

IBPS CWE-RRB OFFICER SCALE-I EXAM 2015

Based on Memory

REASONING ABILITY

- The positions of the first and the fourth letters of the word PLANET are interchanged, similarly, the positions of the second and fifth letters and third and sixth letters are interchanged. In the new arrangement thus formed, how many letters are there between the letter which is second from the right and the letter which is fourth from the left according to the English alphabetical order ?
(a) None (b) One
(c) Two (d) Three
(e) Four
- The positions of how many alphabets will remain unchanged if each of the alphabets in the word WORTHY is arranged in alphabetical order from left to right ?
(a) None (b) One
(c) Two (d) Three
(e) More than three
- How many such pairs of letters are there in the word REASON, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series?
(a) None (b) One
(c) Two (d) Three
(e) More than three
- 'Writing is related to Pen' in the same way as ____ ?
(a) 'Singing' is related to 'Music'
(b) 'Stitching' is related to 'Needle'
(c) 'Dancing' is related to 'Exercise'
(d) 'Carpenter' is related to 'tools'
(e) 'Paper' is related to 'book'
- If it is possible to make only one meaningful word with the second, third, eighth and ninth letters of the word 'CONFLICTED', which would be the second letter of the word from the left ? If more than one such word can be formed, give 'A' as the answer. If no such word can be formed, give 'Z' as your answer.
(a) A (b) T
(c) O (d) N
(e) Z
- In which of the following expressions will the expression $P < M$ be definitely true ?
(a) $M < R > P \geq S$ (b) $M \geq S = P < F$
(c) $Q < M < F = P$ (d) $P = A < R < M$
(e) None of these
- In a case of 42 children, Joseph's rank is sixteenth from the top. Kevin is seven ranks below Joseph. What is Kevin's rank from the bottom ?
(a) 22nd (b) 20th
(c) 19th (d) 23rd
(e) 25th

DIRECTIONS (Qs. 8-10) : The following questions are based on the alphabetical series given below :

C L R T B Q S M A P D I N F J K G Y X

- Four of the following five are alike in a certain way and so form a group. Which is the one that **does not** belong to the group ?
(a) LBT (b) SPA
(c) IJF (d) PID
(e) BMS
- If 'CT' is related to 'RQ' and 'AI' is related to 'DF' in a certain way, to which of the following is 'SP' related to, following the same pattern ?
(a) MD (b) DN
(c) AD (d) AI
(e) DF
- What will come in place of the question mark in the following series ?
CR LB TM SI ?
(a) PK (b) DK
(c) DG (d) NX
(e) PG

DIRECTIONS (Qs. 11-15) : Study the following information and answer the questions given below:

Eight people— S, R, N, L, M, T, O and P are sitting in a circle facing the centre. All eight belong to different professions — reporter, doctor, cricketer, teacher, accountant, shopkeeper, painter and supervisor. They are not necessarily seated in the mentioned order.

M is sitting third to the left of O. The doctor is to the immediate right of M and M is not a reporter. R is sitting fourth to the right of P. Neither R nor P is an immediate neighbour of M. T is a teacher and is sitting third to the right of the doctor. The shopkeeper is sitting second to the left of the teacher. The painter is sitting second to the left of M. S the cricketer is sitting exactly between T and P. The accountant is sitting second to the right of the cricketer. N is sitting third to the left of T.

- Who amongst the following is a reporter ?
(a) O (b) L
(c) N (d) R
(e) None of these
- What is S's position with respect to R ?
(a) Third to the right (b) Second to the right
(c) Third to the left (d) Second to the left
(e) Fourth to the right
- How many people are sitting between P and N when counted in an anti clockwise direction from N ?
(a) One (b) Two
(c) Three (d) Four
(e) None

14. Four of the following five pairs are like in a certain way based on their positions in the above arrangement and so form a group. What of the following **does not** belong to the group ?
 (a) Teacher-Painter (b) Supervisor-Shopkeeper
 (c) Cricketer-Reporter (d) Doctor-Accountant
 (e) Shopkeeper-Doctor
15. Which one of the following statements is **false** according to the above mentioned arrangement ?
 (a) N is to the immediate right of the supervisor
 (b) The cricketer is third to the right of shopkeeper
 (c) The doctor is sitting exactly between the supervisor and the shopkeeper
 (d) L is neither a teacher nor a supervisor
 (e) There are only three people between S and N

DIRECTIONS (Qs. 16-20) : Study the following information and answer the questions that follow :

In a certain code language, 'hope to see you' is coded as 're so na di', 'please come to see the party' is coded as 'fi ge na di ke zo', 'hope to come' is coded as 'di so ge' and 'see you the party' is coded as 're fi zo na'.

16. How is 'please' coded in the given code language ?
 (a) di (b) ke
 (c) fi (d) na
 (e) None of these
17. What does the code 'so' stand for in the given code language ?
 (a) hope (b) come
 (c) see (d) to
 (e) None of these
18. How is 'party' coded in the given code language ?
 (a) Either 're' or 'fi' (b) Either 'zo' or 'na'
 (c) Either 'zo' of 'fi' (d) Either 'zo' or 'ge'
 (e) 'Either 'ke' or 'fi'
19. How will 'please see you' be coded in the given code language ?
 (a) re na ke (b) so re na
 (c) zo re na (d) na di ke
 (e) ke re ge
20. Which one of the following will be coded as 'so di re' in the given code language ?
 (a) you see hope (b) hope you please
 (c) hope you come (d) the hope to
 (e) you hope to

DIRECTIONS (Qs. 21-23) : Read the following information carefully and answer the questions which follow :

P is son of Q. Q is mother of R. R is wife of T. T is father of V. V is brother of W. Y is mother of T.

21. Which of the following is **true** based upon the relationships given above ?
 (a) W is grand-daughter of P
 (b) R is sister of P
 (c) V is son of Q
 (d) V is brother-in-law of Y
 (e) None is true.
22. How is T related to P ?
 (a) Son-in-law (b) Brother
 (c) Father-in-law (d) Brother-in-law
 (e) Cannot be determined

23. Which of the following is/are required to establish that W is the daughter of R ?
 (a) No extra information is required as the relation can be established from the given information
 (b) R has only three children, one son and two daughters
 (c) Q has only the grandson
 (d) Y has only two children, a son and a daughter
 (e) Either (b) or (c)

DIRECTIONS (Qs. 24-29) : In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusion.

Mark answer (a) if only conclusion I follows

Mark answer (b) if only conclusion II follows.

Mark answer (c) if either conclusion I or II follows

Mark answer (d) if neither conclusion I nor II follows

Mark answer (e) if both conclusions I and II follows

24. **Statement :**

$$A \geq B \leq C, C < D, D > F$$

Conclusions :

$$\text{I. } F > B$$

$$\text{II. } A > D$$

25. **Statement :**

$$X > Y \geq Z, Q = Y, P > X$$

Conclusions :

$$\text{I. } Z < P$$

$$\text{II. } P > Q$$

26. **Statement :**

$$L \geq I, H > I \geq J, K < J$$

Conclusions :

$$\text{I. } H > L$$

$$\text{II. } L > K$$

27. **Statement :**

$$O \geq P = Q, R < P, S < Q$$

Conclusions :

$$\text{I. } R < S$$

$$\text{II. } O > S$$

28. **Statement :**

$$D \geq E > F = G, E = H < J$$

Conclusions :

$$\text{I. } J > D$$

$$\text{II. } G < J$$

29. **Statement :**

$$J \geq R > Z, R > F < W, B > J$$

Conclusions :

$$\text{I. } J > F$$

$$\text{II. } B > W$$

DIRECTIONS (Qs. 30-35) : K, L, M, P, Q, R, S and T are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face outside while those who sit in the middle of the sides face the centre of the table.

P sits third to the right of S. S faces the centre. Q sits third to the left of M. M does not sit in the middle of the sides. Only one person sits between Q and R. R is not an immediate neighbour of M. T faces the centre. K is not an immediate neighbour of R.

30. What is position of M with respect to L ?

- (a) Third to the right
 (b) M and L sit diagonally opposite to each other
 (c) Second to the right.
 (d) Second to the left
 (e) Fifth to the right

31. Who sits exactly between Q and R ?
 (a) T (b) P
 (c) K (d) M
 (e) S and K
32. Which of the following pairs represents the persons seated in the middle of the sides who face each other ?
 (a) S, Q (b) K, L
 (c) M, P (d) R, T
 (e) T, Q
33. Who amongst the following sits between R and K when counted in anti-clockwise direction from K ?
 (a) No one sits between R and K as R and K are immediate neighbours of each other
 (b) S, P and L (c) P and Q
 (d) L and R
 (e) M, S and T
34. If K is made to face the opposite direction, who would sit to his immediate right ?
 (a) R (b) Q
 (c) P (d) T
 (e) S
35. Four of the following five are alike in a certain way and so form a group. Which is the one that **does not** belong to that group ?
 (a) L (b) M
 (c) K (d) P
 (e) R

DIRECTIONS (Qs. 36-40) : In each question below are four statements followed by four conclusions numbered I, II, III and IV. You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the four given statements disregarding commonly known facts. Then decide which of the answers (1), (2), (3), (4) and (5) is correct and indicate it on the answersheet.

