm but it cannot start from 4:13 pm, 4:03 pm) Hindi class takes place from 11 am to 12:30 pm. Only one class took place between Hindi and Mathematics. Time slot of Mathematics is twice the time slot of Hindi. Physics classes starts from 5:30 pm. Chemistry class took place between Hindi and Physics, but it did not take place immediately after or before Physics. Total slot time of English and Biology class is 4.5 hours. Number of classes that took place between Biology and Physics is same as the number of classes between chemistry and Biology. Time slot of Chemistry is 1 hour less than the time slot of Mathematics.

31. How many lectures are scheduled between Hindi and Biology?

- (a) None (b) One (c) Two  
 (d) Three (e) More than three

32. Which of the following subject's time slot is scheduled from 12:30-2:30 pm?  
 (a) English (b) Chemistry (c) Biology  
 (d) Math's (e) None of these
33. Which of the following subject is scheduled just after English?  
 (a) Hindi (b) Chemistry (c) Biology  
 (d) Math's (e) None of these
34. What is the duration (in hours) of the Physics' lecture?  
 (a) 2.5 hour (b) 3 hour (c) 3.5 hour  
 (d) 1.5 hour (e) 2 hour

**Direction (35-37):** In the following questions, the symbols #, &, @, \*, \$, % and © are used with the following meanings as illustrated below. Study the following information and answer the given questions:

A@B- A is the child of B.

A©B- A is the parent of B

A%B- A is father-in-law of B

A&B- A is brother-in-law of B

A\$B- A is brother of B

A\*B- A is wife of B

A#B- A is sister-in-law of B

35. If X©F\$D&Q@H©E&F, then how is F related to H?  
 (a) father (b) Brother-in-law  
 (c) son-in-law (d) Sister  
 (e) None of these

36. If G\*J\$K©Y@V&C#G then how J is related to C?  
 (a) father (b) Brother-in-law  
 (c) daughter-in-law (d) Brother  
 (e) None of these

37. If K&L%M\*N@O then how is N related to K?  
 (a) father (b) Uncle (c) Nephew  
 (d) Sister (e) None of these

**Directions (38-41):** Study the following information carefully and answer the questions given below.

Nine persons K, L, M, N, O, P, Q, R, S are going to gym on three dates 8, 17, 25 of three different month January, March and April of same year. Also each of them is of different weight. Only three persons are heavier than S. Q is going to gym immediately after N but not in the same month as N. Only one person go to gym in between O and R and all go in the same month. K is just heavier than M but lighter than Q. L is heavier than S but lighter than N who is not the heaviest. Only three persons go to gym in between L and S but none of them go to gym in a month having 30 days. The one who go immediately after O is not lighter than O. The one who is the lightest person attend gym immediately after L. As many persons go to gym in between N and K as between K and R. P is lighter than both M and O. R is not lighter than K. The one who go to the gym last is heavier than O but lighter than S.

38. Who among the following go to gym on 17<sup>th</sup> April?  
 (a) K (b) M (c) S  
 (d) R (e) None of these
39. How many persons go to gym between R and S?  
 (a) None (b) One (c) Two  
 (d) Three (e) More than three
40. How many persons are heavier than R?  
 (a) None (b) One (c) Two  
 (d) Three (e) More than three
41. Who among the following go to gym immediately after K?  
 (a) P (b) M (c) N  
 (d) O (e) Q

**Directions (42-44):** Study the information carefully and answer the questions given below.

α me either hour hand or minute hand is at 8

∞ me either hour hand or minute hand is at 11

Ⓜ me either hour hand or minute hand is at 6

£ me either hour hand or minute hand is at 9

Å me either hour hand or minute hand is at 2

μ me either hour hand or minute hand is at 5

**Note:** if two symbols are given than by default second symbol is consider as minute hand and first symbol is considered as hour hand. And all time are considered at pm.

42. If a man leaves from GIP to WOW at ⓂÅ. Usually he takes 20 min to reach WOW, but that time he reaches 15 min later, then at what time he will reach WOW?  
 (a) ∞Ⓜ (b) Ⓜ∞ (c) Ⓜ£  
 (d) ⓂⓂ (e) None of these
43. A person takes 40 minutes to reach airport from his office and he has to catch airplane that is scheduled to depart at '£μ' so at what time should he leave from his office for the airport to arrive at the airport at 20 minutes earlier?  
 (a) μÅ (b) Ⓜ∞ (c) Åμ  
 (d) αμ (e) None of these
44. If a man leaves from his home to office at '£∞' and he takes 2hr to reach his office, at what time he will reach to office?  
 (a) μ£ (b) ∞Å  
 (c) ∞∞ (d) Can't be determined  
 (e) None of these

**Directions (45-48):** Study the following information carefully and answer the questions given below:

Ten vehicles are placed in two parallel rows, five vehicles in row 1 facing north and rest in row 2 facing south having equal distance between each other i.e. each of them faces another vehicle.

These vehicles are placed according to speed which increases from West to East direction in both rows but not necessarily in the given order. Two vehicles are placed between boat and the vehicle with speed 170 km/h. Car is placed just next to the vehicle which faces Truck. Only one vehicle is placed between Car and cycle. Scooter is just next to the vehicle with speed 120 km/h, but none of them is placed at extreme end of the row. All the vehicle with speed less than 50 km/h faces South. Aeroplane is placed next to vehicle with speed 228 km/h.

**cycle (12 km/h),  
Auto rickshaw(22 km/h ),  
boat(54 km/h),  
scooter (72 km/h),  
motorcycle (120 km/h),  
Car (154 km/h),  
Truck (170 km/h),  
Train (228 km/h),  
Helicopter (274 km/h),  
Aeroplane(290 km/h)**

45. Which among the following vehicle is placed opposite to Motor Cycle?  
(a) Auto rickshaw (b) Train  
(c) Cycle (d) Car  
(e) Cannot be determined
46. What is the speed of the vehicle which is placed at extreme left end of row 1?  
(a) 54 km/h (b) 12km/h  
(c) 290 km/h (d) 274 km/h  
(e) 22 km/h
47. Which vehicle is placed at extreme left end of row 2?  
(a) Train (b) cycle (c) Helicopter  
(d) Aeroplane (e) Scooter
48. What is the speed range of the vehicle which is placed exactly between Car and Aeroplane?  
(a) (125-160) km/h  
(b) (160-200) km/h

- (c) (200-250) km/h  
(d) (250-275) km/h  
(e) None of these

**Directions (49):** Each question given below consists of a statement, followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Give wer-

- (a) If only argument I is strong  
(b) If only argument II is strong  
(c) If either I or II is strong  
(d) If neither I nor II is strong  
(e) If both I and II are strong

**49. Statement:** Should all the unauthorized structures in the city be demolished?

**Arguments:**

- I. No. Where will the people residing in such houses live?  
II. Yes. This will give a clear message to general public and they will refrain from constructing unauthorized buildings.

**Directions (50):** In question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give wer-

- (a) If only assumption I is implicit  
(b) If only assumption II is implicit  
(c) If either I or II is implicit  
(d) If neither I nor II is implicit  
(e) If both I and II are implicit

**50. Statement:** "I would like to study the impact of pay revision on job satisfaction of employees." — A tells B.

**Assumptions:**

- I. Job satisfaction can be measured.  
II. A has necessary competence to undertake such study.

## QUANTITATIVE APTITUDE

**Directions (51-56):** - Rahul goes to gym and runs 40 minutes on treadmill. For starting 15 minutes he runs at a uniform speed of 5 km/hr and after that he runs at a uniform speed of 9km/hr for remaining time. He runs total **(A)** km on treadmill. After that he comes to his house and get ready for office which is 45km away from his house. He reaches office in 1.5 hours at 9:30 a.m.

In office he gives some work to his subordinates P<sub>1</sub> and P<sub>2</sub> at **(B)**. P<sub>1</sub> can complete that work in 6 hours while efficiency of P<sub>1</sub> and P<sub>2</sub> is in the ratio 5 : 4. P<sub>1</sub> and P<sub>2</sub> together completes 75% of that work at 12:30 p.m. Rahul and P<sub>2</sub>

together can complete same work in 3 hours. Rahul is **(C)**% more efficient than P<sub>1</sub>. After that work he comes back to home in upstream (Speed of stream is 3km/hr and his speed in still water and distance between his house and office are same as earlier). He takes **(D)** hours to reach home.

When he reaches home, two of his friends Aman and Raman come at his house. All three starts to play a game in which 2 dices are used by each person. **(E)** is the number of outcomes in which first Rahul and then Aman throw their respective dices. In a game, all three throw their dices

and each one of them get 8 as the sum of numbers in their dices and any one of two not get same outcomes. Winner is the one who gets highest number as the sum of the square of the number comes in dices. (F) should be the outcomes of the dices of Raman if Raman is winner of the game.

51. What value will come at the place of 'A'?
- (a) 4.25 km      (b) 3.75 km      (c) 5 km  
(d) 5.25 km      (e) None of the given options
52. What value will come at the place of 'B'?
- (a) 10:45 a.m.      (b) None of the given options  
(c) 11 a.m.      (d) 10:30 a.m.  
(e) 10 a.m.
53. What value will come at the place of 'C'?
- (a)  $16\frac{2}{3}\%$       (b) 20%      (c) 25%  
(d)  $33\frac{1}{3}\%$       (e) 50%
54. What value will come at the place of 'D'?
- (a) 2 hours      (b) 1.5 hours      (c)  $1\frac{7}{8}$  hours  
(d)  $1\frac{2}{3}$  hours      (e)  $1\frac{4}{11}$  hours
55. What value will come at the place of 'E'?
- (a) 72      (b) 42      (c) 36  
(d) 108      (e) 54
56. What value will come at the place of 'F'?
- (a) None of the given options  
(b) Cannot be determined  
(c) 3 and 5  
(d) 4 and 4  
(e) 2 and 6
57. If length of a rectangle is decreased by 6 cm we get a square and the area of square formed is  $252\text{ cm}^2$  less than the area of square formed when breadth of the

original rectangle is increased by 6 cm. Find the perimeter of the rectangle.

- (a) 42 cm      (b) 88 cm      (c) 80 cm  
(d) 84 cm      (e) 72 cm

58. Breadth of a rectangle is equal to the diagonal of the square whose side is  $2.5\sqrt{2}$  cm. Ratio between length and breadth of rectangle is 3 : 1. Find the area of the rectangle (in  $\text{cm}^2$ ).

- (a) 125      (b) 75      (c) 90  
(d) 100      (e) 115

59. Equal distance is covered by a boat in upstream and in downstream in total 5 hours. Sum of speed of a boat in upstream and downstream is 40 km/hr. Speed of boat in still water is 600% more than the speed of stream. Find the approximate distance covered by boat in downstream (in km).

- (a) 40      (b) 35      (c) 55  
(d) 59      (e) 50

60. A and B entered into a partnership with Rs.800 and Rs.1600 respectively. From 9<sup>th</sup> months on-ward they each decided to invest Rs.100 more on starting of each month. If total annual profit is Rs.7700 then find the profit share of A.

- (a) Rs.2650      (b) Rs.3250      (c) Rs.4250  
(d) Rs.2350      (e) Rs.1650

61. A starts a business, after 6 months B also join him with Rs.4500 and after 2 months of B's joining C also join them with Rs.4500. If A gets approx Rs 4900 out of total annual profit of Rs.10,000 then find the approximate value of initial investment of A.

- (a) Rs.4800      (b) Rs.4200      (c) Rs.3600  
(d) Rs.4400      (e) Rs.5200

**Directions (62-66):** - Bar chart given below shows selling price of five articles and profit % earned on selling these articles by Ravi. Study the data carefully & answer the following questions.



62. Ravi sold article 'D' to Shyam who again sold it at 25% profit. Find the difference between profit earned by Ravi to profit earned by Shyam.  
(a) Rs. 5 (b) Rs. 10 (c) Rs. 15  
(d) Rs. 20 (e) Rs. 25
63. Cost price of article 'A' is what percent more/less than cost price of article 'C'.  
(a) 62.5% (b) 37.5% (c) 25%  
(d) 75% (e) 50%
64. Ravi marked article B, 50% above its cost price, then what percent discount should be given on marked price to earn the given profit?  
(a) 40% (b) 30% (c) 25%  
(d) 20% (e) 10%
65. Profit earned on selling article 'E' is how much more/less than profit earned on selling article 'C'.  
(a) Rs.40  
(b) None of the given options  
(c) Rs.30  
(d) Rs.20  
(e) Rs.10
66. Ravi mark-up article 'A' such that on selling article 'A' at 16% discount he will earn the given profit. Mark up price of article 'A' is what percent more than its cost price?  
(a)  $33\frac{1}{3}\%$  (b)  $66\frac{2}{3}\%$  (c)  $16\frac{2}{3}\%$   
(d)  $26\frac{2}{3}\%$  (e)  $73\frac{1}{3}\%$

**Direction (67-70):** - Two quantities that is I and II are given in following questions. Students is expected to solve the quantities and wer them according to given options by comparing their numerical values.

