

State Bank of India Clerical Cadre Examination

Mathematics Section

Q. 1-5. What should come in place of question mark (?) in the following questions?

- 1.** 92.5% of 550 = ?
(1) 506.45 (2) 521.65
(3) 518.55 (4) 508.75
(5) None of these
- 2.** $12^4 \times 12^{13} = ?$
(1) 12^7 (2) 12^{39} (3) 12^{17}
(4) 12^{-7} (4) None of these
- 3.** $12.22 + 22.21 + 221.12?$
(1) 250.55 (2) 255.50
(3) 250.05 (4) 255.05
(5) None of these
- 4.** $464 \div (16 \times 2.32) = ?$
(1) 12.5 (2) 14.5
(3) 10.5 (4) 8.5
(5) None of these
- 5.** $78 \div 5 \div 0.5 = ?$
(1) 15.6 (2) 31.2
(3) 7.8 (4) 20.4
(5) None of these
- 6.** A bus covers a distance of 2,924 kms. in 43 hours. What is the speed of the bus?
(1) 72 kms/hr (2) 60 kms/hr (3) 68 kms/hr
(4) Cannot be determined
(5) None of these
- 7.** If $(9)^3$ is subtracted from the square of a number, the answer so obtained is 567. What is the number?
(1) 36 (2) 28 (3) 42
(4) 48 (5) None of these
- 8.** What would be the simple interest obtained on an amount of Rs 5,760 at the rate of 6 p.c.p.a. after 3 years?
(1) Rs 1,036.80 (2) Rs 1,666.80 (3) Rs 1,336.80
(4) Rs 1,063.80 (5) None of these
- 9.** What is 333 times 131?
(1) 46,323 (2) 43,623 (3) 43,290
(4) 42,957 (5) None of these
- 10.** The product of two successive numbers is 8556. What is the smaller number?
(1) 89 (2) 94 (3) 90
(4) 92 (5) None of these
- 11.** The owner of an electronics shop charges his customer 22% more than the cost price. If a customer

paid Rs 10,980 for a DVD Player, then what was the cost price of the DVD Player?

- (1) Rs 8,000 (2) Rs 8,800 (3) Rs 9,500
(4) Rs 9,200 (5) None of these
- 12.** What would be the compound interest obtained on an amount of Rs 3,000 at the rate of 8 p.c.p.a after 2 years?
(1) Rs 501.50 (2) Rs 499.20 (3) Rs 495
(4) Rs 510 (5) None of these
- 13.** What is the least number to be added to 4321 to make it a perfect square?
(1) 32 (2) 34 (3) 36
(4) 38 (5) None of these
- 14.** 45% of a number is 255.6. What is 25% of that number?
(1) 162 (2) 132 (3) 152
(4) 142 (5) None of these
- 15.** Find the average of the following Set of Scores: 221, 231, 441, 359, 665, 525
(1) 399 (2) 428 (3) 407
(4) 415 (5) None of these
- 16.** If $(78)^2$ is subtracted from the square of the number, the answer so obtained is 6,460. What is the number?
(1) 109 (2) 111 (3) 113
(4) 115 (5) None of these
- 17.** In an examination it is required to get 40% of the aggregate marks to pass. A student gets 261 marks and is declared failed by 4% marks. What are the maximum aggregate marks a student can get?
(1) 700 (2) 730 (3) 745
(4) 765 (5) None of these
- 18.** Pinku, Rinku and Tinku divide an amount of Rs 4,200 amongst themselves in the ratio of 7 : 8 : 6 respectively. If an amount of Rs 200 is added to each of their shares, what will be the new respective ratio of their shares of amount?
(1) 8 : 9 : 6 (2) 7 : 9 : 5 (3) 7 : 8 : 6
(4) 8 : 9 : 7 (5) None of these
- 19.** Ms Suchi deposits an amount of Rs 24,000 to obtain a simple interest at the rate of 14 p.c.p.a. for 8 years. What total amount will Ms Suchi get at the end of 8 years?
(1) Rs 52,080 (2) Rs 28,000 (3) Rs 50,880
(4) Rs 26,880 (5) None of these
- 20.** The average of 5 consecutive even numbers A, B, C, D and E is 52. What is the product of B and E?

- (1) 2912 (2) 2688 (3) 3024
 (4) 2800 (5) None of these

21. The difference between 42% of a number and 28% of the same number is 210. What is 59% of that number?

- (1) 630 (2) 885 (3) 420
 (4) 900 (5) None of these

22. What approximate value should come in place of the question mark (?) in the following question?

$$4275 \div 496 \times (21)^2 = ?$$

- (1) 3795 (2) 3800 (3) 3810
 (4) 3875 (5) 3995

23. A canteen requires 112 kgs of wheat for a week. How many kgs of wheat will it require for 69 days?

- (1) 1,204 kgs (2) 1,401 kgs (3) 1,104 kgs
 (4) 1,014 kgs (5) None of these

24. If an amount of Rs 41,910 is distributed equally amongst 22 persons. How much amount would each person get?

- (1) Rs 1,905 (2) Rs 2,000 (3) Rs 1,885
 (4) Rs 2,105 (5) None of these

25. The cost of 4 Cell-phones and 7 Digital cameras is Rs 1,25,627. What is the cost of 8 Cell-phones and 14 Digital cameras?

- (1) Rs 2,51,254 (2) Rs 2,52,627 (3) 2,25,524
 (4) Cannot be determined
 (5) None of these

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

- (1) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
- (2) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
- (3) if the data in Statement I alone or in Statement II alone are sufficient to answer the question.
- (4) if the data in both the Statements I and II are not sufficient to answer the question.
- (5) if the data in both the Statements I and II together are necessary to answer the question.

26. What is the area of the circle?

- I. Perimeter of the circle is 88 cms.
 II. Diameter of the circle is 28 cms.

27. What is the rate of interest?

- I. Simple interest accrued on an amount of Rs 25,000 in two years is less than the compound interest for the same period

by Rs 250.

II. Simple interest accrued in 10 years is equal to the principal.

28. What is the number of trees planted in the field in rows and columns?

- I. Number of columns is more than the number of rows by 4.
 II. Number of trees in each column is an even number.

29. What is the area of the right-angled triangle?

- I. Height of the triangle is three-fourth of the base.
 II. Diagonal of the triangle is 5 metres.