36. **Statements :**

All belts are rollers.
 Some rollers are wheels.
 All wheels are mats.
 Some mats are cars.

Conclusions :

- I. Some mats are rollers.
 II. Some mats are belts.
 III. Some cars are rollers.
 IV. Some rollers are belts.
 (a) Only I and II follow
 (b) Only I, III and IV follow
 (c) Only I and IV follow
 (d) Only II, III and IV follow
 (e) None of these

37. **Statements :**

Some tyres are rains.
 Some rains are flowers.
 All flowers are jungles.
 All jungles are tubes.

Conclusions :

- I. Some jungles are tyres.
 II. Some tubes are rains.
 III. Some jungles are rains.
 IV. Some tubes are flowers.
 (a) Only I, II and III follow
 (b) Only II, III and IV follow
 (c) Only I, III and IV follow
 (d) All follow
 (e) None of these

38. **Statements :**

All desks are chairs.
 All chairs are tables.
 All tables are boxes.
 All boxes are trunks.

Conclusions :

- I. Some trunks are boxes.
 II. All chairs are boxes.
 III. Some boxes are desks.
 IV. All desks are trunks.
 (a) Only I, II and III follow
 (b) Only I, II and IV follow
 (c) Only II, III and IV follow
 (d) All follow
 (e) None of these

39. **Statements :**

Some birds are goats.
 Some goats are horses.
 Some horses are lions.
 Some lions are tigers.

Conclusions :

- I. Some tigers are goats.
 II. No tiger is goat.
 III. Some lions are birds.
 IV. No lion is bird.
 (a) Only either I or II follows
 (b) Only either III or IV follows
 (c) Only either I or II and either III or IV follow
 (d) Only I and II follow
 (e) None of these

40. **Statements :**

All papers are bottles.
 All bottles are cups.
 Some cups are jugs.
 Some jugs are plates.

Conclusions :

- I. Some plates are cups.
 II. Some plates are bottles.
 III. Some cups are papers.
 IV. Some bottles are papers.
 (a) Only III and IV follow
 (b) Only I and II follow
 (c) Only I and III follow
 (d) Only II and IV follow
 (e) None of these

QUANTITATIVE APTITUDE

DIRECTIONS (Qs. 41-45) : In each of these questions a number series is given. Below the series one number is given followed by (a), (b), (c), (d) and (e). You have to complete this series following the same logic as in the original series and answer the question that follows.

41. 5 9 25 91 414 2282.5
3 (a) (b) (c) (d) (e)
What will come in place of (c)?
(a) 63.25 (b) 63.75
(c) 64.25 (d) 64.75
(e) None of these
42. 15 9 8 12 36 170
19 (a) (b) (c) (d) (e)
What will come in place of (b)?
(a) 18 (b) 16
(c) 22 (d) 24
(e) None of these
43. 7 6 10 27 104 515
9 (a) (b) (c) (d) (e)
What will come in place of (d)?
(a) 152 (b) 156
(c) 108 (d) 112
(e) None of these
44. 6 16 57 244 1245 7506
4 (a) (b) (c) (d) (e)
What will come in place of (d)?
(a) 985 (b) 980
(c) 1004 (d) 1015
(e) None of these
45. 8 9 20 63 256 1285
5 (a) (b) (c) (d) (e)
What will come in place of (e)?
(a) 945 (b) 895
(c) 925 (d) 845
(e) None of these

DIRECTIONS (Qs. 46-50) : What *approximate* value will come in place of the question mark (?) in the following questions? (You are not expected to calculate exact value.)

46. $(32.51)^2 - (17.45)^2 = ?$
(a) 780 (b) 850
(c) 680 (d) 820
(e) 750
47. $88.25\% \text{ of } 450 = ? \% \text{ of } 530$
(a) 70 (b) 68
(c) 75 (d) 80
(e) 65
48. $\sqrt{898} \times (12.005)^2 + ? = 5000$
(a) 680 (b) 720
(c) 750 (d) 620
(e) 630
49. $3745 \div 24.05 \times 17.98 = ?$
(a) 2860 (b) 2800
(c) 2760 (d) 2720
(e) 2840

50. $117.95 \times 8.017 \times 4.98 = ?$
(a) 4670 (b) 4780
(c) 4840 (d) 4720
(e) 4800
51. A milkman bought 15 kg of milk and mixed 3 kg of water in it. If the price per kg of the mixture becomes ₹ 22, what is cost price of the milk per kg?
(a) ₹ 28.00 (b) ₹ 26.40
(c) ₹ 24.00 (d) ₹ 22.00
(e) None of these
52. A person invested some amount at the rate of 12% simple interest and the remaining at 10%. He received yearly an interest of ₹ 130. Had he interchanged the amounts invested, he would have received an interest of ₹ 134. How much money did he invest at different rates?
(a) ₹ 500 at the rate of 10%, ₹ 800 at the rate of 12%
(b) ₹ 700 at the rate of 10%, ₹ 600 at the rate of 12%
(c) ₹ 800 at the rate of 10%, ₹ 400 at the rate of 12%
(d) ₹ 700 at the rate of 10%, ₹ 500 at the rate of 12%
(e) None of these
53. The marked price of a machine is ₹ 18000. By selling it at a discount of 20%, the loss is 4%. What is the cost price of the machine?
(a) ₹ 10000 (b) ₹ 12000
(c) ₹ 14000 (d) ₹ 15000
(e) None of these
54. A train travels at a speed of 40 km/h and another train at a speed of 20 m/s. What is the ratio of speed of the first train to that of the second train ?
(a) 2 : 1 (b) 5 : 9
(c) 5 : 3 (d) 9 : 5
(e) None of these
55. A is thrice as efficient as B and hence completes a work in 40 days less than the number of days taken by B. What will be the number of days taken by both of them when working together ?
(a) 22.5 days (b) 15 days
(c) 20 days (d) 18 days
(e) None of these
56. A person goes to a market between 4 p.m. and 5 p.m. When he comes back, he finds that the hour hand and minute hand have interchanged their positions. For how much time (approximately) was he out of his house?
(a) 55.25 minutes (b) 55.30 minutes
(c) 55.34 minutes (d) 55.38 minutes
(e) None of these
57. There are 48 cricket balls, 72 hockey balls and 84 tennis balls and they have to be arranged in several rows in such a way that every row contains the same number balls of one type. What is the minimum number of rows required for this to happen ?
(a) 12 (b) 16
(c) 17 (d) 19
(e) None of these
58. If 1 is subtracted from the numerator of a fraction it becomes $(1/3)$ and if 5 is added to the denominator the fraction becomes $(1/4)$. Which fraction shall result, if 1 is subtracted from the numerator and 5 is added to the denominator ?

- (a) $\frac{5}{12}$ (b) $\frac{7}{23}$
 (c) $\frac{1}{8}$ (d) $\frac{2}{3}$
 (e) None of these
59. The price of an article is ₹ 25. After two successive cuts by the same percentage, the price becomes ₹ 20.25. If each time the cut was $x\%$, then
 (a) $x = 9$ (b) $x = 10$
 (c) $x = 11$ (d) $x = 11.5$
 (e) None of these
60. A person could save 10% of his income. But 2 years later, when his income increased by 20%, he could save the same amount only as before. By how much percentage has his expenditure increased?
 (a) $22\frac{2}{9}\%$ (b) $23\frac{1}{3}\%$
 (c) $24\frac{2}{9}\%$ (d) $25\frac{2}{9}\%$
 (e) None of these

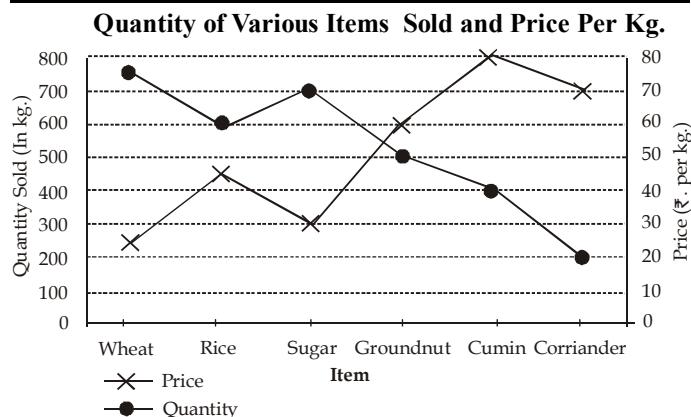
DIRECTIONS (Qs. 61-65) : Study the following table carefully to answer the questions.