67.  $3^{x+5} \cdot 9^{2x-4} = 9^{5x-14}$   
And,  $2y^2 - 15y - 28 = 3y^2 - 23y - 13$   
Quantity I: - Value of 'x'  
Quantity II: - Value of 'y'  
(a) Quantity I > Quantity II  
(b) Quantity I < Quantity II  
(c) Quantity I  $\geq$  Quantity II  
(d) Quantity I  $\leq$  Quantity II  
(e) Quantity I = Quantity II or No relation
68. Quantity I: When an article sold at 28% discount then profit earned is 29.6%. 'x' is the profit % when article sold at 30% discount.  
Quantity II: 38  
(a) Quantity I = Quantity II or No relation  
(b) Quantity I < Quantity II  
(c) Quantity I  $\leq$  Quantity II  
(d) Quantity I  $\geq$  Quantity II  
(e) Quantity I > Quantity II

69. 12 men can complete a work in 10 days. 18 women can do the same work in 20 days. 27 children can do that work in 20 days. 9 women and 9 children together do that work for 16 days.  
Quantity I: No. of men required to complete the remaining work in one day  
Quantity II: 36  
(a) Quantity I > Quantity II  
(b) Quantity I  $\leq$  Quantity II  
(c) Quantity I = Quantity II or No relation  
(d) Quantity I < Quantity II  
(e) Quantity I  $\geq$  Quantity II
70. Quantity I: Time taken to fill the tank when A, B and C are opened in every alternate minute starting with A and ending with C. A, B and C alone takes 20 minutes, 15 minutes and 12 minutes respectively to fill the tank.  
Quantity II: Find the time taken by waste pipe to empty the full cistern. Two pipes alone can fill a cistern in 10 minutes and 15 minutes respectively. When these two pipes along with the waste pipe are opened, the cistern gets filled in 18 minutes.  
(a) Quantity I > Quantity II  
(b) Quantity I < Quantity II  
(c) Quantity I  $\geq$  Quantity II  
(d) Quantity I  $\leq$  Quantity II  
(e) Quantity I = Quantity II or No relation

**Directions (71-75):** - Data given below shows number of units of electricity consumed by F, Lights and Other appliances in three different houses. Study the data carefully and wer the following questions.

**House A** → Total number of units consumed in House 'A' is 250 units out of which 120 units are consumed by Other appliances. Units consumed by F is 30 less than Units consumed by Lights.

**House B** → Units consumed by Lights in House 'A' and House 'B' is same. Units consumed by F in House 'B' are 60% more than that of f in House 'A'.

**House C** → Total units consumed by Lights in all three houses is 200 units and units consumed by F and Lights is same in House C. Units consumed by Other appliances is 125% more than that by F in this House. Total units consumed by Other appliances in all three houses is 320 units.

71. Number of units consumed by Lights in House 'B' is what percent more of the units consumed by Lights in house 'C'?  
(a) 100% (b) 200% (c) 120%  
(d) 50% (e) 150%
72. Average number of units consumed by Other appliances in House 'B', 'C' and 'D' is 110 units. Find the units consumed by Other appliances in House 'D'?  
(a) 110 units (b) None of the given options  
(c) 130 units (d) 120 units  
(e) 140 units

73. Find total number of units consumed in House 'A' and 'C' together?

- (a) None of the given options  
(b) 410 units  
(c) 430 units  
(d) 400 units  
(e) 420 units

74. Find the difference between Units consumed by Other appliances in House 'B' and house 'C'?

- (a) 10 units  
(b) 20 units  
(c) 30 units  
(d) None of the given options  
(e) 40 units

75. Total units consumed by F and Lights together in House 'C' is what percent less than total units consumed by Lights and Other appliances together in House 'A'?

- (a) 20% (b) 40% (c) 50%  
(d) 60% (e) 80%

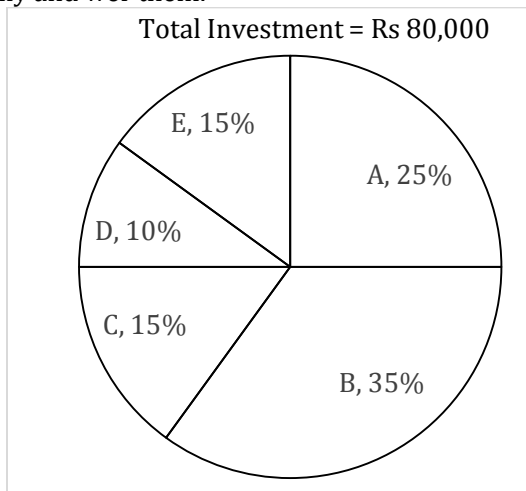
76. Cost price of a pen is 50 Rs. and that of notebook is 140 Rs. If pen is sold at 200% profit, then to purchase 10 such note books how many pens are required to sell if only profit money is used to buy notebooks?

- (a) 16 (b) 18 (c) 14  
(d) 20 (e) 22

77. Length of two trains are 150 m and 200 m respectively and the ratio (shorter: longer) of their speed is 2 : 5. If they cross each other in opposite direction in 15 second then in what time faster train will overtake the slower train.

- (a) 20 seconds (b) 25 seconds  
(c) 32 seconds (d) 35 seconds  
(e) 27 seconds

**Directions (78-80):** Pie-chart given below shows investment (in terms of percentage) out of total investment of five different persons. Study the questions carefully and answer them.



78. B and E started a business together. B left the business 9 months after starting of business. Find the difference between profit shares of B and E if total annual profit is Rs. 15,400?

- (a) Rs.2100 (b) Rs.4200 (c) Rs.1400  
(d) Rs.2800 (e) Rs.3500

79. A and D started a business together after 6 months 'A' is replaced by 'C'. D left the business after 2 months of 'A' while 'C' worked for total 'x' months. Out of total profit of Rs 13,050, 'A' got Rs 6750, then find the value of 'x'.

- (a) 10 (b) 8 (c) 6  
(d) 4 (e) 2

80. 'A', 'F' and 'C' started a business together. F invested Rs. 4000 more than amount invested by C. F left the business after 6 months of starting of business. After 2 months more, 'C' left the business. Out of annual profit if A and C together got Rs 8750 then find total annual profit got by all three together?

- (a) Rs 11,250 (b) Rs 10,000  
(c) Rs 12,500 (d) Rs 13,750  
(e) Rs 15,000

**Directions (81-85):** Solve the given quadratic equations and mark the correct option based on your answer—

81. I.  $(x - 2)^2 = 9$

II.  $(2y + 8)^2 = 16$

- (a)  $x < y$   
(b) No relation can be established between x and y.  
(c)  $x > y$   
(d)  $x \leq y$   
(e)  $x \geq y$

82. I.  $x^2 - 16x + 64 = 0$

II.  $y^2 - 16y + 63 = 0$

- (a)  $x > y$   
(b)  $x \leq y$   
(c)  $x \geq y$   
(d)  $x < y$   
(e) No relation can be established between x and y.

83. I.  $\frac{25}{x^2} - \frac{15}{x} + 2 = 0$

II.  $\frac{40}{y^2} + 1 = \frac{13}{y}$

- (a)  $x < y$   
(b)  $x \geq y$   
(c) No relation can be established between x and y.  
(d)  $x \leq y$   
(e)  $x > y$

84. I.  $\frac{48}{x^2} - \frac{14}{x} + 1 = 0$

II.  $\frac{45}{y^2} + \frac{1}{y} = 2$

- (a) No relation can be established between x and y.  
(b)  $x \leq y$  (c)  $x < y$   
(d)  $x > y$  (e)  $x \geq y$

85. I.  $x^2 + 3x - 4 = 0$   
 II.  $y^2 + 10y + 24 = 0$   
 (a)  $x \leq y$   
 (b)  $x < y$   
 (c)  $x > y$   
 (d) No relation can be established between  $x$  and  $y$ .  
 (e)  $x \geq y$

**Directions (86-90):** The following questions are accompanied by three statements (I), (II), and (III). You have to determine which statement(s) is/are sufficient /necessary to solve the questions

86. What is distance between A and B ?  
 I. Two persons Amit and Abhi started simultaneously from A to B with their speed in ratio 4 : 5.  
 II. Abhi reached B one hour earlier than Amit.  
 III. Difference between speed of Amit and Abhi is 20 km/hr.  
 (a) Only I and II.  
 (b) Only II and III  
 (c) All I, II and III  
 (d) Cannot be solved even including all three statement  
 (e) None of these
87. What is the area of rectangle ?  
 I. If ratio of length and breadth of the rectangle is 3 : 2.  
 II. Circumference of a circle is 440 m and breadth of rectangle is  $\frac{1}{7}$  th of radius of the circle.  
 III. If length is 50% more than breadth.  
 (a) Only III  
 (b) Only II and either I or III.  
 (c) Only II  
 (d) All I, II and III  
 (e) None of these
88. How many students failed in class 11<sup>th</sup> ?  
 I. 400 Students passed in class 11<sup>th</sup>.  
 II. No. of students failed in class 11<sup>th</sup> is 20% of those failed in class 12<sup>th</sup>.  
 III. Ratio of student appeared to that of failed in class 11<sup>th</sup> is 5 : 3.  
 (a) Only I and III  
 (b) Only II  
 (c) Only I and II  
 (d) All I, II and III  
 (e) Cannot be obtained even including all three statement
89. What is the rate of interest?  
 I. S.I. accrued in two years on an amount at same rate of interest is Rs. 44,000.  
 II. The amount after some years on S.I. is Rs. 154000.

- III. Difference between the C.I. and S.I. earned in two years on the same amount and at the same rate of interest is Rs. 120.  
 (a) Only I and III  
 (b) Only III  
 (c) Only II and III  
 (d) Cannot be solved even including all statement  
 (e) None of these

90. What is the sum of two number?  
 I. The bigger no. is 6 more than the smaller no.  
 II. 40% of smaller no. is equal to 30% of bigger no.  
 III. The ratio b/w half of the bigger no. & one-third of smaller no. is 2 : 1.  
 (a) Only II & III  
 (b) Only I & II  
 (c) Any two of the three statements  
 (d) All statement is required  
 (e) Only I & either II or III
91. A container contains 165 liters of milk. Some quantity of milk is taken out and half of that quantity of milk, water is added in the container. Now ratio of milk to water in the container becomes 5:3. What is the quantity of water added in it?  
 (a) 40 lit (b) 45 lit (c) 60 lit  
 (d) 30 lit (e) 90 lit
92. Two boxes contain 4 and 16 balls respectively. Two balls in the first box and four in the second, are black. If a box is chosen randomly and two balls are drawn at random from it, what is the probability that at least one ball is black if the ball is not replaced?  
 (a)  $\frac{11}{20}$  (b)  $\frac{43}{120}$  (c)  $\frac{77}{120}$   
 (d)  $\frac{9}{20}$  (e) None of these
93. Train A, travelling at 84 kmph, overtook train B, traveling in the same direction, in 10 seconds. If train B had been traveling at twice its speed, then train A would have taken 22.5 seconds to overtake it. Find the length of train B, given that it is half the length of train A.  
 (a) 50 m (b) 100 m (c) 200 m  
 (d) 150 m (e) None of these
94. A solid sphere of radius 6 cm is melted and re-casted into a hollow cylinder of uniform thickness. If the external radius of the base of the cylinder is 5 cm and its height is 32 cm, find the uniform thickness of the cylinder ?  
 (a) 3 cm (b) 1.5 cm (c) 1 cm  
 (d) 2.5 cm (e) None of these
95. X and Y entered into partnership with Rs. 700 and Rs. 600 respectively. After another 3 months, X withdrew two-sevenths of his stock but after 3 months, he puts back three-fifths of what he had withdrawn. The total profit at the end of the year is Rs. 726. How much of this should X receive?