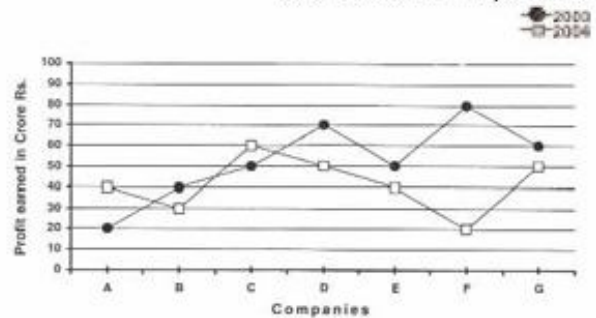
30. What is the father's present age?

- I. Father's present age is five times the son's present age.
 II. Five years ago the father's age was fifteen times the son's age that time.

Q. 31-35. Study the following graph carefully to answer these questions:

Profit earned (in Crore Rs) by Seven Companies during 2003-2004

Profit = Income – Expenditure



31. What is the ratio between the profit earned by Company A in 2004 and the profit earned by Company B in 2003 respectively?

- (1) 4 : 3 (2) 3 : 2 (3) 3 : 4
 (4) 2 : 3 (5) None of these

32. What is the difference (in Crore Rs) between the total profit earned by Companies E, F and G together in 2003 and the total profit earned by these companies in 2004?

- (1) 70 (2) 75 (3) 78
 (4) 82 (5) None of these

33. What is the ratio between the total profit earned by Company C in 2003 and 2004 together and the total profit earned by Company E in these two years respectively?

- (1) 11 : 9 (2) 9 : 10 (3) 10 : 11
 (4) 11 : 10 (5) None of these

34. What was the average profit earned by all the companies in 2003? (In Crore Rs Rounded-Off to two digits after decimal).

- (1) 52.75 (2) 53.86 (3) 52.86

- (4) 53.75 (5) None of these

35. Profit earned by Company B in 2004 is what per cent of the profit earned by the same company in 2003?

- (1) 133.33 (2) 75 (3) 67.66
(4) 75.25 (5) None of these

Q. 36-40. Study the following table carefully to answer these questions:

TABLE GIVING PERCENTAGE OF UNEMPLOYED MALE AND FEMALE YOUTH AND THE TOTAL POPULATION FOR DIFFERENT STATES IN 2005 AND 2006

STATE	2005			2006		
	M	F	T	M	F	T
A	12	15	32	7	8	35
B	8	7	18	10	9	20
C	9	10	28	10	12	34
D	10	6	24	8	8	30
E	6	8	30	7	6	32
F	7	5	28	8	7	35

M = Percentage of unemployed Male youth over total population

F = Percentage of unemployed Female youth over total population

T = Total population of the State in lakhs

36. What was the total number of unemployed youth in State A in 2006?

- (1) 2,20,000 (2) 3,25,000
(3) 5,20,000 (4) 5,25,000
(5) None of these

37. How many female youth were unemployed in State D in 2005?

- (1) 14,400 (2) 1,44,000
(3) 1,40,000 (4) 14,000
(5) None of these

38. Number of unemployed male youth in State A in 2005 was what per cent of the number of unemployed female youth in State E in 2006?

- (1) 66 (2) 50 (3) 200
(4) 133 (5) None of these

39. What was the difference between the number of unemployed male youth in State F in 2005 and the number of unemployed male youth in State A in 2006?

- (1) 70,000 (2) 45,000
(3) 68,000 (4) 65,000
(5) None of these

40. What was the respective ratio between unemployed male youth in State D in 2005 and the unemployed male youth in State D in 2006?

- (1) 1 : 1 (2) 2 : 3 (3) 3 : 2
(4) 4 : 5 (5) None of these

ANSWERS AND EXPLANATIONS

1. (4)
2. (3)
3. (5) Ans. 255.55
4. (1)
5. (2)
6. (3) $\text{Speed} = \frac{D}{t}$
7. (1) $x^2 - 9^3 = 567 \Rightarrow x = 36$
8. (1) $\text{S.I.} = \frac{5760 \times 6 \times 3}{100} = \text{Rs}1036.80$
9. (2) Ans. 43623
10. (4) $x(x + 1) = 8556 \Rightarrow x = 92$
11. (5) $\frac{122}{100}x = 10980 \Rightarrow x = \text{Rs} 9000$
12. (2) $\text{C.I.} = P \left[\left(1 + \frac{R}{100} \right)^n - 1 \right]$
 $= 3000 \left[\left(1 + \frac{8}{100} \right)^2 - 1 \right] = \text{Rs} 499.20$
13. (5)
$$\begin{array}{r} 65 \\ 6 \overline{) 4321} \\ \underline{36} \\ 721 \\ \underline{625} \\ 96 \end{array} \quad \begin{array}{l} 65^2 < 4321 < 66^2 \\ \text{Reqd. no.} = 66^2 - 4321 = 35 \end{array}$$

14. (4) $\frac{45}{100}$ of $x = 255.6 \Rightarrow x = 255.6 \times \frac{100}{45}$
 $\therefore \frac{25}{100} \times 255.6 \times \frac{100}{45} = 142$
15. (3)
16. (5) $x^2 - 78^2 = 6460 \Rightarrow x = 112$
17. (5) $\frac{40}{100}x = 261 + \frac{4}{100}x \Rightarrow x = 725$
18. (4) Shares of Pinku, Rinku and Tinku in
Rs 4200 are $\frac{7}{7+8+6} \times 4200, \frac{8}{21} \times 4200,$
 $\frac{6}{21} \times 4200$ i.e. 1400, Rs 1600, Rs 1200
Reqd. ratio
 $= (1400 + 200) : (1600 + 200) : (1200 + 200)$
 $= 8 : 9 : 7$
19. (3) Total Amount
 $= \text{Rs} 24000 + \frac{24000 \times 14 \times 8}{100} = \text{Rs} 50880$
20. (4) A + B + C + D + E
 $x + (x + 2) + (x + 4) + (x + 6) + (x + 8)$
 $= 5x + 52 \Rightarrow x = 48 = \text{A, B} = 50$
 $\therefore \text{E} = 48 + 8 = 56$
 $\therefore \text{BE} = 50 \times 56 = 2800$

$$21. (2) (42 - 28)\% \text{ of } x = 210 \Rightarrow x = 210 \times \frac{100}{14} = 1500$$

$$\therefore \frac{59}{100} \times 15 = 885$$

22. (2) Use BODMAS

$$23. (3) \frac{112}{7} \times 69 = 1104 \text{ kg}$$

= Reqd. quantity of wheat

24. (1)

$$25. (1) 4x + 7y = 125627 \times 2$$

$$\therefore 8x + 14y = 251254$$

$$26. (3) 2\pi r = 88 \Rightarrow r = \frac{88}{2\pi}$$

$$r = \frac{D}{2} = \frac{28}{2} = 14$$

Either (i) or (ii) is reqd.