Rate of Interest (P.C.P.A) of Fered by Five companies on Deposits Under Different Schemes					
Company Scheme	A	B	C	D	E
I	8.5	9.0	8.0	8.5	9.0
II	9.5	8.5	9.0	9.0	8.5
III	8.0	8.0	7.5	8.5	8.5
IV	10.0	9.5	10.5	9.5	10.0

61. Mr. X deposited an amount in Scheme II with Company C for two years. After that he withdrew the amount and reinvested only the principal amount in Scheme IV of Company B for two years. Total amount of simple interest accrued from the two schemes is ₹ 14, 800. What was the principal amount?
 (a) ₹ 48,000 (b) ₹ 42,000
 (c) ₹ 40,000 (d) Cannot be determined
 (e) None of these
62. Company E offers compound interest under Scheme I and Company A offers simple interest under Scheme IV. What will be the difference between the interest earned under the Scheme I of Company E and Scheme IV of Company A respectively in two years on an amount of ₹ 1.2 lakhs?
 (a) ₹ 1,428 (b) ₹ 1,328
 (c) ₹ 1,528 (d) ₹ 1,548
 (e) None of these
63. Company D offers compound interest under Scheme II and simple interest under Scheme IV. Abhijit invested ₹ 25,000 with this company under Scheme IV and after one year switched over to Scheme II along with the interest for one more year. What is the total amount he will get at the end of two years?

- (a) ₹ 28,939.25 (b) ₹ 29,838.75
 (c) ₹ 31,748.25 (d) ₹ 31,738.75
 (e) None of these
64. Abhishek invested an amount of ₹ 45,000 for two years with Company B under Scheme III which offers compound interest and Jeevan invested equal amount for two years with Company C under Scheme IV which offers simple interest. Who earned more interest and how much?
 (a) Abhishek, ₹ 1,875 (b) Jeevan, ₹ 1,875
 (c) Abhishek, ₹ 1,962 (d) Jeevan, ₹ 1,962
 (e) None of these
65. Mr. Lal investsd ₹ 30,000 in Company A under Scheme II which offers simple interest and ₹ 48,000 in Company D under Scheme II which offers compound interest. What will be the total amount of interest earned by Mr. Lal in two years?
 (a) ₹ 14728.80 (b) ₹ 17428.50
 (c) ₹ 14,827.70 (d) ₹ 16,728.20
 (e) None of these

DIRECTIONS (Qs. 66-70) : Study the following graph carefully to answer the questions.



66. What is the average price per kg of wheat and rice sold? (rounded off to nearest integer)
 (a) 32 (b) 34
 (c) 36 (d) 35
 (e) 31
67. If cumin is sold at a 10% discount, the quantity sold doubles. What will be the cost of total quantity of cumin sold on discount?
 (a) ₹ 52,600 (b) ₹ 28,800
 (c) ₹ 32,000 (d) ₹ 57,600
 (e) None of these
68. Out of the total quantity of sugar sold, half the quantity is sold at the given rate while half the quantity is sold on a price increased by 20%. What is the total cost of entire quantity of sugar sold?
 (a) ₹ 23,100 (b) ₹ 23,800
 (c) ₹ 22,400 (d) ₹ 23,400
 (e) None of these
69. If the quantities sold of Groundnut and Cumin are interchanged, what will be the total cost of quantities sold for these two items together?
 (a) ₹ 62,000 (b) ₹ 60000
 (c) ₹ 65,000 (d) ₹ 63,000
 (e) None of these

70. If the quantity of coriander sold is increased by 200% and the price per kg. is reduced by 8%, what will be the total cost of coriander sold?
- (a) ₹ 38,460 (b) ₹ 36,480
(c) ₹ 38,640 (d) ₹ 36,840
(e) None of these

DIRECTIONS (Qs. 71-75) : In the following questions two equations numbered I and II are given. You have to solve both the questions and

Give answer (a) if $x > y$

Give answer (b) if $x \geq y$

Give answer (c) if $x < y$

Give answer (d) if $x \leq y$

Give answer (e) if $x = y$ or the relationship cannot be established

71. I. $x^2 + 5x + 6 = 0$
II. $y^2 + 3y + 2 = 0$
72. I. $x^2 - 10x + 24 = 0$
II. $y^2 - 9y + 20 = 0$
73. I. $(x)^2 = 961$ II. $y = \sqrt{961}$
74. I. $x^2 - 72 = x$ II. $y^2 = 64$
75. I. $x^2 - 463 = 321$
II. $y^2 - 421 = 308$

DIRECTIONS (Qs. 76-80) : What should come in place of the questions mark (?) in the following questions?

76. $8.5 \times (80 \times 1.5 \times 2.5) \div 4 = ?$
(a) 637.5 (b) 620.5
(c) 544.22 (d) 647.5
(e) None of these
77. $23\% \text{ of } 2500 - 22\% \text{ of } 500 = 930 \div ?$
(a) 2.5 (b) 2
(c) 3 (d) 1.5
(e) None of these
78. $5312.15 - 1318.82 - 2321.43 = ?$
(a) 1681.9 (b) 1571.9
(c) 2671.7 (d) 1671.9
(e) None of these
79. $(333.33 + 33.33 + 3333.34) \div 50 = ?$
(a) 74 (b) 78
(c) 82 (d) 84
(e) None of these
80. $3\% \text{ of } 3500 + 5\% \text{ of } 700 = ?\% \text{ of } 1400$
(a) 12% (b) 15%
(c) 10% (d) 8%
(e) None of these

ENGLISH LANGUAGE

DIRECTIONS (Qs. 81-85) : In each of the following questions, rearrange the given sentences (A), (B), (C) and (D) and indicate the correct sequence in which these sentences must appear so as to make a meaningful paragraph.

81. (A) By increasing these connections the intelligence is also increased.
(B) Classical music has been proved to be very helpful in child development.

- (C) Many doctors now-a-days use it for therapeutic purposes which are based upon the findings of this research.
(D) The research has demonstrated that listening to classical music increases the rate of nervous connections in brain.
- (a) BDCA (b) DBAC
(c) ACBD (d) BDAC
(e) BCAD
82. (A) This right however comes along with the responsibility which the press is forced to work with
(B) It means that the pressmen have every right to expose matters related to public and national interest.
(C) Such responsibilities include not broadcasting matters related to national security and other sensitive issues.
(D) Freedom of press is symbolic of democracy.
- (a) DBCA (b) DBAC
(c) ABCD (d) BDAC
(e) BCDA
83. (A) A popular example of this damage is the Taj Mahal whose marble has been corroded due to acid rain.
(B) It changes the acidic content of water bodies thus affecting the lives of the living organisms of this habitat.
(C) Acid rain has been a major factor responsible for the degradation of the environment.
(D) Along with affecting the living beings, it is also responsible for the corrosion of several heritage buildings thus causing irreparable damages to them.
- (a) CBAD (b) CDBA
(c) BADC (d) BDAC
(e) CBDA
84. (A) Along with missing their education these children also face life threatening dangers by working in hazardous chemical factories.
(B) Child labour has been interfering with the education of millions of children across India.
(C) However, there is a dire need to reinforce these laws strictly throughout the country.
(D) Many laws have been framed in order to curb this evil.
- (a) BADC (b) CBAD
(c) DBAC (d) BDAC
(e) BACD
85. (A) Their invention has been proved to be a boon to the society since many diseases caused by the microbes could be cured by these antibiotics.
(B) The scientists therefore face a continuous challenge to keep inventing newer drugs to counter this problem.
(C) A major hurdle in the use of antibiotics, however, is that the microbes develop resistance to the antibiotics thus rendering these ineffective.
(D) Antibiotics are chemical substances produced by microbes which are capable of inhibiting the growth of other microbes.
- (a) BACD (b) CBAD
(c) DABC (d) DACB
(e) ABDC

DIRECTIONS (Qs. 96-100) : *In each of the following sentences, an idiomatic expression or a **proverb** is **highlighted**. Select the alternative which best describes its use in the sentence.*

96. Although Ravi felt lonely in his fight against the wrong, he decided to **take the bull by the horns**.

- Ravi decided to convince others of his stance
- Ravi decided to give up his fight
- Ravi decided to put forward all his courage and strength
- Ravi decided to apologize for his actions
- None of these

97. As the situation got out of control, the speaker of the parliament tried to **put oil over troubled waters**.

- The speaker tried to calm the situation
- The speaker tried to take advantage of the situation
- The speaker jumped into the fight
- The speaker remained indifferent to the situation
- None of these

- He realised that the panel members would take his suggestions seriously
- He realised that he disclosed the information to a greedy panel
- He realised that he had come to the right group of people
- He realised that the panel members can not appreciate his findings
- None of these

- (a) The chairman politely refused to take the promotion orders back
- (b) The chairman gave up his pride and apologized for the mistake
- (c) The chairman had to face defeat by a group of ordinary workers
- (d) The chairman's career was tainted due to the allegations of biased promotions
- (e) None of these

- (a) Only a few departments of the bankrupt organisations have been taken over by the new owners
- (b) The new owners have bought the bankrupt organisation for a very nominal amount
- (c) The owners have bought the bankrupt organisation in a hurry
- (d) The new owners have completely taken over the bankrupt organisation
- (e) None of these

radically gives rise to a culture where even the smallest change is **heralded** as a break through.