- (a) Rs. 336      (b) Rs. 366      (c) Rs. 633  
(d) Rs. 663      (e) None of these

**Direction (96-100):** - Table given below shows percentage of men out of total men who worked on odd days in three different months and rest of the men are working on even days of the respective month. Study the table carefully and answer the following questions.

Months	Total Number of Men worked	Percentage of men worked on odd number days
March	1000	30%
April	1500	20%
August	750	60%

**Note:** Each man works for 8 hours per day

Total man-hours = Total man worked × Total day of work × 8 hours

96. Total man-hours on odd days of march is what % of the total man-hours on even days of April?

- (a)  $26\frac{2}{3}\%$       (b)  $18\frac{2}{3}\%$       (c)  $33\frac{1}{3}\%$   
(d)  $16\frac{2}{3}\%$       (e)  $58\frac{1}{3}\%$

97. Total man hour of April is how much more or less than the total man hour of August?  
(a) 80,000      (b) 83,200      (c) 84,800  
(d) 86,400      (e) 88,000

98. Find the ratio between man-hour on even days of march to man hour on even days of August?  
(a) 6 : 1      (b) 7 : 3      (c) 8 : 3  
(d) 3 : 7      (e) 9 : 2

99. Man-hour on odd days of April is how much % less than the man hour on odd days of August?  
(a)  $33\frac{1}{3}\%$       (b) 40%      (c) 37.5%  
(d) 62.5%      (e) 60%

100. What is the average of man hours on even days of all three months together.  
(a) 88,000      (b) 66,000      (c) 86,000  
(d) 78,000      (e) 74,000

## ENGLISH LANGUAGE

**Directions (101-105):** In each of the following questions given below, a sentence is given with some bold words which may contain errors. Below each of the sentence, a table is given with two columns in which column 'A' contains the list of bold words, and in column 'B' the suggested corrections are listed. You have to choose the best alternate among the four given options. If no correction is required against the given bold words, mark (e) i.e. "None of the above" as your answer.

101. The Indian telecom sector has witnessed a **Paranoid** shift—crossing the billion-user mark and **rolling** out new technologies along with other leading markets. Just four years ago, it **faced** multiple challenges—falling revenues and increasing debt were wreaking **triumph**.

COLOUMN A

- (1) Paranoid      (2) Rolling  
(3) Faced      (4) Triumph

COLOUMN B

- (5) Paradigm      (6) Rolled  
(7) Face off      (8) Havoc

- (a) Both (1) - (5) and (4) - (8)  
(b) (2) - (6)  
(c) (1) - (5)  
(d) (3-7)  
(e) None of the above

102. The government launched Tarang Sanchar portal to correct **mislead** around electromagnetic **emissions** from towers. It allows people to check emission (EMF) **consensus** status of mobile towers, giving **information** about any site, on request, via email.

COLOUMN A

- (1) Mislead      (2) Emissions  
(3) Consensus      (4) Information

COLOUMN B

- (5) Misconceptions      (6) Eminences  
(7) Compliance      (8) Informed  
(a) (4) - (8)      (b) (2) - (6)  
(c) (1) - (5)      (d) Both (1) - (5) and (3-7)  
(e) None of the above

103. India has told messaging platform WhatsApp to get serious about **hawking** the purveyors of fake news and **variance** rumours. In a meeting with one of its top **hosts**, the law minister **stressed** that over 20 lives had been lost in India due to this rumour-mongering.

COLOUMN A

- (1) Hawking      (2) Variance  
(3) Hosts      (4) Stressed

COLOUMN B

- (5) Tracking      (6) Vicious  
(7) Honchos      (8) Guessed

- (a) (4) - (8)      (b) (2) - (6)  
(c) (1) - (5)  
(d) (1) - (5), (2) - (6) and (3-7)  
(e) None of the above

104. **Preserving**, changing social structures, **raising** disposable incomes, industrial growth and infrastructure expansion, **coupled** with the easy availability of housing loans, are the drivers of decorative paints industry, which accounts for 75% of the **estimated** \$8.2-billion Indian market.

## COLOUMN A

- (1) Preserving (2) Raising  
(3) Coupled (4) Estimated

## COLOUMN B

- (5) Urbanisation (6) Rising  
(7) Caused (8) Estimation  
(a) (4) - (8)  
(b) (2) - (6)  
(c) Both (1) - (5) and (2) - (6)  
(d) (1) - (5), (2) - (6) and (3-7)  
(e) None of the above

105. It is important to measure the **outstanding** risk of a company and find the best possible solution to **hedge** and manage it. **Had** locked in a major portion of the costs can give paint manufacturers a significant margin boost to achieve **compete** pricing and hence healthy functioning.

## COLOUMN A

- (1) Outstanding (2) Hedge  
(3) Had (4) Compete

## COLOUMN B

- (5) Outdated (6) Wedge  
(7) Having (8) Competitive  
(a) (4) - (8)  
(b) (2) - (6)  
(c) Both (3) - (7) and (4) - (8)  
(d) (1) - (5), (2) - (6) and (3-7)  
(e) None of the above

**Directions (106-112):** Read the following passage carefully and answer the questions given below it. Certain words are printed in bold to help you locate them while answering some of the questions.

The legal position of beggars in India has always been precarious. The Bombay Prevention of Begging Act (BPBA), 1959, which has held sway for decades, rests on the premise that poverty equals criminality. This allows the state to arrest people without a warrant on nothing more than a "suspicion," and put them out of the public gaze. Invariably, police raids to round up "beggars" and force them out of city limits are part of projects to "clean up" cities. India's image, especially for the foreigner's gaze, takes precedence over the plight of the banished. The Delhi High Court, earlier this month, has rectified this by conceding that begging is a structural problem. It argued that it is unfair of the state to add insult to injury and punish people for its own failures. **The court quashed those provisions of the BPBA that make begging a punishable offence.** However, its ruling is applicable only to Delhi.

The people targeted by the anti-begging laws are not in anyone's "constituency" given their social and economic deprivation. Under the act, beggars, peddlers, small-time hawkers, street performers, rag pickers, and "loiterers" (including migrants), can be arrested without a warrant or let off on a bond or detained in a certified institution for two to three years and, on a second conviction, for 10 years. This was true in regard to the BPBA, which also asked for the detention of the dependents of the beggars. Effectively, this

posits the beggar as a legal outsider: inhabiting the same territorial space that is India, but disenfranchised from the benefits of Indian citizenship that guarantees constitutional rights. Implied in this is the state's stance that the rights that come with citizenship have to be bought with forms of privilege that lend a perception of legitimacy and "respectability" to the individual. It is enough for a person to "look like a beggar" in order to be arrested. The beggar homes are understaffed and face a severe paucity of resources; and the inmates are treated like free labor. Theoretically, the inmates are supposed to receive vocational training, but practically they come back to the same desperate situation.

In 1990, following a petition before the Bombay High Court, the court ordered a committee to present its report. The committee pointed out that there is no criteria to decide who is a beggar, who is sick, physically handicapped, or simply in need of economic help. In these raids, even those not begging but found in dirty clothes and wandering were arrested arbitrarily. Transgender persons, for example, are particularly vulnerable. Such a vast amount of unchecked power over certain sections of the marginalized population by means of this law gives the state machinery yet another tool to perpetuate entrenched societal biases against already vulnerable groups. Within the purview of what qualifies as "begging" come a wide variety of people who suffer from various kinds of—and often overlapping—marginalization. The suggestions made by the committee are predictably gathering dust.

The recent ruling by the Delhi High Court has maintained the provisions in the act that penalize those employing or causing persons to solicit or receive alms. It has also called upon the city administration to curb any racket of forced begging after examining the sociological and economic aspects of the matter. It must be noted here that the criminal begging ring racketeers are hardly the ones who are arrested in the raids. While these persons invariably escape the law, the sentence they receive upon conviction (if at all) is three years. It has been proved that the provisions of the act go against Articles 19(1) (a) and 21 of the Constitution and the state's duty to promote the welfare of the disabled and unemployed. Destitution is widely considered to be a product of the processes of a country's political economy. In the absence of immediate structural improvement, the least the state governments in India can do is decriminalize begging. The Delhi High Court's judgment accepts that there is a problem. The solution is staring us in the face.

106. What are the pronouncements that allows State to arrest beggars without a warrant?
- The beggar homes are understaffed and face a severe paucity of resources.
  - They are socially and economically deprived.
  - Applicability of evidences against the crime committed by those people.
  - BPBA Act which rests on the postulation that poverty equals criminality.
  - All of these.

107. Regardless of Delhi High Court's disapproval of the provisions of BPBA, how is the decision still not beneficial?
- As the court first ordered a committee to present its report, and then take the decision.
  - As BPBA hasn't acted accordingly its decision of begging not being a punishable offence.
  - The ruling is applicable only to Delhi.
  - Both (a) and (b).
  - Both (b) and (c).
108. According to the passage, what does postulating beggars as legal outsider mean?
- Relocation them including peddlers, small-time hawkers, street performers, rag pickers.
  - Depriving them of the benefits of Indian citizenship that guarantees constitutional rights.
  - Liberation of the dependents of the beggars.
  - Treatment of inmates of beggars as free labor.
  - None of these.
109. Which were the vulnerable groups which were targeted on the basis of societal biases?
- All of the physically challenged people.
  - People found in rags and filthy clothes and wandering.
  - Transgender groups.
  - Both (b) and (c).
  - All of these.
110. Which of the statement is definitely false according to the passage?
- The inmates are supposed to receive a vocational training but instead they do not.
  - The criminal begging ring racketeers are always the ones who are arrested in the raids.
  - Poverty is widely considered to be a product of the processes of a country's political economy.
  - Transgender people are most vulnerable to the raids on the basis of societal biases.
  - India's image, especially for the foreigner's gaze, takes precedence over the plight of the banished.
111. What is(are) the step(s) mentioned in the passage as one of the minor steps in favor of beggars?
- Prevention of the detention of the dependents of the beggars.
  - State governments in India can legitimize begging.
  - Disenfranchised beggars gain the Indian Citizenship.
  - Inhabiting the territorial space that is India.
  - All of these.
112. Given below is a sentence from the passage that may or may not be grammatically viable, choose the most suitable alternative that reflects the grammatically correct sentence. If the highlighted sentence does not require any corrections, choose option (e), i.e. "no correction required" as your answer choice.

**Sentence (A):** "The court quashed this provisions of the BPBA that made begging a punishable offence."

- The court quashed those provision of the BPBA that made begging a punishable offence.
- The court quashes this provision of the BPBA that make begging a punishable offence.
- The court quashes those provisions of the BPBA that makes begging a punishable offence.
- The court quashed those provisions of the BPBA that make begging a punishable offence.
- No correction required

**Directions (113-114):** Each of the following questions has a paragraph from which one sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate/coherent way.

113. While one can rightfully say that success stories of women achievers are not a phenomenon new to our culture, women have become the fulcrum of administrative initiatives in the four and a half years of the Narendra Modi led government. When, from the ramparts of Red Fort, the PM declared his government's \_\_\_\_\_ intention

\_\_\_\_\_ across the nation, many did not bat an eyelid. Since gigantic political announcements were the norm in the nation's capital, this seemed like the most non-glamorous proclamation by a head of state. However, studies have shown that when sanitation needs of young female students are met, dropout rates amongst girl students can be effectively curtailed.

- to travel long distances for facilities in households with toilets
- Is not to be adjudged as a vote bank, for no school going girl child was a voter
- to be the harbinger of wisdom and education in the form of Saraswati, anointed by the Gods
- to ensure toilets are separately built for girls in government schools
- None of these

114. The Election Commission of India (ECI) holds that paid news "plays a very vitiating role in the context of free and fair elections and involves under-reporting of election expenses" by candidates. It found 42 cases of paid news in the election of BJP's Narottam Mishra from Datia, Madhya Pradesh (MP), in the 2008 state Assembly elections. Indeed, one particular news item with the same headline and body appeared in three leading Hindi news Delhi immediately before the polls. \_\_\_\_\_, Given there is no specific law against "paid news", the poll panel leant on Section 10A of the Representation of Peoples Act (RPA) that deals with the misreporting of funds, arguing that Mishra knew of, and by implication authorised the publication of the "reports" which should be seen as political advertising under Section 77 of the RPA.