$$A = \pi r^2$$

$$27. (3) 250 = 25000 [(1 + R)^2 - 1] - 25000 \times R \times 2$$

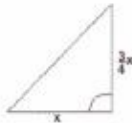
$$\text{or } R = \frac{x \times 100}{x \times 10} = 10\%$$

From either of statement we can find R

28. (4)

$$29. (5) x^2 + \left(\frac{3}{4}x\right)^2 = 5^2 \Rightarrow x = 4,$$

$$h = \frac{3}{4} \times 4 = 3$$



$$\text{Area} = \frac{1}{2} \left(x \times \frac{3}{4}x \right) = \frac{1}{2} (4 \times 3) = 6 \text{ sq. units}$$

Both (i) and (ii) statements are reqd.

30. (5) Let son's present age be x

$$\therefore \text{Father's present age} = 5x$$

$$\text{ATS } 5x - 5 = 15 (x - 5) \Rightarrow x = 7$$

$$\therefore \text{Father's present age} = 35 \text{ yrs}$$

$$31. (5) \frac{40}{40} = \frac{1}{1}$$

$$32. (5) \text{Diff} = (50 + 80 + 60) - (40 + 20 + 50) = 80$$

$$33. (1) \text{Reqd ratio} = \frac{50 + 60}{40 + 50} = \frac{11}{9}$$

34. (3)

$$35. (2) 30 = x\% \text{ of } 40 \Rightarrow x = 75$$

36. (4)

37. (2)

38. (3)

39. (5) Ans 49000

$$\frac{10 \times 24}{100}$$

$$40. (1) \frac{\frac{100}{8 \times 30}}{100} = 1 : 1$$

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English Section

Qs. 1-10. Read the following passage carefully and answer the questions given below it. Certain words are printed in **bold** to help you to locate them while answering some of the questions.

The window **offered** a view of the house opposite. The two families did not speak to each other because of a property dispute. One day, Ruchira's textbooks lay untouched as the young girl's gaze was on the happenings in the house opposite. There were two new faces in the neighbouring household—that of an elderly widow and a girl, aged sixteen. Sometimes the elderly lady would sit by the window, doing the young girl's hair. On other days she was absent.

The new young neighbour's daily routine could be seen through the window—she cleaned the rice paddy; split nuts, put the cushions in the sun to air them. In the afternoons while the men were all at work some of the women slept and others played cards. The girl sat on the terrace and read. Sometimes she wrote. One day there was a **hindrance**. She was writing when the elderly woman snatched the unfinished letter from her hands. Thereafter the girl was not to be seen on the terrace. Sometimes during the day sounds came from the house indicating that a massive argument was going on inside.

A few days passed. One evening Ruchira noticed the girl standing on the terrace in tears. The evening prayer was in progress. As she did daily, the girl bowed several times in prayer. Then she went downstairs. That night Ruchira wrote a letter. She went out and posted it that very instant. But as she lay in bed that night, she prayed fervently that her offer of friendship wouldn't reach its destination. Ruchira then left for Madhupur and returned when it was time for college to start. She found the house opposite in darkness, locked. They had left.

When she stepped into her room she found the desk **piled** with letters—one had a local stamp on it with her name and address in unfamiliar handwriting. She quickly read it. They continued to write to each other for the next twenty years.

1. Why did Ruchira write a letter to her new neighbour?

- (1) She wanted to offer her, her help.
- (2) She wanted to be friends with her.
- (3) To apologize for her family's behaviour towards her family.

(4) To encourage her to continue learning to read and write.

(5) None of these

2. Which of the following can be said about Ruchira?

(A) She used to spy on her neighbours because she didn't trust them.

(B) She was at home because she was studying.

(C) She did not speak to her neighbours because they did not own property.

(1) None (2) Only B (3) Both (A) and (B)

(4) Only (C) (5) Both (A) and (C)

3. How did the new young neighbour spend her days?

(1) She was busy writing letters to Ruchira.

(2) She used to daydream about her past experiences.

(3) She would attend to the needs of the widow.

(4) She spent her time learning to read and write.

(5) None of these

4. Why was the young neighbour prevented from sitting on the terrace?

(1) She used to while away her time instead of working.

(2) The old woman could no longer keep an eye on her.

(3) She had not finished writing the letter she was asked to.

(4) She has been writing a letter which she wasn't supposed to.

(5) As a punishment for being disrespectful and arguing with her elders.

5. What was the major argument in the house about?

(1) There were too many people living there, which resulted in arguments.

(2) The young girl was insisting on attending college.

(3) The young girl had been wasting her time instead of working.

(4) The old woman did not guard the young girl closely.

(5) None of these

6. Which of the following is TRUE in the context of the passage?

(1) The young girl was very devout and prayed everyday.

- (2) Only two letters were exchanged between the two girls.
 (3) The new young neighbour was a servant.
 (4) The afternoon was a time to relax for everyone.
 (5) The two families had fought because of the letters the two girls wrote to each other.

7. Why did the young girl wish that the letter would not reach its destination?

- (A) She was going away and would not be able to see if her neighbour was glad to receive it.
 (B) She was afraid that it would lead to a quarrel between the two families.
 (C) She was afraid that her neighbour would be angry when she received her letter.
 (1) None (2) Only (A) (3) Only (C)
 (4) Both (B) and (C) (5) Only (B)

Qs. 8-9. Choose the word which is most nearly the SAME in meaning as the word printed in bold as used in the passage.

8. hindrance

- (1) handicapped (2) delay
 (3) interruption (4) difficult
 (5) bar

9. offered

- (1) forward (2) willing
 (3) volunteered (4) provided
 (5) put

10. Choose the word which is most OPPOSITE in meaning of the word **piled** as used in the passage.

- (1) low (2) empty (3) blank
 (4) nothing (5) fell

Qs. 11-15. Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is (5). (Ignore errors of punctuation, if any.)

11. The price of (1) all petroleum products (2) is controlled (3) by the government. (4) No error. (5)

12. There is a (1) tax benefit for (2) the income of (3) senior citizens. (4) No error. (5)

13. In my opinion (1) Vikas has (2) failed to follow (3) none of the instructions. (4) No error. (5)

14. At least of (1) three per cent of (2) those who applied (3) will be selected. (4) No error. (5)

15. He was a (1) well known economist (2) who usually wrote (3) for international journals. (4) No error. (5)

Qs. 16-20. Which of the phrases (1), (2), (3) and (4) given below should replace the phrase given in bold in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (5) as the answer.