- Indian corporate leaders have done well standing up to global giants as their companies have grown in size and market share. To be successful in international markets they need to be **distinct**-distinct products, processes, technologies, business models and organisations. The bottom line will be Innovation. Creativity workshops are organized to channel people to think differently. There are fantastic ideas being generated all the time but no industry breakthrough. Simply because of gravity-a **regressive** force exerted by a mindset.

Thinking has therefore to happen at three levels : idea, frame and paradigm. From a narrow focus on either product or process innovation organizations need to look at innovating the whole ecosystem of the organization. Many a time waiting for a hundred percent solution before going to the market the organization forgets that it could end up waiting forever. Moreover sometimes organizations are too focused on today to see tomorrow. Since management mandates are short-term, sowing the seed for a revenue stream today and leaving its benefits to be reaped by a successor doesn't appeal to today's business leader. This is a serious hurdle to innovation. Establishing a function called innovation management or training employees through creativity workshops will have few benefits unless each frontline employee is empowered to share his innovative ideas with management. What happens to this system when the person driving the change leaves the organization ? The approach to innovation hence needs to be system driven rather than people driven. In thirty years India can be the largest world economy save China and the US. However as companies grow there exists a resemblance in their products, services, promotions, processes and pricing and so on. There remains only one escape from this trap.

- DIRECTIONS (Qs. 106-110) :** Read the following passage carefully and answer the questions given below. Certain words in the passage have been printed in **bold** to help you locate them when answering some of the questions.

Can the last fifteen years be called the most successful decade and a half in Indian history and will the next fifteen be equally successful ? Consider a culture where independent thinking is not encouraged. Or take the example of traditional family run business with **vast** resistance to change or a whole nation who believes that breakthrough ideas can be generated abroad but never at home. Partly responsible is socialization from early years we are taught not to question our elders but at workplaces this creates a hurdle for new thinking. Being unable to change

109. Which of the following is **NOT TRUE** in the context of the passage ?
- A change in mindset can help promote innovation
 - The author believes India has tremendous potential
 - India suffers because of the belief the breakthrough ideas can only be generated abroad
 - Innovation automatically happens if a company subscribes to the latest management strategies
 - All are true
110. An appropriate title for the passage would be
- Industry Problems
 - Creativity : Boon or Curse
 - What Ails Innovation
 - India : Next Superpower ?
 - None of these

DIRECTIONS (Qs. 111-113) : Pick out the word which is **closest** in meaning to the word printed in **bold** as used in the passage.

111. **Paradigm**
- category
 - difficulty
 - hypothesis
 - foundation
 - None of these
112. **Distinct**
- infrequent
 - abundant
 - complex
 - cautious
 - None of these
113. **Heralded**
- chastised
 - appealed
 - challenged
 - proclaimed
 - None of these

DIRECTIONS (Qs. 114-115) : Pick out the word which is **most opposite** in meaning to the word printed in **bold** as used in the passage.

114. **Regressive**
- customary
 - aggravating
 - uniform
 - natural
 - advanced
115. **Vast**
- diverse
 - deliberate
 - minute
 - valid
 - extensive

DIRECTIONS (Qs. 116-120) : Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph : then answer the questions given below them.

- (A) Development of drought resistance could benefit large numbers of farmers.
- (B) Hence the human race has no choice but to adapt to these impacts.
- (C) India has to be concerned about climatic changes.
- (D) This impact can run into decades and centuries.
- (E) Environment day is thus an important occasion to assess the past and our future.
- (F) Since there is a possibility of adverse impact on agriculture which could deter growth.
116. Which is the FIFTH sentence of the passage after the rearrangement ?

- (F)
 - (D)
 - (E)
 - (A)
 - (C)
117. Which is THIRD sentence of the passage ?
- (A)
 - (D)
 - (B)
 - (C)
 - (E)
118. Which is the SECOND sentence of the passage ?
- (B)
 - (D)
 - (F)
 - (C)
 - (E)
119. Which is the LAST (SIXTH) sentence of the passage ?
- (C)
 - (B)
 - (F)
 - (D)
 - (E)
120. Which is the FIRST sentence of the passage ?
- (A)
 - (D)
 - (C)
 - (B)
 - (E)

COMPUTER APTITUDE

121. Which of the following operating system does not implement the multitasking truly?
- Windows 98
 - Windows NT
 - Windows XP
 - MS DOS
 - None of these
122. Which of the following windows version support 64 bit processor?
- Windows 98
 - Windows 2000
 - Windows XP
 - Windows 95
 - None of these
123. Which of the following Operating System does not implement multitasking truly?
- Windows 98
 - Windows NT
 - Windows XP
 - MS DOS
 - None of these
124. What program runs first after computer is booted and loading GUI?
- Desktop Manager
 - File Manager
 - Windows Explorer
 - Authentication
 - None of these
125. Which of the following operating system do you choose to implement a client server network?
- MS DOS
 - Windows
 - Windows 98
 - Windows 2000
 - None of these
126. My Computer was introduced from
- Windows 3.1
 - Windows 3.11
 - Windows 95
 - Windows 98
 - None of these
127. Which of the following does not support more than one program at a time?
- DOS
 - Linux
 - Windows
 - Unix
 - None of these

128. Which of the following is not an operating system?
 (a) DOS (b) Linux
 (c) Windows (d) Oracle
 (e) None of these
129. Which of the following is not a multitasking operating system?
 (a) Windows (b) Linux
 (c) Win NT (d) DOS
 (e) None of these
130. You should choose Sleep option when
 (a) The computer is tired after working for the whole day
 (b) You are leaving for a very short time and want to resume your work shortly
 (c) When computer gets hanged frequently. Let it sleep for some time
 (d) You finish working and going to bed
 (e) None of these
131. Background color or effects applied on a document is not visible in
 (a) Web layout view (b) Print Layout view
 (c) Reading View (d) Print Preview
 (e) None of these
132. What is a portion of a document in which you set certain page formatting options?
 (a) Page (b) Document
 (c) Section (d) Page Setup
 (e) None of these
133. Borders can be applied to
 (a) Cells (b) Paragraph
 (c) Text (d) All of above
 (e) None of these
134. Which of the following is not a type of page margin?
 (a) Left (b) Right
 (c) Center (d) Top
 (e) None of these
135. What is gutter margin?
 (a) Margin that is added to the left margin when printing
 (b) Margin that is added to right margin when printing
 (c) Margin that is added to the binding side of page when printing
 (d) Margin that is added to the outside of the page when printing
 (e) None of these
136. Portrait and Landscape are
 (a) Page Orientation (b) Paper Size
 (c) Page Layout (d) All of above
 (e) None of these
137. If you need to change the typeface of a document, which menu will you choose?
 (a) Edit (b) View
 (c) Format (d) Tools
 (e) None of these
138. Which of the following is not a font style?
 (a) Bold (b) Italics
 (c) Regular (d) Superscript
 (e) None of these
139. Which of the following terms is used for the from in which the word will appear on the page?
 (a) Text formatting (b) Character formatting
 (c) Point size (d) Type face
 (e) None of these
140. A(n) _____ allows you to access your e-mail from anywhere.
 (a) forum (b) webmail interface
 (c) message board (d) weblog
 (e) None of these
141. The following are included in the world programme _____
 Title Bar, Ribbon, Status Bar, Views, Document workspace.
 (a) Window (b) Browser
 (c) Explorer (d) Website
 (e) None of these
142. Your business has contracted with another company to have them host and run an application for your company over the Internet. The company providing this service to your business is called an
 (a) Internet service provider
 (b) Internet access provider
 (c) Application service provider
 (d) Outsource agency
 (e) None of these
143. Which of the following would you find on LinkedIn?
 (a) Games (b) Connections
 (c) Chat (d) Applications
 (e) None of these
144. _____ is a technique that is used to send more than one call over a single line.
 (a) Digital transmission (b) Infrared transmission
 (c) Digitizing (d) Multiplexing
 (e) None of these
145. The search companion can
 (a) locate all files containing a specified phrase
 (b) restrict its search to a specified set of folders
 (c) locate all files containing a specified phrase and restrict its search to a specified set of folders
 (d) cannot locate all files containing a specified phrase or restrict its search to a specified set of folders
 (e) None of these
146. Which of the following cannot be part of an e-mail address?
 (a) Period (.) (b) At sign (@)
 (c) Space() (d) Underscore (_)
 (e) None of these
147. Which of the following must be contained in a URL?
 (a) A protocol identifier (b) The letters www.
 (c) The unique registered domain name
 (d) www.and the unique registered domain name
 (e) None of these