- (a) This essentially restricts the poll regulator from acting against paid news.
- (b) In 2017, the ECI ordered Mishra's disqualification and barred him from contesting elections for three years.
- (c) Since the expenditure incurred or authorised on this head was not listed in the submissions to the poll regulator.
- (d) A Law Commission report from 2015 also recommends amending the RPA to this effect.
- (e) None of these

**115.** In the question given below three sentences are given which are jumbled. Find the correct sequence of these sentence so that they form a meaningful paragraph.

- A. This asymmetry is typified by Article 370 — a provision, as Ms. Tillin writes, which was debated for over five months before forming part of the Constitution as adopted in 1950.
- B. In its original form, Article 370 accorded to J&K a set of special privileges, including an exemption from constitutional provisions governing other States
- C. India's Constitution, as the political scientist Louise Tillin has explained, establishes a form of asymmetric federalism, in which some States enjoy greater autonomy over governance than others.

- (a) CBA                      (b) BCA                      (c) ABC  
(d) CAB                      (e) BAC

**Directions (116-120):** In each of the questions given below, a paragraph is given which has some blanks and those blanks have to be filled with the same word out of five words given below it. You have to choose that same word as your answer and fill up the blanks with that appropriate word.

**116.** By the 12th century a \_\_\_\_\_ referred to as Tanka was introduced. Later on, the Indian Rupee was adopted as the country's sole \_\_\_\_\_, and the use of other domestic coinage was removed from circulation. Our \_\_\_\_\_ rankings show that the most popular India Rupee exchange rate is the USD to INR rate.

- (a) Money                      (b) Currency                      (c) Worth  
(d) Value                      (e) Rupees

**117.** \_\_\_\_\_ education debt is a big issue in health care. \_\_\_\_\_ schools themselves are addressing the student debt problem. However, there is an array of government programs that help students afford \_\_\_\_\_ school or that forgive student lo

- (a) Business                      (b) Economics                      (c) Science  
(d) Law                      (e) Medical

**118.** The largest chunk of the \_\_\_\_\_ population is made of daily wage earners, not farmers, the report said, adding that an equal focus on both \_\_\_\_\_ wages and farm income is vital to relieve \_\_\_\_\_ distress.

- (a) Poor                      (b) Rural                      (c) Agricultural  
(d) Advanced                      (e) Insolvent

**119.** The much-anticipated New Industrial \_\_\_\_\_, which will replace the 27-year-old existing \_\_\_\_\_ and pave the way for promotion of new technology and reduced regulations, has been placed before the Union Cabinet for approval. This will be the third industrial \_\_\_\_\_ drafted in independent India.

- (a) Policy                      (b) Procedures  
(c) Meeting                      (d) Practices  
(e) Group

**120.** Lead with the \_\_\_\_\_ of one individual who works there and what it took for her to get that job and how that job has made her life better. It was a \_\_\_\_\_, not topic, about a high-powered woman who had persevered and triumphed. More importantly, it was a \_\_\_\_\_ I wanted to read and knew other readers would too.

- (a) Autobiography                      (b) Record / Reports  
(c) Fiction                      (d) Article  
(e) Story

**Directions (121-125):** In each of the questions given below, a passage has been given which are either situational based or describes a scenario. Below each passage, a question has been given which is framed to make you to infer something out of it. Mark out the correct inference as your answer.

**121.** Finding the efforts by Internet giants to curb circulation of online videos of sexual violence against women and children inadequate, the government is likely to seek "stricter directions" to service providers, such as Facebook and YouTube, from the Supreme Court.

What is the attitude of the government toward the social networking sites?

- (a) Acrimonious                      (b) Acerbic  
(c) Rigorous                      (d) Sardonic  
(e) Sarcastic

**122.** The government is keen on intermediaries sharing certain data with law enforcement agencies to identify the origin of 'sexually violent' content. The issue of tracing the origin of "unlawful" content is already a bone of contention between the government and WhatsApp, which was recently pulled up by the Centre after being misused to spread fake news. What can be said about the attitude of the WhatsApp toward making the origin of a (unlawful) content on WhatsApp accessible to the law-enforcement agencies?

- (a) Insidious                      (b) Exuberant                      (c) Fanatical  
(d) Reluctant                      (e) Vehement

**123.** The Kerala government on Thursday claimed in the Supreme Court that sudden releases of water from the Mullaperiyar dam was a cause for the floods in the State. In an affidavit, Kerala slammed Tamil Nadu for allegedly ignoring its repeated entreaties for controlled release of water from the reservoir to facilitate the evacuation of thousands living downstream.

What is the attitude of the state government of Kerala towards the state government of Tamil Nadu?

- (a) Censuring (b) Praising (c) Insidious  
(d) Pernicious (e) Forbiddingly

**124.** Periodical warnings were issued since the water level reached 136 ft for every two feet rise, and from 140 onward for every one-foot rise. Intimation was given to the Kerala government well in advance regarding the release of water from the spillway of the dam, the counter-affidavit said.

“The allegation that action was taken by the Respondent State (Tamil Nadu) only after the water level in the dam crossed the permitted storage of +142 ft, is denied,” Tamil Nadu said in its affidavit.

What is the tone of the statements made by the state of Tamil Nadu in its affidavit?

- (a) Sarcastic (b) Sardonic (c) Enthusiastic  
(d) Bitterly (e) Acerbic

**125.** In the first order on July 4, the court declared all animals as legal persons, effectively blurring the line that separates humans from other animals. Instead of blurring the line between man and animal, it would make more sense for the judiciary to ask the government to bolster laws like the Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960. Moreover, the order should have recognized that the animals had more value than just property under law even if they were not defined as persons. Such an order is more likely to have a lasting impact on animal welfare than an order declaring all animals to be persons.

- (a) Animal welfare is difficult to be advanced through High Court's order.  
(b) The court's order will effectively protect the animals from the inhumanity.  
(c) Implementation of Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960 were a failure.  
(d) There is a need to convert animals into human entities to treat them with respect.  
(e) None of these

**Directions (126-130):** In each of the questions below, there is a word given in bold which is followed by five options. In each of the options, a pair of words is given which is either the pair of synonyms or antonyms or synonym & antonym of the word given in bold. Choose that pair as your answer.

**126. ABERRANT**

- (a) Inane: Systematic (b) Anomalous: Amulet  
(c) Abusive: Amoral (d) Abstain: Abandon  
(e) Deviant: Abnormal

**127. METICULOUS**

- (a) Conscientious: Nemesis  
(b) Scrupulous: Slapdash  
(c) Obligatory: Scrutinize  
(d) Skeptic: Stringent  
(e) Sloppy: Subservient

**128. ECCENTRIC**

- (a) Peculiar: Bizarre  
(b) Altruistic: Magnanimous  
(c) Autocratic: Bloated  
(d) Capacious: Chaste  
(e) Compress: Illegitimate

**129. ECSTASY**

- (a) Illusion: Hallucination  
(b) Effectual: Hilarity  
(c) Euphoria: Garbled  
(d) Rapture: Insouciance  
(e) Fatuous: Erudite

**130. IMPUNITY**

- (a) Livid: Morbid  
(b) Dispensation: Nullify  
(c) Incarceration: Captivity  
(d) Salvation: Incongruous  
(e) Kindred: Obsessive

**Directions (131-133):** In the following questions a part of a sentence is given in bold, it is then followed by four sentences which try to explain the meaning of the idiom/phrase given in bold. Choose the alternative from the four given below each question which explains the meaning of the phrase correctly without altering the meaning of the sentence given as question. If none of the sentence explains the meaning of the highlighted phrase, choose option (e) i.e., “none of these” as your answer choice.

**131.** I contemplate long and hard before I decide if I feel ready to tackle a new skill or if I prefer **to let sleeping dogs lie**.

- (a) I scrutinize thoroughly before I choose if I am ready to pursue a new skill or if I prefer to ignore it to avoid even more difficult situation.  
(b) I examine extensively before I determine, if I want to follow a new skill or if I choose to capture the hidden capabilities.  
(c) I study very hard while establishing whether I feel qualified to adapt a new skill or if I am inexperienced to assimilate it.  
(d) I forecast thoroughly before I decide that if I am ready to tackle a new skill or if I choose to let the dogs sleep.  
(e) None of these

132. If you want to respond but feel like the **cat got your tongue**, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.

- (a) If you want to respond but feel like you could clamor, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
- (b) If you want to respond but feel like the cat held your tongue, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
- (c) If you want to respond but feel like you could only mutter, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
- (d) If you want to respond but feel like you can't answer anything, I spoke with experts to create an unofficial, evolving script we could use when we face a variety of icky situations.
- (e) None of these

133. President Paul Biya has been acting like a **cat on hot bricks** or better still a mother who returns from a long journey just to find her plates in disarray.

- (a) President Paul Biya has been acting anxious like a mother who returns from a long journey just to find her plates in disarray.
- (b) President Paul Biya has been acting poised as if a mother who returns from a long journey just to find her plates in disarray.
- (c) President Paul Biya's mother is suppressed after returning from a long journey just to find her plates in disarray.
- (d) President Paul Biya is a mother who returns from a long journey just to find her plates in disarray and is distressed about it.
- (e) None of these

**Directions (134-140):** Read the following passage and answer the questions accordingly.

Business always starts and closes with customers and hence the customers must be treated as the King of the market. All the business enhancements, profit, status, image etc. of the organization depends on customers. Hence it is important for all the organizations to meet all the customers' expectations and identify that they are satisfied customer. Customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer expectation. It can only be attained if the customer has an overall good relationship with the supplier. In today's competitive business marketplace, customer satisfaction is an important performance exponent and basic differentiator of business strategies. Hence, the more is customer satisfaction; more is the business and the bonding with customer. Customer satisfaction is a part of customer's

experience that exposes a supplier's behavior on customer's expectation. It also depends on how efficiently it is managed and how promptly services are provided. This satisfaction could be related to various business aspects like marketing, product manufacturing, engineering, quality of products and services, responses customer's problems and queries, completion of project, post delivery services, complaint management etc.

Customer's perception on supplier helps the customer choose among the supplier on basis of money value and how well the delivered products suit all the requirements. The supplier's services never diminishes after the delivery as customer seeks high values post marketing services which could help them use and customize the delivered product more efficiently. If he is satisfied with the post marketing services then there are good chances for supplier to retain the customers to enhance repeated purchases and make good business profits. It is necessarily required for an organization to interact and communicate with customers on a regular basis to increase customer satisfaction. In these interactions and communications it is required to learn and determine all individual customer needs and respond accordingly. **In case if the products are identical in competition markets, satisfaction provides high retention rates.** For example, shoppers and retailers are engaged with frequent shopping and credit cards to gain customer satisfaction, many high end retailers also provide membership cards and discount benefits on those cards so that the customer remain loyal to them.

Higher the satisfaction level, higher is the sentimental attachment of customers with the specific brand of product and also with the supplier. This helps in making a strong and healthy customer-supplier bonding. This bonding forces the customer to be tied up with that particular supplier and chances of defection very less. Hence customer satisfaction is very important panorama that every supplier should focus on to establish a renounced position in the global market and enhance business and profit. Every business unit emphasizes on spurring a long term relationship with customers to nurture its stability in today's blooming market. Customer's expectations are now not only limited to get best products and services, they also need a face-to-face business in which they want to receive exactly what they demand and in a quick time.

Customer Relationship Management is an upright concept or strategy to solidify relations with customers and at the same time reducing cost and enhancing productivity and profitability in business. An ideal CRM system is a centralized collection of all data sources under an organization and provides an atomistic real time vision of customer information. A CRM system is vast and significant, but it be can implemented for small business, as well as large enterprises also as the main goal is to assist the customers efficiently. Usually an organization consists of

various departments which predominantly have access to customer's information either directly or indirectly. A CRM system piles up this information centrally, examines it and then makes it addressable within all the departments. A CRM system is not only used to deal with the existing customers but is also useful in acquiring new customers. The process first starts with identifying a customer and maintaining all the corresponding details into the CRM system which is also called an 'Opportunity of Business'. The Sales and Field representatives then try getting business out of these customers by sophisticatedly following up with them and converting them into a winning deal. Customer Relationship Management strategies have given a new outlook to all the suppliers and customers to keep the business going under an estimable relationship by fulfilling mutual needs of buying and selling.

**134.** How can overall customer satisfaction be attained?

- (a) By diversifying the limits of the business.
- (b) If the customer has an overall good relationship with the distributor.
- (c) If the customer has an overall good relationship with the supplier.
- (d) Both (b) and (c).
- (e) Both (a) and (b).