16. Occupying by many meetings, he did not reach home till late.

- (1) By occupying
 (2) While occupied
 (3) Occupation of
 (4) Occupied with
 (5) No correction required

17. We were nervous while the auditor was going by the accounts.

- (1) had gone through
 (2) was going over
 (3) gone through
 (4) went by
 (5) No correction required

18. Parents have to take some of this precaution while allowing their children to use the internet.

- (1) each of these precaution
 (2) every precautions
 (3) all these precautions
 (4) any of this precaution
 (5) No correction required

19. An employee will get the incentive, only if he deserves it.

- (1) he himself deserves
 (2) they deserving it
 (3) he deserved for it
 (4) he was deserving
 (5) No correction required

20. Sunita has been posted in Chennai, where is her birthplace.

- (1) which is her
 (2) that is her
 (3) that she has
 (4) there is her
 (5) No correction required

Qs. 21-25. 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) The old lady however refused to pay him and was taken to court.
 (B) The doctor, confident of his abilities, agreed.
 (C) Finally he cured her after all the valuable furniture had been removed from her house.
 (D) He then saw her furniture, realized its value and decided to delay curing her till he could steal it.
 (E) A blind old lady promised to pay the doctor a large sum of money if she was cured and nothing if she wasn't.
 (F) She was asked why she refused to pay by the judge. "I am not cured. I cannot see all my furniture!" was the reply.

21. Which of the following should be the SIXTH (LAST) sentence after rearrangement?

- (1) B (2) C (3) D
 (4) E (5) F

22. Which of the following should be the **THIRD** sentence after rearrangement?

- (1) B (2) C (3) D
 (4) E (5) F

23. Which of the following should be the **FIFTH** sentence after rearrangement?

- (1) A (2) B (3) C
 (4) D (5) E

24. Which of the following should be the **SECOND** sentence after rearrangement?

- (1) A (2) B (3) C
 (4) D (5) E

25. Which of the following should be the **FIRST** sentence after rearrangement?

- (1) B (2) C (3) D
 (4) E (5) F

Qs. 26-30. In each question below a sentence with four words printed in **bold** type is given. These are numbered as (1), (2), (3) and (4). One of these four words printed in **bold** may be either **wrongly spelt or inappropriate** in the context of the sentence. Find out the word, which is **wrongly spelt or inappropriate**, if any. The number of that word is your answer. If all the words printed in **bold** are correctly spelt and also appropriate in the context of the sentence, mark (5) i.e. 'All Correct' as your answer.

26. There were many **objectives**(1) from employees to the **proposal**(2) to **amend**(3) the **regulations**(4). All correct(5).

27. Since he has **provided**(1) over **halve**(2) the finance for the **infrastructure**(3) he should be in **charge**(4). All correct(5).

28. The scheme **permits**(1) **investors**(2) to buy the shares from **foreign**(3) companies at a **fixed**(4) price. All correct(5).

29. A leader who **relies**(1) on his team **members**(2) for **advice**(3) is **respected**(4). All correct(5).

30. He is in **complete**(1) **agreement**(2) with your **analyze**(3) of the **situation**(4). All correct(5).

Qs. 31-40. 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 are suggested one of which fits the blank appropriately. Find out the appropriate word in each case.

Most of the employees had no (31) in the oil industry. Employees were paid a (32) salary but they were loyal and hardworking. They often worked without breaks—they once worked (33) for 72 hours to discharge oil from a Russian tanker. (34) made the difference was the support they (35) from their bosses. On (36) occasions the barrier between boss and subordi-

nate vanished. We all worked like a team and (37) unexpected results. The air force (38) presented a letter of (39) to the company for the work done by us. Thus these determined (40) poorly paid employees have built the company into what it is today.

- 31.** (1) practise (2) contact
 (3) discipline (4) experience
 (5) knowledge

- 32.** (1) minor (2) low
 (3) less (4) cheaper
 (5) little

- 33.** (1) continuously (2) fully
 (3) running (4) near
 (5) slowly

- 34.** (1) Which (2) They
 (3) What (4) There
 (5) That

- 35.** (1) showed (2) taken
 (3) wanted (4) needed
 (5) received

- 36.** (1) any (2) many
 (3) couple (4) regularly
 (5) this

- 37.** (1) achieve (2) seen
 (3) given (4) contribute
 (5) produced

- 38.** (1) was (2) yet
 (3) even (4) instead
 (5) still

- 39.** (1) compliment (2) thank
 (3) regret (4) appreciation
 (5) reward

- 40.** (1) though (2) not
 (3) enough (4) beside
 (5) despite

ANSWERS

- | | | | |
|------------------------------------|-----------|-----------|-----------|
| 1. (2) | 2. (2) | 3. (3) | 4. (4) |
| 5. (5) | 6. (1) | 7. (4) | 8. (3) |
| 9. (4) | 10. (4) | | |
| 11. (5) No error. | | | |
| 12. (2) 'tax benefit on'. | | | |
| 13. (4) 'any of the instructions'. | | | |
| 14. (1) 'At least'. | | | |
| 15. (3) 'who usually wrote'. | | | |
| 16. (4) | 17. (2) | 18. (3) | 19. (5) |
| 20. (1) | 21. (5) F | 22. (3) D | 23. (1) A |
| 24. (2) B | 25. (4) E | | |
| 26. (1) 'objections' | | | |
| 27. (2) 'half' | | | |
| 28. (4) 'fixed' | | | |
| 29. (5) All correct | | | |
| 30. (3) 'analysis' | | | |
| 31. (4) | 32. (2) | 33. (1) | 34. (3) |
| 35. (5) | 36. (2) | 37. (5) | 38. (3) |
| 39. (4) | 40. (1) | | |

Mathematics Section – Part 2

Qs. 1-20. What should come in place of the question mark (?) in the following questions?

1. $963 + 560 \div 35 = ?$

- (1) 45 (2) 981
(3) 870 (4) 43
(5) None of these

2. $14400 \div 64 \div 9 = ?$

- (1) 27 (2) 23
(3) 29 (4) 21
(5) None of these

3. $14.8 \times 12.3 \times 8.6 = ?$

- (1) 1555.454 (2) 1535.445
(3) 1545.545 (4) 1565.544
(5) None of these

4. 45% of 720 = 30% of ?