148. Which of the following information systems focuses on making manufacturing processes more efficient and of higher quality?
- Computer aided manufacturing
 - Computer integrated manufacturing
 - Computer aided software engineering
 - Computer aided system engineering
 - None of these
149. A mistake in an algorithm that causes incorrect results is called a
- logical error
 - syntax error
 - procedural error
 - compiler error
 - None of these
150. A device for changing the connection on a connector to a different configuration is
- a converter
 - a competent
 - an attachment
 - an adapter
 - None of these
151. To navigate to a new web page for which you know the URL, type that URL in the browser's _____ and press Enter
- Address bar
 - Domain bar
 - Address button
 - Name button
 - None of these
152. The CPU also called the _____ when talking about PCs, does the vast majority of the processing for a computer.
- Macroprocessor
 - RAM
 - Memory system
 - microprocessors
 - None of these
153. A computer's type, processor and operating system define its _____
- Brand
 - Size
 - Platform
 - Speed
 - None of these
154. A kiosk
- is data organised and presented in a manner that has additional value beyond the value of the data itself
 - combines microscopic electronic components on a single integrated circuit that processes bits according to software instructions
 - is a computer station that provides the public with specific and useful information and service
 - describes a computer's type, processor, and operating system
 - None of these
155. The part of the CPU that accesses and decodes programme instructions, and coordinates the flow of data among various system components is the
- ALU
 - Control unit
 - Megabertz
 - Motherboard
 - None of these
156. Computer programs are written in a high level programming language, however, the human readable version of a program is called
- cache
 - instruction set
 - source code
 - word size
 - None of these
157. What is the difference between a CD-ROM and a CD-RW?
- They are the same just two different terms used by different manufacturers
 - A CD-ROM can be written to and a CD-RW cannot
 - A CD-RW can be written to, but a CD-ROM can only be read from
 - A CD-ROM holds more information than a CD-RW
 - None of these
158. What is the term for how words will appear on a page?
- Text formatting
 - Character formatting
 - Point size
 - Typeface
 - None of these
159. The process of a computer receiving information from a server on the Internet is known as
- Pulling
 - Pushing
 - Downloading
 - Transferring
 - None of these
160. _____ can be done through Digital Banking ?
- Mobile Phone
 - Internet
 - Telephone
 - All of the above
 - None of these

GENERAL AWARENESS

161. Which day is observed as World Vegetarian Day?
- 1st November
 - 1st October
 - 1st December
 - 10th October
 - None of these
162. Punjab National Bank is an Indian Financial Services company based in which city?
- New Delhi
 - Mumbai
 - Chandigarh
 - Jaipur
 - None of these
163. Which bank launched "Dhanchayat" an Educational film, to raise awareness on the dangers of borrowing money from unorganized sources?
- ICICI
 - SBI
 - HDFC
 - PNB
 - None of these
164. What does stand for "S" in RTGS?
- Security
 - Services
 - Settlement
 - System
 - None of these
165. Who is the brand ambassador of Renault?
- Ranbir Singh
 - Aamir Khan
 - Salman Khan
 - Ranbir Kapoor
 - None of these
166. Which sport does PV Sindhu relates to?
- Tennis
 - Badminton
 - Polo
 - Squash
 - None of these
167. DICGC, Act is related to which sector?
- Banking
 - Agricultural
 - Industrial
 - Sport
 - None of these

168. World Information Technology Summit 2018 is going to be held in
 (a) New Delhi (b) Mumbai
 (c) Bangaluru (d) Hyderabad
 (e) None of these
169. Which state is India's largest state by area?
 (a) Madhya Pradesh (b) Uttar Pradesh
 (c) Rajasthan (d) Maharashtra
 (e) None of these
170. Which is the first Asian country to become an Associate Member state of CERN as India's request for membership is still pending?
 (a) Sri Lanka (b) Bangladesh
 (c) Pakistan (d) Nepal
 (e) None of these
171. What is the percentage of RRB sponsor bank contribution?
 (a) 75% (b) 35%
 (c) 45% (d) 50%
 (e) None of these
172. KVP is a fixed income, long term and risk free government-run product. The minimum investment amount required to start with is ₹1,000. What is the maximum limit?
 (a) ₹20,000 (b) ₹50,000
 (c) ₹1,00,000 (d) No maximum limit
 (e) None of these
173. What is the currency of Thailand?
 (a) Peso (b) Taka
 (c) Euro (d) Thai Baht
 (e) None of these
174. Jerusalem is the capital of _____
 (a) Israel (b) Italy
 (c) Iran (d) Iraq
 (e) None of these
175. Vijender Singh belongs to ?
 (a) Boxing (b) Shooting
 (c) Cricket (d) Badminton
 (e) None of these
176. Who is the chairman of SEBI?
 (a) Rajeev Sinha (b) Anand Sinha
 (c) U.K. Sinha (d) Rajendra Sinha
 (e) None of these
177. Guravayur Temple is located in?
 (a) Guwahati (b) Delhi
 (c) Bhubaneswar (d) Kerala
 (e) None of these
178. Kumari Selja belongs to ?
 (a) Minister of Commerce and Industry
 (b) Minister of Social Justice and Empowerment
 (c) Minister of External Affairs
 (d) Minister of Rural Development
 (e) None of these
179. Netaji Subhash Chandra Bose International Airport is located in ?
 (a) Kolkata (b) Siliguri
 (c) Goa (d) Bengaluru
 (e) None of these
180. Head Quarters of UNESCO is located in?
 (a) Geneva (b) New York
 (c) Paris (d) London
 (e) None of these
181. Ujani Dam is located on which river?
 (a) Pravara River (b) Bhima River
 (c) Mutha River (d) Walayar River
 (e) None of these
182. What is the currency of Argentina?
 (a) Real (b) Peso
 (c) Taka (d) Euro
 (e) None of these
183. One Night at the call center was written by?
 (a) Arundhati Roy
 (b) R.K. Narayanan
 (c) Rabindranath Tagore
 (d) Chetan Bhagat
 (e) None of these
184. Which day is celebrated as Anti terrorism day?
 (a) May 27 (b) May 21
 (c) May 24 (d) May 26
 (e) None of these
185. SAARC headoffice is located in ?
 (a) Newyork (b) Kathamandu
 (c) Geneva (d) New Delhi
 (e) None of these
186. National Maritime day is celebrated on?
 (a) April 7th (b) April 5th
 (c) April 6th (d) April 8th
 (e) None of these
187. Winter Olympics 2018 is going to be held in ?
 (a) Russia (b) Brazil
 (c) South Korea (d) Japan
 (e) None of these
188. Big Apple is the nick name for which city?
 (a) Los Angeles (a) New York
 (a) Portland (a) Dallas
 (e) None of these
189. Bank to every Indian is a tag line for which bank?
 (a) ICICI Bank (b) SBI
 (c) IOB (d) HDFC Bank
 (e) None of these
190. Which Temple complex will be renovated by Indian assistance in Nepal?
 (a) Shiva Temple
 (b) Pashupatinath Temple
 (c) Honuman Temple
 (d) Dakshinaawatar Temple
 (e) None of these