**135.** What are the various business facets mentioned that relate to customer satisfaction?

- (a) Quality of products and services.
- (b) Product manufacturing and engineering.
- (c) Marketing and management of complaints.
- (d) Post delivery services.
- (e) All of these.

**136.** Why does the supplier ensure customer retention?

- (a) In order to find practical guidance.
- (b) For acquiring other businesses and adjusting pricing.
- (c) To enhance repeated purchases and make good business profits.
- (d) For challenging the assumptions underlying the organization's strategy and value proposition.
- (e) For implementing and evaluating cross-functional decisions.

**137.** What is one of the problems concerned with products that requires organizations to be in regular touch with customers?

- (a) Short term revenue and profitability.
- (b) Short time durability of products in markets.
- (c) Uniformity of products in competing markets.

- (d) As the product quality nowadays do not meet the customer needs.
- (e) All of these.

**138.** How does a CRM system provide a real time vision of customer information?

- (a) Through accurate forecasting which makes it good for aligning managements.
- (b) By preventing outdated database and documents at any given moment.
- (c) Both (a) and (b).
- (d) By examining all the information centrally from all the data sources.
- (e) None of these.

**139.** Which of the statements is definitely false according to the passage?

- (a) Every business unit focuses on establishing long term relationship with customers.
- (b) CRM is such a vast and significant system that it is basically used to deal with the existing customers.
- (c) The supplier's services never diminish after the delivery as customer seeks high values post marketing services.
- (d) An ideal CRM system is a centralized collection of all data sources under an organization.
- (e) None of these.

**140.** Given below is a sentence from the passage that may or may not be grammatically viable, choose the most suitable alternative that reflects the grammatically correct sentence. If the highlighted sentence does not require any corrections, choose option (e), i.e. "no correction required" as your answer choice.

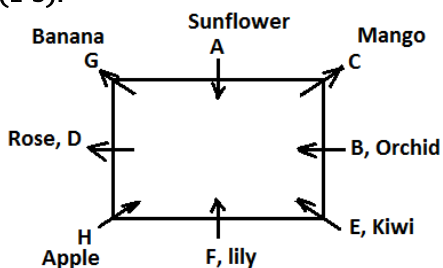
**Sentence (A):** *"In case if the products are identical in competition markets, satisfaction provides high retention rates."*

- (a) Even if the products are identical in competing markets, satisfaction provides high retention rates.
- (b) In case if the product is identical in competing markets, satisfaction provides high retention rates.
- (c) In case if the products are identical at competing markets, satisfaction provide higher retention rates.
- (d) Even if the products are identical in competition markets, satisfaction provides highest retention rates.
- (e) No correction required

## Solutions

## REASONING ABILITY

Directions (1-5):



1. (d)            2. (a)            3. (c)  
4. (b)            5. (e)

**Directions (6-10): Logic:** In the given Input-Output the numbers are arranged from both the ends simultaneously. In first step- Lowest number is arranged from the left end and highest number is arranged from the right end. In second step- 2<sup>nd</sup> lowest number is arranged from the left end and 2<sup>nd</sup> highest number is arranged from the right end and so on... Also while arranging the numbers, the numbers which are arranged from left end are replaced by the addition of the digits of that number whereas the numbers which are arranged from the right end are replaced by the difference of the digits of that number.

**Input:** 75 12 10 94 84 32 63 42 54 22

Step I: 01 75 12 84 32 63 42 54 22 05

Step II: 03 01 75 32 63 42 54 22 05 04

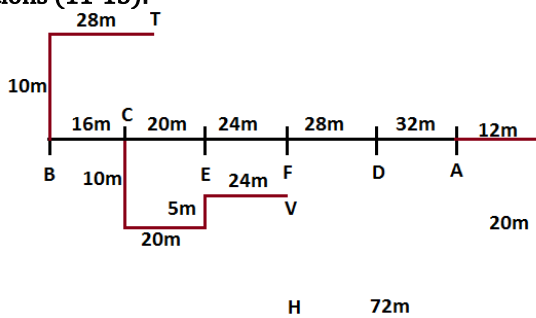
Step III: 04 03 01 32 63 42 54 05 04 02

Step IV: 05 04 03 01 42 54 05 04 02 03

Step V: 06 05 04 03 01 05 04 02 03 01

6. (b)            7. (d)            8. (e)  
9. (a)            10. (c)

Directions (11-15):



11. (b)            12. (a)            13. (d)  
14. (c)            15. (e)

**Direction (16-20): Logic-** The different number codes for all the consonant as per the given condition are,

B-1, C-2, D-3, F-4, G-5, H-6, J-7

K-1, L-2, M-3, N-4, P-5, Q-6, R-7

S-1, T-2, V-3, W-4, X-5, Y-6, Z-7

**Step 1:** The consonants of the word 'NORMAL' are to be coded as the number allotted to the consonant:

N O R M A L  
4 0 7 3(M) A 2

**Step 2:** The numbers immediately preceded and followed by the vowels are to be coded as per the given conditions;

So, the code for consonant for word 'NORMAL' is coded as '4073(M)A2', numbers 4 and 7 is immediately followed and preceded respectively by 'O' so, '4' is coded as '#1' and '7' is coded as '@#'. Similarly, '3' and '2' is immediately followed and preceded respectively by 'A' so, '3' is coded as '#1' and '2' is coded as '@#'.

N O R M A L  
Step 1: 4 O 7 3 A 2  
Step 2: #1 O @# #1(M) A @#

**Step 3:** Now the vowels are to be coded as per the given conditions, as 'O' comes after 'M' in the alphabetical series so 'O' is coded as '\$\$' and 'A' comes before 'M' in the alphabetical series so, 'A' is to be coded as '\*\*'.

N O R M A L  
Step 1: 4 O 7 3 A 2  
Step 2: #1 O @# #1(M) A @#  
Step 3: #1 \$\$ @# #1 \*\* @#

So, the final code for the word 'NORMAL' is '#1\$\$@##1\*\*@#'.

16. (b); Therefore, the code for the word 'NORMAL' is '#1\$\$@##1\*\*@#'.

17. (d); **Step 1:** The consonants of the word 'EMBARKS' are to be coded as the number allotted to the consonant:

E M B A R K S  
E 3(M) 1 A 7 1 1

**Step 2:** The numbers immediately preceded and followed by the vowels are to be coded as per the given conditions;

So, the code for consonant for word 'EMBARKS' is coded as 'E3(M)1A711', number '3' is followed by vowel so the code for '3' is '@#' and numbers '1' and '7' is immediately preceded and followed respectively by 'A' so, '1' is coded as '#1' and '7' is coded as '@#'. But the numeric code of 'K' and 'S' is '1' is neither followed by nor preceded by any vowel. Hence, there code will remain the same.

E M B A R K S  
 Step 1: E 3(M) 1 A 7 1 1  
 Step 2: E @#(M) #1 A @# 1 1

Step 3: Now the vowels are to be coded as per the given conditions, as 'E' comes before 'M' in the alphabetical series so 'E' is coded as '\*\*' and 'A' comes before 'M' in the alphabetical series so, 'A' is to be coded as '@#'.  
 E M B A R K S  
 Step 1: E 3(M) 1 A 7 1 1  
 Step 2: E @#(M) #1 A @# 1 1  
 Step 3: \*\* @# #1 \*\* @# 1 1

So, the final code for the word 'EMBARKS' is '\*\*@##1\*\*@#11'.

18. (a); The code for "SMITTLE" is '1#1\*\*@#2#1\*\*'.

S M I T T L E  
 Step 1: 1 3 1 2 2 2 E  
 Step 2: 1 #1 \*\* @# 2 #1 \*\*

19. (a); The code for 'ANNUAL' is '\*\*@##1\$\$\*\*@#'.  
 A N N U A L  
 Step 1: A 4 4 U A 2  
 Step 2: \*\* @# #1 \$\$ \*\* @#

20. (a);

P R O M  
 Step 1: 5 7 O 3  
 Step 2: 5 #1 \$\$ @#

Direction (21-25):

Compartment A	Compartment B	Compartment C
R	N	K
Q	P	V
M	Y	L
S	X	Z

21. (d)      22. (a)      23. (b)

24. (b)      25. (d)

26. (b); Both course of action should be followed. For I, As the given statement states that ministry has forecasted the situation of flood, so the people of city A should move to city B as a preventive action. Also as an impact of flood here will be a lack of necessities so the people of city A should preserve these things.

Direction (27-30):

27. (d)      28. (d)      29. (c)  
 30. (c)

Direction (31-34):

Subjects	Time slot
Math	6:30am-9:30am
English	9:30am-11:00am
Hindi	11:00am-12:30pm
Chemistry	12:30pm-2:30pm
Biology	2:30pm-5:30pm
Physics	5:30pm-8:30pm

31. (b)      32. (b)      33. (a)

34. (b)

Direction (35-37):

35. (c)

H      X  
 |      |  
 E(+) — Q(-) = F(+) — D(+)

36. (d);

G(-) = J(+) — C(-) — K(-) = V(+)  
 |  
 Y

37. (c);

L(+) = O(-) — K(+)  
 |  
 N(+) = M(-)

Direction (38-41):

Months/Dates	8th	17th	25th
January (31)	L	P	N
March (31)	Q	S	K
April (30)	O	M	R

Q>N>L>S>R>K>M>O>P

38. (b)      39. (d)      40. (e)

41. (d)

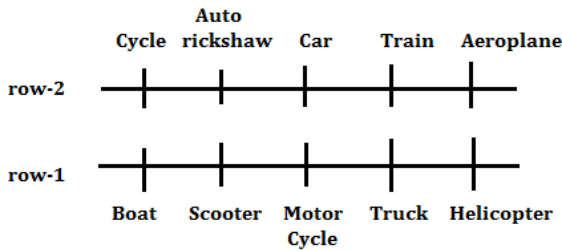
Directions (42-44):

42. (c); A man leave GIP at '@A' me 6.10, he takes 20 min to reach WOW but he reaches 15 min late me he reach Wow at 6.45 me '@E'.

43. (d); Airplane departure time is 'Em' me 9.25, A person want to reach airport 20 minute earlier me he want to reach airport at 9.05, and he takes 40 minutes to reach airport me he should leave office 8.25 me 'am'.

44. (c); A man leave his home at 'Eoo' me 9.55, and he takes 2 hours to reach office from his home that me he reaches office at 11.55 me 'ooo'.

Directions (45-48):



45. (d)                      46. (a)                      47. (d)  
48. (c)

49. (b); The demolition of unauthorized buildings would teach a lesson to the unscrupulous builders and also serve as a warning for the citizens not to indulge in such activities in the future. This is essential, as unauthorized constructions impose undue burden on the city's infrastructure. So, only argument II holds strong.  
50. (e); Clearly, A wishes to study the degree of effect of pay revision on job satisfaction of employees. This means that job satisfaction can be measured and A is capable of making such a study. So, both I and II are implicit.

**QUANTITATIVE APTITUDE**

51. (c); Rahul runs for 15 minutes at a speed of 5 km/hr and 25 minutes at a speed of 9 km/hr  
∴ Total distance covered by Rahul on treadmill  
 $= \frac{15}{60} \times 5 + \frac{25}{60} \times 9 = 1.25 + 3.75 = 5 \text{ km}$   
A = 5 km

52. (e); P<sub>2</sub> can complete work in  $= 6 \times \frac{5}{4} = 7.5 \text{ hours}$   
P<sub>1</sub> and P<sub>2</sub> together can complete total work in  
 $= \frac{6 \times 7.5}{6 + 7.5} = \frac{45}{13.5} = 3 \frac{1}{3} \text{ hours}$   
⇒ P<sub>1</sub> and P<sub>2</sub> together can complete 75% work in  
 $= \frac{10}{3} \times \frac{75}{100} = 2.5 \text{ hours}$   
They finish work at 12:30 p.m.  
⇒ They start their work at 12:30 - 2:30 = 10 a.m.  
B = 10 a.m.