- (1) 960 (2) 1080
(3) 1240 (4) 820
(5) None of these

5. $3\frac{1}{6} + 4\frac{2}{3} - 1\frac{1}{4} = ?$

- (1) $4\frac{1}{6}$ (2) $6\frac{2}{9}$
(3) $6\frac{7}{12}$ (4) $5\frac{1}{9}$
(5) None of these

6. $63251 + 52894 = ? + 37624$

- (1) 87812 (2) 67281
(3) 76821 (4) 78521
(5) None of these

7. $7\frac{2}{7}$ of $189 + 452 = 2000 - ?$

- (1) 183 (2) 164
(3) 170 (4) 198
(5) None of these

8. 68% of 595 - 43% of 372 = ?

- (1) 244.64 (2) 232.84
(3) 278.44 (4) 260.24
(5) None of these

9. 35% of (?) = 2175.95

- (1) 6712 (2) 6217
(3) 6127 (4) 6721
(5) None of these

10. $? \div 52 \times 12 = 252$

- (1) 1242 (2) 992

(3) 1142 (4) 1346

(5) None of these

11. $(45)^2 + (21)^2 = (?)^2 + 257$

- (1) 51 (2) 49
(3) 45 (4) 47
(5) None of these

12. $90780 \div \sqrt{7} = 85 \times 12$

- (1) 89 (2) 7921
(3) 7569 (4) 87
(5) None of these

13. $1862 \div 28 = ?$

- (1) 66.5 (2) 67
(3) 64.5 (4) 69
(5) None of these

14. 63% of 962 + ? = 999

- (1) 346.92 (2) 368.64
(3) 392.94 (4) 402.68
(5) None of these

15. $743 + 958 = ?\%$ of 5670

- (1) 34 (2) 26
(3) 30 (4) 22
(5) None of these

16. $\sqrt{5929} = ?$

- (1) 77 (2) 83
(3) 87 (4) 93
(5) None of these

17. $638 + 254 \div 8 \times 4 = ?$

- (1) 646 (2) 545
(3) 446 (4) 765
(5) None of these

18. 65% of 400 + $\sqrt{7} = 44\%$ of 800 - 12% of 400

- (1) 1936 (2) 44
(3) 2116 (4) 46
(5) None of these

19. $\frac{18 \times 14 + 46}{16 \times 10 - 23} = ?$

- (1) $1\frac{1}{2}$ (2) $2\frac{24}{137}$
(3) $4\frac{37}{138}$ (4) $3\frac{32}{173}$
(5) None of these

20. $8 \times 5 + (?)^2 = (11)^2$

- (1) 81 (2) 6561
(3) 9 (4) 27
(5) None of these

21. What should come in place of the question mark (?) in the following number series?

1 4 14 45 139 422 ?

- (1) 1268 (2) 1234
(3) 1272 (4) 1216
(5) None of these

22. 38 per cent of first number is 52 per cent of the second number. What is the respective ratio of the first number to the second number?

- (1) 5 : 4 (2) 16 : 9
(3) 26 : 19 (4) Cannot be determined
(5) None of these

23. What is the compound interest accrued on an amount of Rs 12,000, at the rate of 10 p.c.p.a. at the end of 3 years?

- (1) Rs 3,972 (2) Rs 2,567
(3) Rs 4,780 (4) Rs 5,609
(5) None of these

24. The average age of a man and his son is 54 years. The ratio of their ages is 23 : 13 respectively. What will be ratio of their ages after 6 years?

- (1) 10 : 7 (2) 5 : 3
(3) 4 : 3 (4) 3 : 2
(5) None of these

25. A single person takes 3 minutes to write a letter. If from 10 a.m. to 12.00 noon, 1960 letters are to be written, how many persons should be employed on this job?

- (1) 53 (2) 47
(3) 51 (4) 49
(5) None of these

26. The simple interest accrued on an amount of Rs 9,530 at the end of 6 years is Rs 2,859. What is the rate of interest p.c.p.a.?

- (1) 5 (2) 7
(3) 9 (4) 11
(5) None of these

27. The cost of 10 Chairs and 15 Tables is Rs 15,525. What is the cost of 8 Chairs and 12 Tables?

- (1) Rs 13,560 (2) Rs 12,420
(3) Rs 14,840 (4) Cannot be determined
(5) None of these

28. The owner of a Gift shop charges his customer 28% more than the cost price. If a customer paid Rs

1,408 for some Soft toys, then what was the cost price of those Soft toys?

- (1) Rs 1,300 (2) Rs 1,000
(3) Rs 1,200 (4) Rs 1,400
(5) None of these

29. A plot of 715 sq ft is available at the rate of Rs 3,850 per sq ft. If 40% of the total cost of the plot is to be paid for booking the plot, how much is the booking amount?

- (1) Rs 11,10,000 (2) Rs 11,01,100
(3) Rs 11,01,000 (4) Rs 11,00,100
(5) None of these

30. If the product of two successive positive integers is 3192, which is the smaller integer?

- (1) 52 (2) 58
(3) 54 (4) 56
(5) None of these

31. What approximate value should come in place of the question mark (?) in the following question?

$59.786 \div 14.444 \times 8.321 = ?$

- (1) 49 (2) 58
(3) 22 (4) 66
(5) None of these

32. A sum of money is divided among A, B, C and D in the ratio of 4 : 5 : 7 : 11 respectively. If the share of C is Rs 1,351, then what is the total amount of money of A and D together?

- (1) Rs 2,123 (2) Rs 2,316
(3) Rs 2,565 (4) Rs 2,895
(5) None of these

33. Mr Madhur deposits an amount of Rs 58,750 to obtain a simple interest at the rate of 12 p.c.p.a. for 4 years. What total amount will Mr Madhur get at the end of 4 years?

- (1) Rs 91,230 (2) Rs 86,950
(3) Rs 74,760 (4) Rs 69,540
(5) None of these

34. If an amount of Rs 96,393 is distributed equally amongst 33 children. How much amount would each child get?

- (1) Rs 2,789 (2) Rs 2,563
(3) Rs 2,860 (4) Rs 2,921
(5) None of these

35. The difference between 73% of a number and 58% of the same number is 960. What is 22% of that number?

- (1) 1408 (2) 1232
(3) 1324 (4) 1536

(5) None of these

36. One-seventh of a number is 39. What will be 56% of that number?

- (1) 164.66 (2) 152.88
(3) 178.22 (4) 182.44
(5) None of these

37. In a class of 55 students and 3 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 60% of the total number of students. How many sweets were there?