191. The form 'ITR-1' is a form for using
 - (a) Income Tax Challan
 - (b) Excise Duty
 - (c) Customs Duty
 - (d) Income Tax Return
 - (e) None of these
192. In economic terms, the total market value of all final goods and services produced in a country in a given year is known as ———
 - (a) GNI
 - (b) GDP
 - (c) Inflation
 - (d) PPP
 - (e) Wealth of a nation
193. Which of the following is one of the indicators of Human Development Index (HDI) ?
 - (a) Life expectancy at birth
 - (b) Total cost of the agricultural land with a family
 - (c) Total area of the agricultural land with a family
 - (d) Availability of perennial source of water for irrigation
 - (e) Nature of employment, casual/permanent or semipermanent
194. In India, the National Income is measured on the basis of —
 - (a) Flow of goods only
 - (b) Number of employed youth only
 - (c) Volume of tax collected per annum
 - (d) Earning of people working in PSUs and Government jobs
 - (e) All of these
195. Which one of the following a measure of Fiscal Reforms, has Government of India adopted ?
 - (a) Bringing down fiscal deficit to a particular level by an Act of Law
 - (b) Fixing higher rate of growth
 - (c) Allocation of more funds to job oriented schemes
 - (d) Allocation of more funds to provide education to children who are 6–14 years of age
 - (e) None of these
196. 'Green House Gases' are responsible mainly for —
 - (a) Growth of Livestock population
 - (b) Volume of foreign trade
 - (c) Quality of agro products in a country
 - (d) Industrial Development of a nation
 - (e) Global warming
197. 'IAEA' is an organization which functions in the area of
 - (a) Prevention of Money Laundering
 - (b) Control of Foreign Direct Investment
 - (c) Nuclear Energy
 - (d) World Trade
 - (e) Promoting International understanding among the nations.
198. Which of the following organisations is established mainly to promote Micro, Small and Medium industrial sector in India ?
 - (a) NABARD
 - (b) SIDBI
 - (c) IDBI Bank
 - (d) EXIM Bank
 - (e) All of these
199. Which of the following Acts helps a bank in its day to day activities ?
 - (a) Competition Act
 - (b) Negotiable Instruments Ac
 - (c) Hindu Marriage Act
 - (d) Hindu Succession Act
 - (e) NRI Act
200. What does the letter 'M' denote in the abbreviated term 'MRTP', an act which was applicable in India till recently?
 - (a) Money
 - (b) Moral
 - (c) Minimum
 - (d) Monopolies
 - (e) Market

HINTS & SOLUTIONS

1. (d) P L A N E T

N E T P L A

L M N O P

2. (e) W O R T H Y
H O R T W Y

3. (b) 18 5 1 19 15 14

R E A S O N

4. (b) Pen is used to write something. Similarly, stitching is done by needle.

5. (a) 1 2 3 4 5 6 7 8 9 10

C O N F L I C T E D

Meaningful words \Rightarrow Note, Tone

6. (d) $P = A < R < M \Rightarrow P < M$

7. (b) Kevin's rank from the top $\Rightarrow 16 + 7 = 23$ rd
Kevin's rank from the bottom $\Rightarrow 42 - 23 + 1 = 20$ th

8. (d) $L \xrightarrow{+3} B \xrightarrow{-1} T$

$S \xrightarrow{+3} P \xrightarrow{-1} A$

$I \xrightarrow{+3} J \xrightarrow{-1} F$

$P \xrightarrow{+2} I \xrightarrow{-1} D$

$B \xrightarrow{+3} M \xrightarrow{-1} S$

So the term PID does not follow the pattern.

9. (d) $C \xrightarrow{+2} R \quad A \xrightarrow{+2} D$

$T \xrightarrow{+2} Q \quad I \xrightarrow{+2} F$

Similarly,

$S \xrightarrow{+2} A$

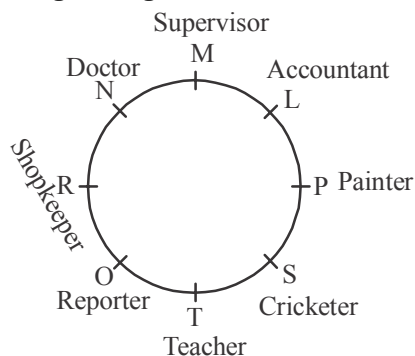
$P \xrightarrow{+2} I$

10. (c) So AI follows same pattern.

$C \xrightarrow{+1} L \xrightarrow{+2} T \xrightarrow{+3} S \xrightarrow{+4} D$

$R \xrightarrow{+2} B \xrightarrow{+3} M \xrightarrow{+4} I \xrightarrow{+5} G$

- (11 - 15): Sitting arrangement



11. (a) O is a reporter.

12. (a) S is third to the right of R.

13. (d) Four persons - R, O, T and S.

14. (e) Shopkeeper and Doctor are immediate neighbours.

15. (c) The doctor is sitting exactly between the Supervisor and Shopkeeper.

- (16 - 20)

hope to see you re so na di

please come to see the party fi ge na di ke zo

hope to come di so ge

See you the party re fi zo na

Codes are :

hope \Rightarrow so please \Rightarrow ke

to \Rightarrow di come \Rightarrow ge

see \Rightarrow na the \Rightarrow fi or zo

you \Rightarrow re party \Rightarrow fi or zo

16. (b) please \Rightarrow ke

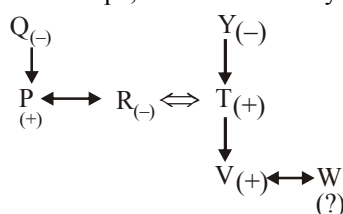
17. (a) so \Rightarrow hope

18. (c) party \Rightarrow fi/zo

19. (a) please \Rightarrow ke; see \Rightarrow na: you \Rightarrow re

20. (e) so \Rightarrow hope; di \Rightarrow to: re \Rightarrow you

- (21-23)



21. (b) The sex of W is not given.

R is sister of P.

V is grandson of Q.

V is grandson of Y.

22. (d) T is brother-in-law of P.

23. (b) If R has one son and two daughters, then W is the daughter of R.

24. (d) $A \geq B \leq C < D > F$

Conclusions

I. $F > B$: Not True

II. $A > D$: Not True

25. (e) $P > X > Y = Q \geq Z$

Conclusions

I. $Z < P$: True

II. $P > Q$: True

26. (e) $L \geq I$; $H > I \geq J > K$

Conclusions

I. $H > L$: True

II. $L > K$: True

27. (b) $O \geq P = Q > R : O \geq P = Q > S$

Conclusions

- I. $R < S$: Not True
II. $O > S$: True

28. (b) $D \geq E = H > F = G$
 $D \geq E = H < J$

Conclusions

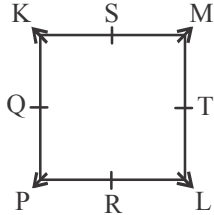
- I. $J > D$: Not True
II. $G < J$: True

29. (a) $B > J \geq R > Z$
 $B > J \geq R > F < W$

Conclusions

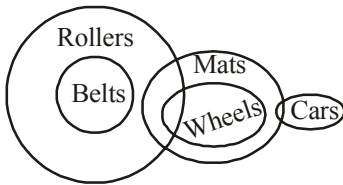
- I. $J > F$: True
II. $B > W$: Not True

(30 - 35) :

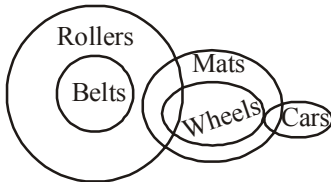


30. (d) M is second to the left of L $\times 2$.
31. (b) P sits exactly between Q and R.
32. (e) Q faces T and both are sitting in the middle of the sides.
33. (c) P and Q.
34. (b) Q would sit to the immediate right of K.
35. (e) Except R, all others are seated at the corners.

36. (c)



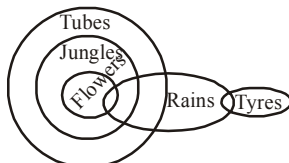
Or



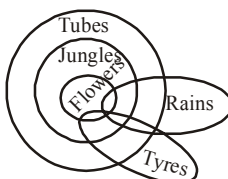
- Conclusions : I. (True)
II. (False)
III. (False)
IV. (True)

So only conclusion I and IV follow.

37. (b)

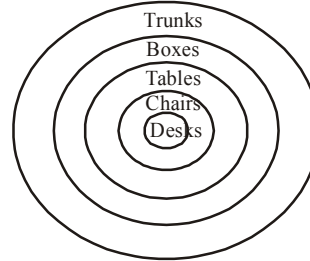


Or



- Conclusions : I. (False)
II. (True)
III. (True)
IV. (True)

38. (d)



- Conclusions : I. (True)
II. (True)
III. (True)
IV. (True)

So all conclusions I, II, III and IV follow.