53. (b); P<sub>2</sub> can complete work in  $= 6 \times \frac{5}{4} = 7.5 \text{ hours}$   
Rahul and P<sub>2</sub> can complete same work in 3 hours  
⇒ Rahul can complete same work in  
 $= \frac{1}{\frac{1}{3} - \frac{1}{7.5}} = \frac{1}{0.2} = 5 \text{ hours}$   
Ratio of efficiency of Rahul and P<sub>1</sub> is 6 : 5  
 $C = \frac{6-5}{5} \times 100 = 20\%$

54. (d); Distance between his house and his office is 45 km  
⇒ His speed  $= \frac{45}{1.5} = 30 \text{ km/hr}$   
Speed of stream is 3 km/hr  
⇒ Upstream speed of boat  $= 30 - 3 = 27$   
Time to reach home i.e., D  $= \frac{45}{27} = 1 \frac{2}{3} \text{ hours}$

55. (a); Each friend has 2 dices so there are total 36 outcomes by one friend.  
If either Rahul or Aman throw their dices, then there are total 36 + 36 outcomes  
So, E = 36 + 36 = 72

56. (e); Sum of outcomes of dices should be 8 so it can be (4,4), (3,5) and (2,6)  
In (4,4)  
Addition of square of outcomes  $= 4^2 + 4^2 = 32$

- In (3,5)  
Addition of square of outcomes  $= 3^2 + 5^2 = 34$   
In (2,6)  
Addition of square of outcomes  $= 2^2 + 6^2 = 40$   
Now Raman will win the game if he gets (2,6) and remaining two get (3,5) or (4,4)  
So, option (e) is the correct answer

57. (d); Let length and breadth of rectangle be l cm and b cm respectively  
So, ATQ  
 $l \times (b + 6) - b(l - 6) = 252$   
 $6(l + b) = 252$   
 $2(l + b) = 84 \text{ cm}$

58. (b); Diagonal of square  $= 2.5\sqrt{2} \times \sqrt{2} = 5 \text{ cm}$   
Length of rectangle  $= 5 \times 3 = 15 \text{ cm}$   
Breadth = 5 cm  
Area of rectangle  $= 15 \times 5 = 75 \text{ cm}^2$

59. (e); Speed of boat in still water = 20 km/hr  
Speed of stream  $= \frac{20}{7} \text{ km/hr}$   
Ratio of speed of boat in upstream to that of downstream  $= 6 : 8 \Rightarrow 3 : 4$   
Time taken by boat in upstream to that of downstream  $= 4 : 3$   
Required distance  $= \left(20 + \frac{20}{7}\right) \times \frac{5 \times 3}{7} \approx 50 \text{ km}$

60. (a); Ratio of profit of

A	:	B
800 × 8+		1600 × 8+
900+		1700+
1000+	:	1800+
1100+		1900+
1200		2000
53	:	101

Profit of A  $\Rightarrow \frac{7700}{154} \times 53 = 2650 \text{ Rs.}$

61. (c); Let initial investment of A = x  
 Ratio of profit  
 A : B : C  
 $12 \times x : 6 \times 4500 : 4 \times 4500$   
 $x : 2250 : 1500$   
 Now ATQ  
 $\frac{x}{x+2250+1500} = \frac{49}{100}$   
 $x \approx \text{Rs } 3600$
62. (c); S.P. of article D sold by Ravi = Rs.120  
 Profit % earned on article D by Ravi = 60%  
 Cost price of article D for Ravi =  $\frac{120}{160} \times 100 = \text{Rs}75$   
 Profit earned by Shyam =  $120 \times \frac{25}{100} = \text{Rs}30$   
 Profit earned by Ravi =  $120 - 75 = \text{Rs } 45$   
 Required difference =  $45 - 30 = \text{Rs}15$
63. (b); Cost price of article A =  $\frac{105}{140} \times 100 = \text{Rs}75$   
 Cost price of article C =  $\frac{150}{125} \times 100 = \text{Rs}120$   
 Required % =  $\frac{120-75}{120} \times 100 = \frac{45}{120} \times 100 = 37.5\%$
64. (d); Cost price of article B =  $\frac{60}{120} \times 100 = \text{Rs } 50$   
 Marked price of article B =  $50 \times 1.5 = \text{Rs } 75$   
 Required discount % =  $\frac{75-60}{75} \times 100$   
 $= \frac{15}{75} \times 100 = 20\%$
65. (e); Profit earned on selling article E =  $\frac{90}{180} \times 80 = \text{Rs } 40$   
 Profit earned on selling article C =  $\frac{150}{125} \times 25 = \text{Rs } 30$   
 Required difference =  $40 - 30 = \text{Rs } 10$
66. (b); Mark price of article A =  $\frac{105}{84} \times 100$   
 $= \text{Rs } 125$   
 CP of article A =  $\frac{105}{140} \times 100 = \text{Rs}75$   
 Mark up % of article A =  $\frac{125-75}{75} \times 100 = 66\frac{2}{3}\%$
67. (c);  $3^{x+5} \cdot 9^{2x-4} = 9^{5x-14}$   
 $\Rightarrow 3^{x+5} \cdot 3^{4x-8} = 3^{10x-28}$   
 $\Rightarrow 3^{x+5+4x-8} = 3^{10x-28}$   
 $\Rightarrow 3^{5x-3} = 3^{10x-28}$   
 $\Rightarrow 5x - 3 = 10x - 28$   
 $\Rightarrow 5x = 25$   
 $\Rightarrow x = 5$   
 And,  $2y^2 - 15y - 28 = 3y^2 - 23y - 13$   
 $\Rightarrow y^2 - 8y + 15 = 0$   
 $\Rightarrow y^2 - 3y - 5y + 15 = 0$   
 $\Rightarrow y(y - 3) - 5(y - 3) = 0$   
 $\Rightarrow (y - 5)(y - 3) = 0$   
 $\Rightarrow y = 5, 3$   
 Quantity I: - Value of x = 5  
 Quantity II: - Value of y = 5, 3  
 $\Rightarrow \text{Quantity I} \geq \text{Quantity II}$
68. (b); Quantity I:  
 Let C.P.  $\rightarrow \text{Rs } 100$   
 So, S.P.  $\rightarrow \text{Rs } 129.6$   
 ATQ,  
 M.P.  $\rightarrow \frac{129.6}{72} \times 100 \Rightarrow \text{Rs } 180$

$$'x' \Rightarrow \frac{180 \times (100-30)}{100} - 100 \Rightarrow 26\%$$

Quantity II > Quantity I

69. (a); Let efficiency of 1 man, 1 woman and 1 child is m, w and c respectively  
 ATQ,  
 $10 \times 12m = 18w \times 20 = 27c \times 20$   
 $2m = 6w = 9c$   
 Let total work = 120 m  
 Quantity I:  
 $(9w + 9c) \times 16 = (3m + 2m) \times 16 = 80 \text{ m}$   
 Remaining work =  $120 \text{ m} - 80 \text{ m} = 40 \text{ m}$   
 Number of men required to complete remaining work in one day = 40  
 Quantity II = 36  
 Quantity I > Quantity II
70. (a); Quantity I:-  
 $3 \text{ --- } 20A$   
 $4 \text{ --- } 15B$   
 $5 \text{ --- } 12C$   
 $\searrow$   
 $\rightarrow 60$   
 $\swarrow$   
 Let total capacity of tank be 60.  
 Units filled in first three minutes =  $3 + 4 + 5 = 12$   
 Hence, total time taken =  $5 \times 3 = 15 \text{ minutes}$   
 Quantity II:-  
 Let waste pipe can empty the cistern in x min  
 $\frac{1}{10} + \frac{1}{15} - \frac{1}{x} = \frac{1}{18}$   
 $\Rightarrow \frac{1}{x} = \frac{9+6-5}{90} = \frac{10}{90}$   
 $\Rightarrow x = 9 \text{ minutes}$   
 Quantity I > Quantity II

**Solution (71-75): -**

**House A**  $\rightarrow$

Units consumed by Other appliances = 120 units

Let unit consumed by Lights = x

Then, Units consumed by Fans =  $x - 30$

$$x + x - 30 = 250 - 120$$

$$2x = 130 + 30$$

$$x = 80$$

Units consumed by Lights = 80 units

Units consumed by Fans = 50 units

**House B**  $\rightarrow$

Units consumed by Lights = 80 units

Units consumed by Fans =  $\frac{160}{100} \times 50 = 80 \text{ units}$

**House C**  $\rightarrow$

Total units consumed by Lights in all three houses = 200 units

$\Rightarrow$  Units consumed by Lights in house 'C' =  $200 - 80 - 80 = 40 \text{ units}$

Units consumed by Fans = 40 units

Units consumed by Other appliances =  $40 \times \frac{225}{100} = 90 \text{ units}$

Total units consumed by Other appliances in House 'B'  
 $= 320 - 90 - 120 = 110 \text{ units}$

Units Consumed	Fans	Lights	Other appliances
House A	50	80	120
House B	80	80	110
House C	40	40	90

71. (a); Required % =  $\frac{80-40}{40} \times 100 = 100\%$
72. (c); Total number of units consumed by Other appliances in House 'B', 'C' and 'D' together =  $110 \times 3 = 330$  units  
Units consumed by Other appliances in House 'D' =  $330 - 110 - 90 = 130$  units
73. (e); Total units consumed in House 'A' and 'C' together =  $50 + 80 + 120 + 40 + 40 + 90 = 420$  units
74. (b); Required difference =  $110 - 90 = 20$  units
75. (d); Total units consumed by Fans and Lights in House 'C' =  $40 + 40 = 80$  units  
Total units consumed By Lights and Other appliances in House 'A' =  $80 + 120 = 200$  units  
Required % =  $\frac{200-80}{200} \times 100 = \frac{120}{200} \times 100 = 60\%$
76. (c); C.P. of 10 note books  $\Rightarrow 140 \times 10 = 1400$  Rs.  
Profit on selling one pen  $\Rightarrow \frac{50 \times 200}{100} = \text{Rs } 100$   
Number of pen required  $\Rightarrow \frac{1400}{100} = 14$
77. (d); Let speed of slower train =  $2x$   
 $\Rightarrow$  speed of faster train =  $5x$   
ATQ,  
 $\frac{150+200}{2x+5x} = 15$   
 $x = \frac{10}{3}$   
Time required =  $\frac{350}{\frac{50-20}{3}} = 35$  second
78. (b); Ratio of profit share of B and E is  $35\% \times 80,000 \times 9 : 15\% \text{ of } 80,000 \times 12 = 7 : 4$   
Required difference =  $\frac{(7-4)}{11} \times 15400 = \frac{3}{11} \times 15400 = \text{Rs } 4200$
79. (d); Ratio of profit share of A, C and D is  
A : C : D  
 $25\% \times 80,000 \times 6 : 15\% \times 80,000 \times x : 10\% \times 80,000 \times 8$   
150 :  $15x$  : 80  
30 :  $3x$  : 16  
ATQ,  
 $\frac{30}{30+16+3x} = \frac{6750}{13050}$   
 $\Rightarrow \frac{30}{46+3x} = \frac{15}{29}$   
 $\Rightarrow 46 + 3x = 58$   
 $x = 4$  months
80. (a); Amount invested by F =  $\frac{15}{100} \times 80,000 + 4000 = 12000 + 4000 = \text{Rs } 16,000$   
Amount invested by A =  $\frac{25}{100} \times 80,000 = \text{Rs } 20,000$   
Ratio of profit share of F, C and A  
F : C : A  
 $16000 \times 6 : 12000 \times 8 : 20,000 \times 12$   
2 : 2 : 5

ATQ,  
 $5 + 2 \rightarrow 8750$   
Then total annual profit =  $9 \rightarrow \frac{8750}{7} \times 9 = \text{Rs } 11,250$