- (1) 737 (2) 671
(3) 714 (4) 638
(5) None of these

38. If $(108)^2$ is added to the square of a number, the answer so obtained is 13033. What is the number?

- (1) 33 (2) 43
(3) 37 (4) 47
(5) None of these

39. In an examination it is required to get 350 of the aggregate marks to pass. A student gets 32% marks and is declared failed by 70 marks. What are the maximum aggregate marks a student can get?

- (1) 885 (2) 865
(3) 875 (4) Cannot be determined
(5) None of these

40. Which number should replace both the question marks in the following equation?

$$\frac{?}{388} = \frac{97}{?}$$

- (1) 222 (2) 196
(3) 206 (4) 178
(5) None of these

ANSWERS AND EXPLANATIONS

1. (5) 2. (5) 3. (4)
4. (2) 5. (3) 6. (4)
7. (5) 8. (1) 9. (2)
10. (5) 11. (4) 12. (2)
13. (1) 14. (3) 15. (3)
16. (1) 17. (4) 18. (1)
19. (2) 20. (3)
21. (3) Multiplying each term by 3 and adding 1, 2, 3, 4, 5, 6 we get the next nos
 \therefore Req'd no. = $422 \times 3 + 6 = 1272$.
22. (3) $\frac{38}{100}x = \frac{52}{100}y \Rightarrow \frac{x}{y} = \frac{26}{19}$
23. (1) C.I. = $12000 \left[\left(1 + \frac{10}{100} \right)^3 - 1 \right] = \text{Rs } 3972$

24. (2) $23x + 13x = 54 \times 2 \Rightarrow x = 3$

$$\text{Req'd ratio} = \frac{23 \times 3 + 6}{13 \times 3 + 6} = \frac{5}{3}$$

25. (4) $\frac{1960}{(2 \times 60)} = 49$ [\therefore a person can write
3

$$\frac{2 \times 60}{3} \text{ letters in given time}]$$

26. (1) $R = \frac{2859 \times 100}{9530 \times 6} = 5$

Rate = 5% p.a.

27. (2) $10x + 15y = 15525$

$\therefore 2x + 3y = 3105$ (i) [x = Cost of a chair

Multiply (i) by 4, y = Cost of 1 table]

we get, $8x + 12y = 12420$

28. (5) Req'd cost = $1408 \times \frac{100}{128} = \text{Rs } 1100$

29. (2) Req'd amount = $715 \times 3850 \times \frac{40}{100}$
= Rs 11,01,100

30. (4) $x(x+1) = 3192 \Rightarrow x = 56$

31. (5)

32. (4) $\frac{7}{4+5+7+11} x = 1351 \Rightarrow x = 193 \times 27$

$$\text{Req'd amount} = \frac{4+11}{27} \times 193 \times 27$$

= Rs 2895

33. (2) $A = 58750 + \frac{58750 \times 12 \times 4}{100}$
= Rs 86950

34. (4) Each child gets = $\frac{96393}{33} = \text{Rs } 2921$

35. (1) $\frac{(73-58)}{100} x = 960 \Rightarrow x = 6400$

$$\therefore \frac{22}{100} \times 6400 = \text{Rs } 1408$$

36. (2)

37. (5) Total sweets

$$= \left(\frac{20}{100} \times 55 \right) \times 55 + 3 \times \left(\frac{60}{100} \times 55 \right)$$

= 704

38. (3) $x^2 + 108^2 = 13033 \Rightarrow x = 37$

39. (3) $\frac{32}{100}x + 70 = 350 \Rightarrow x = 875$

40. (5) $\frac{x}{388} = \frac{97}{x} \Rightarrow x = \sqrt{97 \times 388}$
= $2 \times 97 = 194$

Reasoning Part -1

1. In a certain code DROWN is written as MXNSC. How is BREAK written in that code?

- (1) LBFSC (2) JBDSA (3) JZDQA
(4) LZFOC (5) None of these

2. Among M, N, T, R and D each having a different height, T is taller than D but shorter than M. R is taller than N but shorter than D. Who among them is the tallest?

- (1) D (2) T (3) M
(4) R (5) N

3. How many such digits are there in the number 5436182 each of which is as far away from the beginning of the number as when the digits are arranged in ascending order within the number?

- (1) None (2) One (3) Two
(4) Three (5) More than three

4. What should come next in the letter series given below?

DDEDEFDFEFGDEFHDEFHIDEFGHIJD

- (1) D (2) E (3) F
(4) J (5) None of these

5. The letters in the word MORTIFY are changed in such a way that the vowels are replaced by the previous letter in the English alphabet and the consonants are replaced by the next letter in the English alphabet. Which of the following will be the fourth letter from the right end of the new set of letters?

- (1) S (2) H (3) G
(4) N (5) None of these

6. 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?

- (1) Leaf (2) Flower (3) Petal
(4) Fruit (5) Tree

7. 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?

- (1) Garlic (2) Ginger (3) Carrot
(4) Radish (5) Brinjal

8. How many meaningful English words can be made with the letters ALPE using each letter only once in each word?

- (1) None (2) One (3) Two
(4) Three (5) More than three

9. 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?

- (1) 24 (2) 48 (3) 32
(4) 72 (5) 64

10. How many such pairs of letters are there in the word CHAMBERS each of which has as many letters between them in the word as in the English alphabet?

- (1) None (2) One (3) Two
(4) Three (5) More than three

11-15. In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer:

- (1) if only Conclusion I follows.
(2) if only Conclusion II follows.
(3) if either Conclusion I or II follows.
(4) if neither Conclusion I nor II follows.
(5) if both Conclusions I and II follow.

Statements:

- 11.** Some toys are desks.
Some desks are pens.
All pens are rods.

Conclusions:

- I. Some rods are toys.
II. Some pens are toys.

Statements:

- 12.** Some tables are huts.
No hut is ring.
All rings are bangles.

Conclusions:

- I. Some bangles are tables.
II. No bangle is table.

Statements:

- 13.** All stars are clouds.
All clouds are rains.
All rains are stones.

Conclusions:

- I. All rains are stars.
II. All clouds are stones.

Statements:

- 14.** All windows are doors.

Some doors are buildings.
All buildings are cages.

Conclusions:

- I. Some cages are doors.
- II. Some buildings are windows.

Statements:

- 15.** Some chairs are rooms.
All rooms are trees.
All trees are poles.

Conclusions:

- I. Some poles are chairs.
- II. Some trees are chairs.