39. (c)



Conclusions :

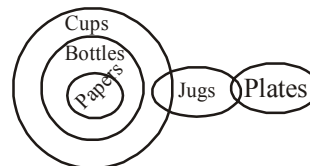
- I. (False)
II. (False)
III. (False)
IV. (False)

Either

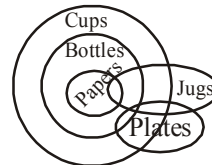
Either

Complementary Pair

40. (a)



Or



- Conclusions : I. (False)
II. (False)
III. (True) Conversion of the first conclusion
IV. (True) Conversion of the first premise

41. (d) The pattern of the given series is :

$$5 \times 1.5 + 1.5 = 7.5 + 1.5 = 9$$

$$9 \times 2.5 + 2.5 = 22.5 + 2.5 = 25$$

$$25 \times 3.5 + 3.5 = 87.5 + 3.5 = 91$$

$$91 \times 4.5 + 4.5 = 409.5 + 4.5 = 414$$

Similarly,

$$(a) \Rightarrow 3 \times 1.5 + 1.5 = 4.5 + 1.5 = 6$$

$$(b) \Rightarrow 6 \times 2.5 + 2.5 = 15 + 2.5 = 17.5$$

$$(c) \Rightarrow 17.5 \times 3.5 + 3.5 = 61.25 + 3.5 = \boxed{64.75}$$

42. (b) The pattern of the given series is:

$$15 \times 1 - 1 \times 6 = 15 - 6 = 9$$

$$9 \times 2 - 2 \times 5 = 18 - 10 = 8$$

$$8 \times 3 - 3 \times 4 = 24 - 12 = 12$$

$$12 \times 4 - 4 \times 3 = 48 - 12 = 36$$

$$36 \times 5 - 5 \times 2 = 180 - 10 = 170$$

Similarly,

$$(a) \Rightarrow 19 \times 1 - 1 \times 6 = 19 - 6 = 13$$

$$(b) \Rightarrow 13 \times 2 - 2 \times 5 = 26 - 10 = \boxed{16}$$

43. (a) The pattern of the given series is :

$$7 \times 1 - 1 = 6$$

$$6 \times 2 - 2 = 10$$

$$10 \times 3 - 3 = 27$$

$$27 \times 4 - 4 = 104$$

$$104 \times 5 - 5 = 515$$

Similarly,

$$(a) \Rightarrow 9 \times 1 - 1 = 8$$

$$(b) \Rightarrow 8 \times 2 - 2 = 14$$

$$(c) \Rightarrow 14 \times 3 - 3 = 39$$

$$(c) \Rightarrow 39 \times 4 - 4 = \boxed{152}$$

44. (e) The pattern of the given series is:

$$6 \times 2 + 2^2 = 12 + 4 = 16$$

$$16 \times 3 + 3^2 = 48 + 9 = 57$$

$$57 \times 4 + 4^2 = 228 + 16 = 244$$

Similarly,

$$(a) \Rightarrow 4 \times 2 + 2^2 = 8 + 4 = 12$$

$$(b) \Rightarrow 12 \times 3 + 3^2 = 36 + 9 = 45$$

$$(c) \Rightarrow 45 \times 4 + 4^2 = 180 + 16 = 196$$

$$(d) \Rightarrow 196 \times 5 + 5^2 = 980 + 25 = \boxed{1005}$$

45. (c) The pattern of the given series is:

$$8 \times 1 + 1 = 9 \quad 63 \times 4 + 4 = 256$$

$$9 \times 2 + 2 = 20$$

$$20 \times 3 + 3 = 63$$

Similarly, (a) $\Rightarrow 5 \times 1 + 1 = 6$

$$(b) \Rightarrow 6 \times 2 + 2 = 14$$

$$(c) \Rightarrow 14 \times 3 + 3 = 45$$

$$(d) \Rightarrow 45 \times 4 + 4 = 184$$

$$(e) \Rightarrow 184 \times 5 + 5 = \boxed{925}$$

46. (e) $? = (32.51 + 17.45) (32.51 - 17.45)$

$$= 49.96 \times 15.06$$

$$\approx 50 \times 15 \approx 750$$

47. (c) $\frac{450 \times 88}{100} \approx \frac{530 \times ?}{100}$

$$\Rightarrow ? \approx \frac{450 \times 88}{530} \approx 75$$

48. (a) $\sqrt{900} \times (12)^2 + ? \approx 5000$

$$[898 \approx 900; 12.005 \approx 12]$$

$$\Rightarrow 30 \times 144 + ? \approx 5000$$

$$\Rightarrow ? \approx 5000 - 4320 \approx 680$$

49. (b) $? \approx \frac{3745}{24} \times 18 \approx 2808.75$

\therefore Required answer = 2800

50. (d) $? \approx 118 \times 8 \times 5 \approx 4720$

51. (b) Let cost price of milk ₹ x per kg.

Price of 15kg of milk = ₹ $15x$.

Now, mix 3kg of water, therefore quantity of mixture = $(15 + 3)$ kg = 18 kg

So, price of mixture is ₹22 per kg

According to question.

$$15x = 22 \times 18$$

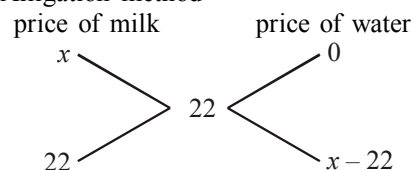
$$x = \frac{22 \times 18}{15}$$

$$= \frac{132}{5} = 26.40$$

Alternate Method :

Let CP of milk be ₹ x per kg.

By Alligation method



$$\therefore 22 : (x - 22) = 15 : 3$$

$$\Rightarrow \frac{22}{x - 22} = \frac{15}{3}$$

$$\Rightarrow \frac{22}{x - 22} = 5$$

$$\Rightarrow 22 = 5x - 110$$

$$\Rightarrow 22 = 132$$

$$\therefore x = ₹ 26.40$$

52. (d) Let the person invest ₹ x and y at two different rates 12% and 14% respectively.

$$\therefore \frac{x \times 12 \times 1}{100} + \frac{y \times 10 \times 1}{100} = 130 \quad \left(\because SI = \frac{P \times R \times T}{100} \right)$$

$$\Rightarrow 12x + 10y = 13000 \quad \dots(i)$$

After inter changing invested amount.

$$\frac{y \times 12 \times 1}{100} + \frac{x \times 10 \times 1}{100} = 134$$

$$\Rightarrow 12y + 10x = 13400 \quad \dots(ii)$$

On solving equations (i) and (ii), we get

$$x = ₹ 500 \text{ and } y = ₹ 700$$

53. (d) Given marked price of machine = ₹ 18000

$$\therefore \text{Discount} = \frac{20}{100} \times 18000 = ₹ 3600$$

$$\therefore \text{SP} = 18000 - 3600 = ₹ 14400$$

If loss of 4%, then

$$\text{CP} = \frac{100 \times \text{SP}}{100 - r} = \frac{100 \times 14400}{100 - 4}$$

$$= \frac{100 \times 14400}{96} = ₹ 15000$$

54. (b) Speed of a train = 40 km/h

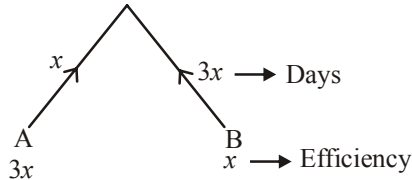
$$= 40 \times \frac{5}{18} \text{ m/s}$$

Speed of another train = 20 m/s

$$\therefore \text{Required ratio} = \frac{\text{Speed of first train}}{\text{Speed of second train}}$$

$$= \frac{40 \times \frac{5}{18}}{20} = \frac{2 \times 5}{18} = \frac{10}{18} = \frac{5}{9} \text{ or } 5 : 9$$

55. (b) Let efficiency of B is x



Days are inversely proportional to efficiency.

According to question

$$\Rightarrow 3x - x = 40$$

$$\Rightarrow 2x = 40$$

$$\therefore x = 20$$

Time taken by A = x days = 20 days

Time taken by B = $3x$ days = $3 \times 20 = 60$ days

$$\text{Time taken by A and B together} = \frac{20 \times 60}{80} = 15 \text{ days}$$

56. (d) Let us assume that he was out of house for 't' min.

So angle formed by min. hand = $6 \times t$

Angle formed by hour hand = $0.5 \times t$

$$\text{Now, } 0.5 \times t + 6 \times t = 360$$

$$\Rightarrow 6.5t = 360$$

$$t = \frac{360}{6.5} = 55.38 \text{ min}$$

57. (c) HCF of 48, 72 and 84 = $2^2 \times 3 = 12$

$$\text{minimum number of rows} = \frac{48}{12} + \frac{72}{12} + \frac{84}{12}$$

$$= 4 + 6 + 7 = 17$$

58. (c) Let the numerator and denominator of a fraction are x and y , respectively,

According to question,

$$\frac{x-1}{y} = \frac{1}{3} \Rightarrow 3x-3 = y \Rightarrow 3x-y = 3 \dots (i)$$

$$\text{and } \frac{x}{y+5} = \frac{1}{4} \Rightarrow 4x-y = 5 \dots (ii)$$

On solving eqs. (i) and (ii), we get

$$x = 2 \text{ and } y = 3$$

$$\therefore \text{Required fraction} = \frac{x-1}{y+5} = \frac{2-1}{3+5} = \frac{1}{8}$$