81. (c); I.  $(x - 2)^2 = 9$   
 $\Rightarrow (x - 2) = \pm 3$   
 $\Rightarrow x = 5, -1$   
II.  $(2y + 8)^2 = 16$   
 $(2y + 8) = \pm 4$   
 $\Rightarrow y = -2, -6$   
 $x > y$
82. (e); I.  $x^2 - 16x + 64 = 0$   
 $x^2 - 8x - 8x + 64 = 0$   
 $x(x - 8) - 8(x - 8) = 0$   
 $(x - 8)(x - 8) = 0$   
 $x = 8, 8$   
II.  $y^2 - 16y + 63 = 0$   
 $y^2 - 7y - 9y + 63 = 0$   
 $y(y - 7) - 9(y - 7) = 0$   
 $(y - 9)(y - 7) = 0$   
 $y = 9, 7$   
No relation can be established between  $x$  &  $y$
83. (d); I.  $\frac{25}{x^2} - \frac{15}{x} + 2 = 0$   
 $\Rightarrow 2x^2 - 15x + 25 = 0$   
 $\Rightarrow 2x^2 - 10x - 5x + 25 = 0$   
 $2x(x - 5) - 5(x - 5) = 0$   
 $(2x - 5)(x - 5) = 0$   
 $x = \frac{5}{2}, 5$   
II.  $\frac{40}{y^2} + 1 = \frac{13}{y}$   
 $\Rightarrow y^2 - 13y + 40 = 0$   
 $\Rightarrow y^2 - 8y - 5y + 40 = 0$   
 $\Rightarrow y(y - 8) - 5(y - 8) = 0$   
 $(y - 5)(y - 8) = 0$   
 $y = 5, 8$   
 $y \geq x$
84. (d); I.  $\frac{48}{x^2} - \frac{14}{x} + 1 = 0$   
 $\Rightarrow x^2 - 14x + 48 = 0$   
 $\Rightarrow x^2 - 8x - 6x + 48 = 0$   
 $\Rightarrow x(x - 8) - 6(x - 8) = 0$   
 $\Rightarrow (x - 8)(x - 6) = 0$   
 $x = 8, 6$   
II.  $\frac{45}{y^2} + \frac{1}{y} = 2$   
 $\Rightarrow 2y^2 - y - 45 = 0$   
 $\Rightarrow 2y^2 - 10y + 9y - 45 = 0$   
 $\Rightarrow 2y(y - 5) + 9(y - 5) = 0$   
 $\Rightarrow (2y + 9)(y - 5) = 0$   
 $y = 5, -\frac{9}{2}$   
 $x > y$

85. (e); I.  $x^2 + 3x - 4 = 0$

$$x^2 + 4x - x - 4 = 0$$

$$x(x + 4) - 1(x + 4) = 0$$

$$(x - 1)(x + 4) = 0$$

$$x = 1, -4$$

II.  $y^2 + 10y + 24 = 0$

$$y^2 + 4y + 6y + 24 = 0$$

$$y(y + 4) + 6(y + 4) = 0$$

$$(y + 6)(y + 4) = 0$$

$$y = -4, -6$$

$$x \geq y$$

86. (c); From I, II & III

Let speed of Amit and Abhi be  $4x$  and  $5x$  km/hr respectively.

$$5x - 4x = 20$$

$$\therefore x = 20 \text{ km/hr}$$

Let distance be  $d$  km

$$\frac{d}{80} - \frac{d}{100} = 1$$

$$\therefore d = \frac{80 \times 100}{20} = 400 \text{ km}$$

87. (b); From I and II

Let length and breadth be  $3x$  m and  $2x$  m respectively

$$2\pi r = 440 \quad [r \rightarrow \text{radius of circle}]$$

$$r = 70 \text{ m}$$

$$\therefore \text{breadth} = 10 \text{ m}$$

$$\& \text{ length} = 15 \text{ m}$$

$$\therefore \text{Area} = 10 \times 15 = 150 \text{ m}^2$$

Statement I and III are same.

88. (a); From I

$$\text{Passed} = 400$$

From III

Let number of appeared & Failed students be  $5x$  and  $3x$  respectively

$$2x = 400 \Rightarrow x = 200$$

$$\begin{aligned} \therefore \text{failed} &= \text{appeared} - \text{passed} \\ &= 1000 - 400 \\ &= 600 \end{aligned}$$

89. (a); From I

$$\frac{PR \times 2}{100} = 44000$$

$$PR = 2200000$$

From II

$$P + \frac{PRT}{100} = 154000$$

From III

$$\text{Difference} = \frac{PR^2}{100^2}$$

$$\frac{PR^2}{100^2} = 120$$

From I and III R can be found.

90. (e); Let the smaller no. is  $x$  & bigger no. is  $y$ .

From I

$$Y = x + 6$$

From II,

$$\frac{40}{100} \times x = \frac{30}{100} \times y$$

From III,

$$\frac{y}{2} = \frac{2}{x}$$

$$\frac{y}{3} = \frac{1}{1}$$

$$\Rightarrow 3y = 4x$$

$\therefore$  from I and II or I and III

91. (b); Let amount of milk removed =  $2x$  lit

So, amount of water added =  $x$  lit

Now

$$\rightarrow \frac{165 - 2x}{x} = \frac{5}{3}$$

$$x = 45 \text{ lit}$$

92. (c); At least one black can be chosen in three ways:

1. first one is black, second is non-black

2. first one is non-black, second is black

3. both are black.

Probability of selecting a box is  $\frac{1}{2}$

Now, probability of choosing at least one black ball

$$\text{from first box} = \frac{1}{2} \times \left( \frac{2}{4} \times \frac{2}{3} + \frac{2}{4} \times \frac{2}{3} + \frac{2}{4} \times \frac{1}{3} \right) = \frac{5}{12}$$

Probability of choosing at least one black ball from

$$2^{\text{nd}} \text{ box} = \frac{1}{2} \times \left( \frac{4}{16} \times \frac{12}{15} + \frac{12}{16} \times \frac{4}{15} + \frac{4}{16} \times \frac{3}{15} \right)$$

$$= \frac{27}{120}$$

$$\text{final probability} = \frac{5}{12} + \frac{27}{120} = \frac{50 + 27}{120} = \frac{77}{120}$$

93. (a); Let speed of train B be  $x$  m/s

And length of train B be  $y$  m

Then length of train A is  $2y$  m

$$\text{Speed of train A} = 84 \times \frac{5}{18} = \frac{210}{9} \text{ m/s} = \frac{70}{3} \text{ m/s}$$

A.T.Q,

$$\frac{2y+y}{10} = \frac{70}{3} - x \dots\dots\dots(i)$$

$$\text{and } \frac{2y+y}{22.5} = \frac{70}{3} - 2x$$

solving (i) and (ii),  $y = 50$  m

94. (c); Let, inner radius of cylinder be ' $x$ ' cm.

$$\frac{4}{3} \pi (6)^3 = \pi \times 32 (5^2 - x^2)$$

$$\text{or, } \frac{4 \times 6 \times 6 \times 6}{3 \times 32} = 25 - x^2$$

$$\text{or, } x^2 = 25 - 9$$

$$\text{or, } x = 4 \text{ cm}$$

Hence, thickness =  $5 - 4 = 1$  cm.

95. (b); X's investment

$$= (700 \times 3) + \left( 700 \times \frac{5}{7} \times 3 \right) + \left( 500 + 200 \times \frac{3}{5} \right) \times 6$$

$$= \text{Rs. } 7320$$

$$Y's \text{ investment} = 600 \times 12 = \text{Rs. } 7200.$$

$\therefore$  X's share from profit

$$= \frac{7320}{(7320 + 7200)} \times 726 = \text{Rs. } 366.$$

96. (a); Total man working on odd days in March

$$= \frac{1000 \times 30}{100} = 300$$

Total odd days in March = 16

$$\text{Total man hour} = 300 \times 16 \times 8$$

Similarly,

$$\text{Total man hour of April on even days} = 15 \times 8 \times 1200$$

$$\text{Required \%} = \frac{300 \times 16 \times 8}{15 \times 8 \times 1200} \times 100 = 26 \frac{2}{3} \%$$

97. (d); Total man hour of April =  $\frac{1500}{100} \times [20 \times 15 + 80 \times 15] \times 8$   
 = 1,80,000  
 Total man hour of August  
 =  $750 \times \frac{40}{100} \times 15 \times 8 + 16 \times 750 \times \frac{60}{100} \times 8$   
 = 36000 + 57600  
 = 93,600  
 Required difference = 1,80,000 - 93,600 = 86,400

98. (b); Required ratio =  $\frac{10 \times 15 \times 70 \times 8}{15 \times 75 \times 4 \times 8}$   
 = 7 : 3

99. (c); Man-hour on odd days on April =  $15 \times 300 \times 8$   
 = 36000  
 Man-hour on odd days on August =  $16 \times 75 \times 6 \times 8$   
 = 57600  
 required % =  $\frac{57600 - 36000}{57600} \times 100 = 37.5\%$

100. (a); Man-hour on even days →  
 March =  $15 \times 8 \times 700 = 84,000$   
 April =  $15 \times 8 \times 1200 = 1,44,000$   
 August =  $15 \times 8 \times 300 = 36,000$   
 Required Average = 88,000

## ENGLISH LANGUAGE

101. (a); The sentence is describing about a shift in the technology in the telecom industry. It has also mentioned about the challenges faced by the industry few years ago. Therefore, to adhere to the context of the sentence "paranoid" should be replaced by "paradigm" while "triumph" should be replaced by "havoc". Hence, option (a) is the most suitable answer choice.

Paranoid means unreasonably or obsessively anxious, suspicious, or mistrustful.

Triumph means a great victory or achievement.

Paradigm means a typical example or pattern of something; a pattern or model.

Havoc means widespread destruction.

102. (d); Words "mislead" and "consensus" create a contextual error in the sentence and thus should be replaced by "misconceptions" and "compliance" respectively. Hence, option (d) is the most suitable answer choice. Emissions means the production and discharge of something, especially gas or radiation. Consensus means a general agreement. Eminences means to fame or acknowledged superiority within a particular sphere. Compliance means the action or fact of complying with a wish or command.

103. (d); The words given in bold "hawking", "variance" and "hosts" create either grammatical or contextual error in the sentence. To correct the sentence, replace these words by "tracking", "vicious" and "honchos" respectively. Hence, option (d) is the most suitable answer choice.

Hawking means (of a person) hunt game with a trained hawk.

Variance means the fact or quality of being different, divergent, or inconsistent.

Vicious means deliberately cruel or violent.

Honchos means a leader or manager; the person in charge.

104. (c); Since the sentence is describing about the developments and advancements made in the recent time, the bold words "preserving" and "raising"

create grammatical as well as contextual errors in the sentence. To make the sentence correct, replace these words by "urbanization" and "rising" respectively. Therefore, option (c) becomes the most suitable answer choice.

105. (c); The words given in bold "had" and "compete" create either grammatical or contextual error in the sentence. To correct the sentence, replace these words by "having" and "competitive" respectively. The sentence is given in the present tense [...can give paint manufacturers], it requires a gerund [Having] that works as a subject in the sentence, therefore, "had" should be replaced to frame a grammatically correct structure of the sentence. Moreover, to describe the quality of "pricing" an adjective [competitive] is required rather than a verb [compete]. Hence, option (c) is the most suitable answer choice.

106. (d); The appropriate answer is option (d). The answer can be referred from paragraph 1 where it is mentioned that legal position of beggars in India has always been uncertain. "The Bombay Prevention of Begging Act (BPBA), 1959, which has held sway for decades, rests on the premise that poverty equals criminality. This allows the state to arrest people without a warrant on nothing more than a "suspicion," and put them out of the public gaze."

107. (c); The correct choice here is option (c). We can refer to paragraph 1 where it is given that the court quashed those provisions of the BPBA that make begging a punishable offence. However, its ruling is applicable only to Delhi.

108. (b); Option (b) is the only appropriate choice here. The answer can be derived from paragraph 2 where it is mentioned that speculation of beggars as legal outsider means inhabiting the same territorial space that is India but disenfranchised from the benefits of Indian citizenship that guarantees constitutional rights.