Q. 16-20. Study the following arrangement carefully and answer the questions given below:

G M 5 I D # J K E 2 P T 4 W % A F 3 U 8 \$ N V 6 Q @ 7 H 1 © B 9 ★ Z

16. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that **does not** belong to that group?

- (1) D J I (2) F U A (3) H @ 1
- (4) B ★ © (5) I # 5

17. What should come in place of the question mark (?) in the following series based on the above arrangement?

- D J K 2 T 4 % F 3 ?
- (1) U \$ V (2) U \$ N (3) 8 N V
 - (4) 8 N I (5) None of these

18. How many such numbers are there in the above arrangement, each of which is immediately preceded by a vowel and also immediately followed by a symbol?

- (1) None (2) One (3) Two
- (4) Three (5) More than three

19. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number but not immediately followed by a consonant?

- (1) None (2) One (3) Two
- (4) Three (5) More than three

20. Which of the following is the fourth to the right of the twelfth from the right end of the above arrangement?

- (1) 8 (2) 7 (3) K
- (4) A (5) None of these

Q. 21-25. Study the following information carefully and answer the questions given below:

A, B, C, D, E, F, G and H are sitting around a circle facing at the centre. F is third to the right of B who is third to the right of H. A is third to the left of H. C is fourth to the left of A. E is third to the right of D who is not a neighbour of A.

21. In which of the following pairs the second person is to the immediate right of the first person?

- (1) HC (2) BE (3) GB
- (4) FA
- (5) None of these

22. Who is second to the right of D?

- (1) F (2) G (3) A
- (4) Data inadequate
- (5) None of these

23. Who is third to the left of G?

- (1) H (2) D (3) C
- (4) F (5) None of these

24. Who is fourth to the left of C?

- (1) F (2) A (3) E
- (4) Data inadequate
- (5) None of these

25. What is B's position with respect to D?

- (1) Fourth to the right
- (2) Fourth to the left
- (3) Fifth to the left
- (4) Fifth to the right

- (1) (A) only
- (2) (B) only
- (3) (A) and (B) only
- (4) (C) and (D) only
- (5) None of these

Q. 26-30. 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) i.e. 'None of these' as the answer.

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

Conditions:

- (i) If both the first and the last letters of the group are consonants, both are to be coded as the code for the last letter.
- (ii) If the first letter is a consonant and the last letter is a vowel, the codes are to be interchanged.

26. BDATFE:

- (1) 6\$8146
- (2) 6\$814@
- (3) @\$814@
- (4) @\$8146
- (5) None of these

27. AWBRND:

- (1) \$563©8
- (2) 8563©\$
- (3) 8365©\$
- (4) 8536©\$
- (5) None of these

28. EMNTKU:

- (1) ★#©1%@
- (2) @#©14★
- (3) @#©1%★
- (4) #@@1%★
- (5) None of these

29. MDEAJI:

- (1) 1\$@82#
- (2) #@\$821
- (3) 1\$@821
- (4) #@\$82#
- (5) None of these

30. RKUMFP:

- (1) 7%★#43
- (2) 3★%#47
- (3) 3%★#43
- (4) 3%★#47
- (5) None of these

Q. 31-35. 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 not smaller than Q'.
- 'P ★ Q' means 'P is neither greater than nor smaller than Q'.
- 'P © Q' means 'P is neither greater than nor equal to Q'.
- 'P \$ Q' means 'P is neither smaller than nor equal to Q'.

Now in each of the following questions assuming the given statements to be true, find which of the two

Q. 36-40. In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?

conclusions I and II given below them is/are **definitely true**? Give answer:

- (1) if only Conclusion I is true.
- (2) if only Conclusion II is true.
- (3) if either Conclusion I or II is true.
- (4) if neither Conclusion I nor II is true.
- (5) if both Conclusions I and II are true.

Statements:

31. R \$ M, M © F, F % J.

Conclusions:

- I. R \$ J
- II. F © R

Statements:

32. M © D, D @ K, K ★ N.

Conclusions:

- I. N \$ D
- II. K \$ M

Statements:

33. B @ D, D \$ M, M ★ N.

Conclusions:

- I. N @ D
- II. D \$ N

Statements:

34. F \$ W, W % J, K @ N.

Conclusions:

- I. J @ F
- II. N % W

Statements:

35. F © T, T % R, R \$ W.

Conclusions:

- I. W © T
- II. R © T

PROBLEM FIGURES

36.					
37.					
38.					
39.	S C = Z	C W S	□ S ★ W	U □ ★ S	★ U □ O
40.	S	S C	S O C	Z C S O	Z = C S O

ANSWER FIGURES

1	2	3	4	5
△ □ ○ U	○ ★ U	○ U □	U □ ★ ○	□ ★ U △
○ = Z □ S	○ = Z □ S	△ = Z □ S	U = Z □ S	□ = Z □ S
○ C S = Z C	○ S C = Z C	○ S C = Z C	Z C S = Z C S	○ S C = Z C

ANSWERS AND EXPLANATIONS

1. (2) Write the letters in reverse order. The code for 1st, 3rd and 5th letters is the preceding letter and for 2nd and 4th, the next letter.

DROWN NWORD BREAK KAERB
 MXNSC JBDSA

2. (3) M T D R N

3. (2) 3 only.

4. (2) E F G H I J K

5. (5) N N S U H G Z

6. (5) Others are parts of tree.

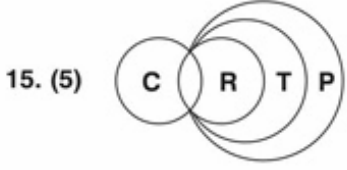
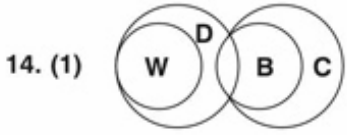
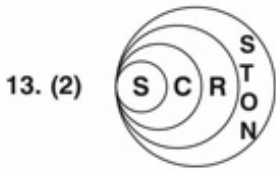
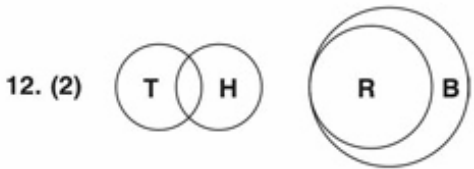
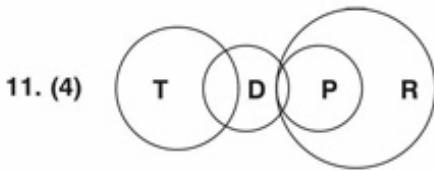
7. (5) All the others grow below the surface.