59. (b) According to the question,

$$\Rightarrow 25 \times \left(\frac{100-x}{100} \right) \left(\frac{100-x}{100} \right) = 20.25$$

$$\Rightarrow (100-x)^2 = \frac{202500}{25} \Rightarrow (100-x)^2 = 8100$$

$$\Rightarrow 100-x = 90$$

$$\therefore x = 10$$

60. (a) Let income be ₹ 100

$$\text{Expenditure amount} = 100 \times \frac{90}{100} = ₹ 90$$

$$\text{Now, income increased by } 20\% = 100 \times \frac{120}{100} = ₹ 120$$

$$\text{Expenditure amount} = (120 - 10) = ₹ 110$$

$$\text{Increase in expenditure} = 110 - 90 = ₹ 20$$

$$\text{Increase in \% of expenditure} = \frac{20}{90} \times 100$$

$$= \frac{200}{9} = 22\frac{2}{9}\%$$

61. (c) Let the principal be ₹ x , Interest accrued from

$$\text{company C} = \frac{x \times 2 \times 9}{100} = ₹ \frac{9x}{50}$$

Interest accrued from company

$$B = ₹ \frac{9.5x}{50}$$

$$\therefore \frac{9.5x}{50} + \frac{9x}{50} = 14800$$

$$\Rightarrow 18.5x = 14800 \times 50$$

$$\Rightarrow x = \frac{14800 \times 50}{18.5} = ₹ 40000$$

62. (a) CI earned under the scheme I of company E

$$= P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right] = 120000 \left[\left(1 + \frac{9}{100} \right)^2 - 1 \right]$$

$$= 120000 \times 0.1881 = ₹ 22572$$

CI earned under the scheme IV of the company A

$$= \frac{120000 \times 2 \times 10}{100} = ₹ 24000$$

Difference

$$= ₹ (24000 - 22572) = ₹ 1428$$

63. (b) SI earned under the scheme IV of company D

$$= \frac{25000 \times 9.5}{100} = ₹ 2375$$

$$\text{Amount} = ₹ (25000 + 2375) = ₹ 27375$$

Total amount under scheme II

$$= ₹ 27375 \left(1 + \frac{9}{100} \right) = ₹ \left(\frac{27375 \times 109}{100} \right) = ₹ 29838.75$$

64. (d) CI got by Abhishek = $45000 \left[\left(1 + \frac{8}{100} \right)^2 - 1 \right]$

$$= ₹ (45000 \times 0.1664) = ₹ 7488$$

Interest got by Jeevan

$$= ₹ \left(\frac{45000 \times 10.5 \times 2}{100} \right) = ₹ 9450$$

\therefore Difference

$$= ₹ (9450 - 7488) = ₹ 1962$$

Jeevan earned more interest.

65. (a) Interest earned under scheme II of company A

$$= ₹ \left(\frac{30000 \times 9.5 \times 2}{100} \right) = ₹ 5700$$

CI earned under scheme II of company D

$$= 48000 \left[\left(1 + \frac{9}{100} \right)^2 - 1 \right]$$

$$= ₹ (48000 \times 0.1881) = ₹ 9028.8$$

∴ Total interest earned by Mr. Lal

$$= ₹ (5700 + 9028.8) = ₹ 14728.8$$

66. (b) Required average price

$$= \frac{750 \times 25 + 600 \times 45}{1350} = ₹ \left(\frac{18750 + 27000}{1350} \right) \text{ per kg}$$

$$\approx ₹ 34 \text{ per kg}$$

67. (d) Required cost price

$$= ₹ \left(800 \times \frac{90}{100} \times 80 \right)$$

$$= ₹ 57600$$

68. (a) Total cost of entire quantity of sugar = $(350 \times$

$$30 + 350 \times 30 \frac{120}{100})$$

$$= ₹ (10500 + 12600) = ₹ 23100$$

69. (e) Required cost

$$= ₹ (500 \times 80 + 400 \times 60)$$

$$= ₹ 64000$$

70. (c) Total cost of coriander sold

$$= ₹ \left(600 \times \frac{92}{100} \times 70 \right) = ₹ 38640$$

71. (d) I. $x^2 + 5x + 6 = 0$

$$\Rightarrow x^2 + 2x + 3x + 6 = 0$$

$$\Rightarrow x(x + 2) + 3(x + 2) = 0$$

$$\Rightarrow (x + 3)(x + 2) = 0$$

$$\therefore x = -3 \text{ or } -2$$

$$\text{II. } y^2 + 3y + 2 = 0$$

$$\Rightarrow y^2 + 2y + y + 2 = 0$$

$$\Rightarrow y(y + 2) + 1(y + 2) = 0$$

$$\Rightarrow (y + 1)(y + 2) = 0$$

$$\therefore y = -1 \text{ or } -2$$

$$\therefore x \leq y$$

72. (b) I. $x^2 - 10x + 24 = 0$

$$\Rightarrow x^2 - 6x - 4x + 24 = 0$$

$$\Rightarrow x(x - 6) - 4(x - 6) = 0$$

$$\Rightarrow (x - 4)(x - 6) = 0$$

$$\therefore x = 4 \text{ or } 6$$

$$\text{II. } y^2 - 9y + 20 = 0$$

$$\Rightarrow y^2 - 5y - 4y + 20 = 0$$

$$\Rightarrow y(y - 5) - 4(y - 5) = 0$$

$$\Rightarrow (y - 4)(y - 5) = 0$$

$$\therefore y = 4 \text{ or } 5$$

$$\therefore x \geq y$$

73. (e) I. $x^2 = 961$

$$\Rightarrow x = \pm \sqrt{961} = \pm 31$$

$$\text{II. } y = \sqrt{961} = \pm 31$$

$$\therefore x = y$$

74. (b) I. $x^2 - x - 72 = 0$

$$\Rightarrow x^2 - 9x + 8x - 72 = 0$$

$$\Rightarrow x(x - 9) + 8(x - 9) = 0$$

$$\Rightarrow (x + 8)(x - 9) = 0$$

$$\therefore x = -8 \text{ or } 9$$

$$\text{II. } y^2 = 64$$

$$\Rightarrow y = \sqrt{64} = \pm 8$$

$$\therefore x \geq y$$

75. (e) I. $x^2 = 463 + 321 = 784$

$$\therefore x = \sqrt{784} = \pm 28$$

$$\text{II. } y^2 = 308 + 421 = 729$$

$$\therefore y = \sqrt{729} = \pm 27$$

Relationship between x and y cannot be established.

76. (a) $8.5 \times (80 \times 1.5 \times 2.5) \div 4 \rightarrow 8.5 \times (300) \div 4 = 637.5$

77. (b) $23\% \text{ of } 2500 - 22\% \text{ of } 500 = 930 \div ?$

$$575 - 110 = 930 \div ?$$

$$? = 2$$

78. (d) $5312.15 - 1318.82 - 2321.43 = 1671.9$

79. (a) $(333.33 + 33.33 + 3333.34) \div 50 ? 3700 \div 50 = 74$

80. (c) $3\% \text{ of } 3500 + 5\% \text{ of } 700 = ?\% \text{ of } 1400$

$$105 + 35 = ?\% \text{ of } 1400$$

$$? = 10\%$$

81. (d) 82. (b) 83. (e) 84. (a)

85. (d) 86. (b) 87. (e) 88. (c)

89. (d) 90. (a) 91. (b) 92. (d)

93. (e) 94. (a) 95. (c) 96. (c)

97. (a) 98. (d) 99. (b) 100. (d)

101. (d) 102. (b) 103. (a) 104. (e)

105. (c) 106. (d) 107. (c) 108. (a)

109. (d) 110. (b) 111. (e) 112. (d)

113. (d) 114. (e) 115. (c) 116. (d)

117. (b) 118. (c) 119. (e) 120. (c)

121. (d) 122. (a) 123. (d) 124. (d)

125. (d) 126. (c) 127. (a) 128. (d)

129. (d) 130. (b) 131. (d) 132. (c)

133. (d) 134. (c) 135. (c) 136. (a)

137. (c) 138. (d) 139. (a) 140. (b)

141. (a) 142. (d) 143. (b) 144. (d)

145. (a) 146. (c) 147. (d) 148. (a)

149. (b) 150. (d) 151. (a) 152. (d)

153. (d) 154. (c) 155. (b) 156. (c)

157. (c) 158. (a) 159. (c) 160. (a)

161. (b) 162. (a) 163. (c) 164. (c)

165. (d) 166. (b) 167. (a) 168. (d)

169. (c) 170. (c) 171. (b) 172. (d)

173. (d) 174. (a) 175. (a) 176. (c)

177. (d) 178. (b) 179. (a) 180. (c)

181. (b) 182. (b) 183. (d) 184. (b)

185. (b) 186. (b) 187. (c) 188. (b)

189. (b) 190. (b) 191. (d) 192. (b)

193. (a) 194. (e) 195. (a) 196. (e)

197. (c) 198. (b) 199. (a) 200. (d)