- 109. (d);** Option (d) is the appropriate choice. Refer to paragraph 3 where it is given that in these raids, even those not begging but found in dirty clothes and wandering were arrested arbitrarily. Transgender persons, for example, are particularly vulnerable.
- 110. (b);** Option (b) is the appropriate choice. It is the only option which is false according to the passage. Instead correcting it, the right statement would be as follows: The criminal begging ring racketeers are hardly the ones who are arrested in the raids. Rest all of the given options are true.
- 111. (b);** Only option (b) is the correct choice. The answer can be referred from paragraph 4, where it is explicitly expressed in the absence of immediate structural improvement, the least the state governments in India can do is decriminalize begging.
- 112. (d);** The grammatically correct sentence is sentence (d). There are grammatical errors in sentence (A) and options (a), (b) and (c). In sentence (A), with the plural subject "provisions", the determiner associated to it should be plural as well. Similarly, in option (a), along with the plural determiner [those] the subject should also be in its plural form [provision]. Moreover, in sentence (b) the subject provision is singular, therefore to comply with the rule of subject-verb agreement, the verb associated to it must be singular too [makes]. Likewise, in option (c), with the plural subject [provisions], the verb must be plural to adhere to the correct grammatical syntax [make]. Since option (d) is grammatically viable, it becomes the most feasible answer choice.
- 113. (d);** The paragraph is describing about declaration made PM regarding the sanitation needs of young female. Therefore, the most appropriate phrase that will fill the blank of the paragraph, adhering to the absolute context of the paragraph is "to ensure toilets are separately built for girls in government schools". The hint for the same can be drawn from the phrase [...that when sanitation needs of young female students are met...]. Moreover, option (b) is incorrect as the latter part of the paragraph suggests the need for sanitation of young women, which should have some relevance with the previous part of the paragraph; option (b) fails to provide any such information and thus cannot be used to complete the paragraph. Hence, option (d) is the most suitable answer choice.
- 114. (b);** The paragraph his describing about the influences of paid news during the election. It has also provided evidence for the same stating 42 cases of paid news in the election of BJP's Narottam Mishra from Datia, MP. The latter part of the paragraph mentions about the norms under which the legitimized action is effectuated. Thus, the most appropriate sentence that should complete the paragraph is "In 2017, the ECI ordered Mishra's disqualification and barred him from contesting elections for three years", as it connects the previous and the later part of the paragraph. All the other sentences fail to provide coherence to the paragraph; hence, option (b) is the most suitable answer choice.
- 115. (d);** Option (d) is the correct choice for the given question.  
CAB is the correct sequence of the given sentence.  
C is the first sentence as it provides the basis of the argument which is the asymmetry in federalism.  
A gives additional information about this asymmetry which was talked about in sentence C. B is the third sentence as it is talking about its (article 370) original form and the reason for the debate which was mentioned in C.
- 116. (b);** The most suitable word that will fit in all the three blanks of the paragraph is "currency". All the words are however seems similar but have little difference and thus does not fit contextually in the sentence. Hence, option (b) is the most suitable answer choice.  
Money means a current medium of exchange in the form of coins and banknotes; coins and banknotes collectively.  
Currency means a system of money in general use in a particular country.  
Worth means equivalent in value to the sum or item specified.  
Value means the regard that something is held to deserve; the importance, worth, or usefulness of something.  
Rupees means the basic monetary unit of India
- 117. (e);** The most appropriate word that should fill all the three blanks of the paragraph is "medical". Since, the alternatives provide different streams of education; the most suitable one to adhere to the context of the paragraph is "medical". This is indicated from the phrase of the first sentence "...big issue in health care". Hence, option (e) is the most viable answer choice.
- 118. (b);** The most appropriate word that should fill all the blanks of the sentence is "rural". All the other words are either grammatically incorrect or contextually. Hence, option (b) is the most suitable answer choice.  
Advanced means far on or ahead in development or progress.  
Insolvent means unable to pay debts owed.
- 119. (a);** The most appropriate word that should fill all the blanks of the sentence is "policy". All the other words are either grammatically incorrect or contextually. Hence, option (a) is the most suitable answer choice.  
Policy means a course or principle of action adopted or proposed by an organization or individual.  
Procedure means an established or official way of doing something.

Practice means the actual application or use of an idea, belief, or method, as opposed to theories relating to it.

120. (e); The most appropriate word that should fill all the blanks of the sentence is "story". All the other words are either grammatically incorrect or contextually. Hence, option (e) is the most suitable answer choice. Autobiography means an account of a person's life written by that person. Fiction means literature in the form of prose, especially novels, that describes imaginary events and people.

121. (c); The passage apprises us that the government is requesting the Supreme Court to enforce "stricter directions" to social networking sites like Facebook and YouTube. It could be understood that the government wants 'more obedience' from the social networking sites and is trying to achieve her intent through requesting the Supreme Court. Acrimonious, Acerbic, Sardonic, Sarcastic are synonyms and mean 'sharp and forthright.' Sarcastic means 'Marked by or given to using irony in order to mock or convey contempt.' Rigorous means '(of a person) adhering strictly to a belief or system'; 'Harsh and demanding'; Rigorous is a synonym of 'strict' which means '(of a rule or discipline) demanding total obedience or observance; rigidly enforced.' From the above, we find out that the meaning of 'rigorous' correctly convey the **intent or attitude** of the Government toward the social networking sites. So, the correct answer is **option (c)**.

122. (d); Contention [noun] means 'heated disagreement'. The paragraph suggests that on the issue of making accessible the origin of a content on WhatsApp is a **heated disagreement** between the Government and WhatsApp. Meaning that the WhatsApp is **reluctant** toward making the origin of a content on WhatsApp accessible to the law enforcement agencies. Hence, option (d) is the correct answer. Insidious [noun] 'Proceeding in a gradual, subtle way, but with very harmful effects'; Exuberant [adjective] 'Full of energy, excitement, and cheerfulness'; Fanatical [adjective] 'Filled with excessive and single-minded zeal.'; Vehement [adjective] 'Showing strong feeling; forceful, passionate, or intense';

123. (a); The state government of Kerala seems to be **angry** with the indifferent attitude shown by the state government of Tamil Nadu and the ignorance of the repeated entreaties (signed by the Tamil Nadu) in relation to the controlled release of water from the reservoir. The state government of Kerala believes that the attitude of the state government of Tamil Nadu is responsible for the flood in the state.

Censure [noun]: 'strong criticism or disapproval'; Insidious [noun]: 'Proceeding in a gradual, subtle way, but with very harmful effects'; Pernicious [noun]: 'having a very harmful effect or influence'; Forbiddingly [noun]: 'unfriendly and likely to be unpleasant or harmful'; From the given paragraph, we understand that the intent of the state government of Kerala is not malicious and not to Harm the state government of Tamil Nadu, but Kerala was **criticizing** the government of the Tamil Nadu. So, Options (c), (d) and (e) are Not correct. Only option (a) **correctly** convey the intent of the state government of Kerala and is the correct answer.

124. (e); Upon reading the passage, one understands that the state of Tamil Nadu made statements in an outspoken or forthright manner. Acerbic [adjective] means (especially of a comment or style of speaking) sharp and forthright. Sardonic & Sarcastic [adjective] means Grimly mocking or cynical. From the above illustrated meanings of the options, one can understand that the meaning of the word '**acerbic**' is the Closest to the tone of the statements made by the state of Tamil Nadu. Hence, option (e) is the correct answer.

125. (a); The given paragraph is providing information about the court's order regarding the declaration of animals as legal persons. However, the paragraph further mentions that this order will not have a lasting impact on animal welfare. Moreover, it is to be noted that it mentions about the strengthening of the Wildlife Protection Act, 1972, and the Prevention of Cruelty to Animals Act, 1960 and does not comment on their implementation, hence, option (c) is incorrect. Therefore, the most suitable answer choice is option (a).

126. (e); "Aberrant" means departing from an accepted standard or diverging from the normal type. Therefore, "Deviant: Abnormal" is the set of words that expresses the meaning of the given highlighted word. Hence, option (e) is the most suitable answer choice. Inane means lacking sense or meaning; silly. Anomalous means deviating from what is standard, normal, or expected. Amulet means an ornament or small piece of jewellery thought to give protection against evil, danger, or disease.

127. (b); "Meticulous" means showing great attention to detail; very careful and precise. Therefore, the set of words that consists of its synonym and antonym is "Scrupulous : Slapdash". Hence, option (b) is the most suitable answer choice.

Conscientious means wishing to do one's work or duty well and thoroughly.

Nemesis means the inescapable agent of someone's or something's downfall.

Scrupulous means (of a person or process) careful, thorough, and extremely attentive to details.

Slapdash means done too hurriedly and carelessly.

Sloppy means careless and unsystematic; excessively casual.

Subservient means prepared to obey others unquestioningly.

- 128. (a);** "Eccentric" means (of a person or their behaviour) unconventional and slightly strange. Therefore, the set of words that reflect the synonyms of the given highlighted word is "Peculiar : Bizarre". Hence, option (a) is the most suitable answer choice.

Peculiar means different to what is normal or expected; strange.

Bizarre means very strange or unusual.

Altruistic means showing a disinterested and selfless concern for the well-being of others; unselfish.

Magnanimous means generous or forgiving, especially towards a rival or less powerful person.

Bloated means swollen with fluid or gas.

Capacious means having a lot of space inside; roomy.

Chaste means without unnecessary ornamentation; simple or restrained.

- 129. (d);** "Ecstasy" means an overwhelming feeling of great happiness or joyful excitement. Therefore, the set of words that consists of its synonym and antonym is "Rapture: Insouciance". Hence, option (d) is the most suitable answer choice.

Effectual means (of something inanimate or abstract) successful in producing a desired or intended result; effective.

Hilarity means extreme amusement, especially when expressed by laughter

Garbled means reproduce (a message, sound, or transmission) in a confused and distorted way.

Rapture means a feeling of intense pleasure or joy.

Insouciance means casual; lack of concern; indifference.

Fatuous means silly and pointless.

Erudite means having or showing great knowledge or learning.

- 130. (c);** "Impunity" means exemption from punishment or freedom from the injurious consequences of an action. Therefore, the set of words that reflect the antonyms of the given highlighted word is "Incarceration: Captivity". Hence, option (c) is the most suitable answer choice.

Livid means furiously angry.

Morbid means characterized by an abnormal and unhealthy interest in disturbing and unpleasant subjects, especially death and disease.

Dispensation means exemption from a rule or usual requirement.

Incarceration means the state of being confined in prison; imprisonment.

Nullify means

Captivity means the condition of being imprisoned or confined.

Salvation means preservation or deliverance from harm, ruin, or loss.

Incongruous means not in harmony or keeping with the surroundings or other aspects of something.

Kindred means similar in kind; related.

Obsessive means of the nature of an obsession.

- 131. (a);** The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (a) as, the meaning of the phrase "to let sleeping dogs lie" is to ignore a problem because trying to deal with it could cause an even more difficult situation. All the other sentences are contextually incorrect; hence, option (a) is the most suitable answer choice.

- 132. (d);** The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (d) as, the meaning of the phrase "cat got your tongue" is used when someone has nothing to say. All the other sentences are contextually incorrect; hence, option (d) is the most suitable answer choice.

- 133. (a);** The most appropriate sentence that is grammatically and contextually viable in accordance to the meaning of the given sentence is sentence (a) as, the meaning of the phrase "cat on hot bricks" is used to express when someone is restless or skittish, unable to remain still. All the other sentences are contextually incorrect; hence, option (a) is the most suitable answer choice.

- 134. (c);** Only option (c) is the appropriate choice. Refer to paragraph 1 where it is mentioned that customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer expectation. It can only be attained if the customer has an overall good relationship with the supplier.

- 135. (e);** Option (e) is the correct choice. The answer can be deduced from paragraph 1 where it is mentioned that customer satisfaction is a part of customer's experience that exposes a supplier's behavior on customer's expectation. This depends on various business aspects like marketing, product manufacturing, engineering, quality of products and services, responses customer's problems and queries, completion of project, post delivery services, complaint management etc. Hence option (e) is the answer.

- 136. (c);** Option (c) is the suitable choice. This can be inferred from paragraph 2 where it is given that there are good chances for supplier to retain the customers to enhance repeated purchases and make good business profits. Whereas rest all of the given options are not mentioned in the paragraph. And hence so they are irrelevant.
- 137. (c);** Only option (c) is the correct choice. We can infer our answer from paragraph 2 where it is mentioned that it is necessarily required for an organization to interact and communicate with customers on a regular basis to increase customer satisfaction. In these interactions and communications, it is required to learn and determine all individual customer needs and respond accordingly. Even if the products are identical in competing markets, satisfaction provides high retention rates.
- 138. (d);** The suitable answer is option (d). The answer can be deduced from paragraph 4 where it is given an ideal CRM system is a centralized collection of all data sources under an organization and provides an

atomistic real time vision of customer information. It piles up this information centrally, examines it and then makes it addressable within all the departments.

- 139. (b);** Option (b) is the correct answer. Among all of the given options only option (b) is false according to the passage. It can be referred from paragraph 4 where it is given a CRM system is not only used to deal with the existing customers but is also useful in acquiring new customers. Rest all of the given options are true.
- 140. (a);** Sentence (A) contains grammatical errors in it. It is to be noted that usage of "in case" while using "if" becomes incorrect as "in case" itself means 'if it is true that', thus one of the words become redundant. Thus, option (b) and (c) are also eliminated. Moreover, to define the quality of the markets an adjective must be used [competing], instead of a noun [competition]. Therefore, option (d) is also eliminated. Since, option (a) is grammatically as well as contextually correct, it becomes our most suitable answer choice.