8. (4) PALE, LEAP, PEAL.

9. (5) It is a perfect square. (8²).

10. (3) C and A and R and S.

Use Venn diagrams for solving the next set of questions.



16. (3) 17. (3) 18. (2) 19. (4) 20. (2)

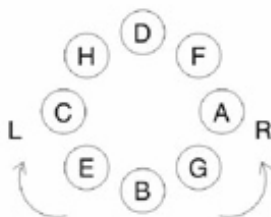
21. (1)

22. (5)

23. (3)

24. (2)

25. (3)



26. (4) 27. (2) 28. (3) 29. (5) 30. (5)

For solving the next type of questions, (31-35) decode the symbols:

P @ Q P < Q; P % Q P ≤ Q; P * Q P = Q

P © Q P < Q; P \$ Q P > Q

31. (4) R > M; M < F; F ≤ J

32. (2) M < D; D < K; K = N

33. (2) B < D; D > M; M = N

34. (4) F > W; W ≤ J; J < N

35. (4) F < T; T ≤ R; R > W

36. (2) 37. (1) 38. (1) 39. (1) 40. (3)

Reasoning Section Part - 2

1. In a certain code DATE is written as #%\$@ and STYLE is written as ★\$©↑@. How is DELAY written in that code?

- (1) #@↑%© (2) #©\$%@ (3) #@\$%©
(4) #S↑%© (5) None of these

2. In a certain code DETAIL is written as BJMUFE. How is SUBMIT written in that code?

- (1) UJWCVT (2) NJUCVT (3) NJUTVC
(4) UJNTVC (5) None of these

3. If it is possible to make only one meaningful word from the second, the fourth, the sixth and the ninth letters of the word PROACTIVE, using each letter only once, second letter of that word is your answer. If more than one word can be formed your answer is M and if no such word can be formed your answer is N.

- (1) A (2) E (3) T
(4) M (5) N

4. How many such pairs of letters are there in the word FOREHAND each of which have as many letters between them in the word as they have in the English alphabet?

- (1) None (2) One (3) Two
(4) Three (5) More than three

5. 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?

- (1) 17 (2) 31 (3) 23
(4) 13 (5) 21

Q. 6-10. These questions are based on the following arrangement. Study it carefully and answer the questions that follow.

T 6 # I J 1 % L E 3 K 9 @ A H 7 B © D 2 U \$ R 4 ★ 8

6. Four of the following five are alike in a certain way on the basis of their position in the above arrangement and so form a group. Which is the one that does not belong to the group?

- (1) JI1 (2) EL3 (3) @9A
(4) 7HB (5) R4\$

7. What will come in place of the question mark (?) in the following series based on the above arrangement?

- 6IJ %E3 9AH ?
(1) B©2 (2) 7©D (3) 7BD
(4) BD2 (5) None of these

8. If all the vowels are removed from the above arrangement which element will be sixth to the right of fourth element from the left?

- (1) 9 (2) K (3) 3
(4) @ (5) None of these

9. How many such symbols are there in the above arrangement each of which is immediately preceded by a number?

- (1) None (2) One (3) Two
(4) Three (5) More than three

10. Which element is fifth to the right of eleventh from the right end?

- (1) S (2) U (3) 1
(4) 3 (5) None of these

Q. 11-15. In each question below are three statements followed by two conclusions numbered I and II. You have to take the three 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 three statements disregarding commonly known facts. Give answer:

- (1) if only conclusion I follows.
(2) if only conclusion II follows.
(3) if either conclusion I or conclusion II follows.
(4) if neither conclusion I nor conclusion II follows.
(5) if both conclusions I and II follow.

Statements:

- 11.** All taps are wells.
Some wells are canals.
All canals are rivers.

Conclusions:

- I. Some rivers are taps.
II. Some wells are rivers.

Statements:

- 12.** Some files are papers.
Some papers are books.
All books are journals.

Conclusions:

- I. Some papers are journals.
II. Some files are journals.

Statements:

- 13.** Some apples are grapes.
Some grapes are mangoes.
No mango is guava.

Conclusions:

- I. Some guavas are apples.
II. No guava is apple.

Statements:

- 14.** Some computers are screens.
Some screens are movies.
Some movies are scripts.

Conclusions:

- I. Some computers are movies.
II. Some screens are scripts.

Statements:

- 15.** All pearls are gems.
All gems are diamonds.
All corals are gems.

Conclusions:

- I. All pearls are diamonds.
II. All corals are diamonds.

Q. 16-20. In the following questions symbols @, #, %, \$ and ★ are used with different meanings as follows:

- 'A @ B' means 'A is not smaller than B'.
'A # B' means 'A is neither smaller than nor equal to B'.
'A % B' means 'A is neither smaller than nor greater than B'.
'A \$ B' means 'A is not greater than B'.
'A ★ B' means 'A is neither greater than nor equal to B'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are **definitely true**. Give answer.

- (1) if only conclusion I is true.
(2) if only conclusion II is true.
(3) if either conclusion I or conclusion II is true.
(4) if neither conclusion I nor conclusion II is true.
(5) if both conclusions I and II are true.

Statements:

- 16.** T @ V, V # M, M % F

Conclusions:

- I. T # M
II. T @ F

Statements:

- 17.** L \$ N, N ★ F, R % L

Conclusions:

- I. F # R
II. R \$ N

Statements:

- 18.** H # I, I @ J, J \$ P

Conclusions:

- I. H # J
II. H # P

Statements:

- 19.** L ★ D, D # K, K \$ J

Conclusions:

- I. L ★ K
II. D \$ J

Statements:

- 20.** Q \$ W, W % E, E @ K

Conclusions:

- I. Q \$ K
II. W @ K

Q. 21-25. In each of the following questions a group of letters is given followed by four combinations of digits and symbols numbered (1), (2), (3) and (4). The letters are to be coded as per the scheme and conditions given below. The serial number of the combination that correctly represents the group of letters is your answer. If none of the combinations is correct your answer is (5) i.e. None of these.

Letters: H I T K R F A L E M J B Q U
Digit/

Symbol code 3 7 % # 4 \$ 6 9 @ ↑ 2 5 © 8

Conclusions:

- (i) If the first letter in the group is a vowel and the last letter is a consonant their codes are to be interchanged.
(ii) If the first letter in the group is a consonant and the last letter is a vowel both are to be coded by the code for vowel.
(iii) If the first as well as the last letter is a vowel both are to be coded by the code for first letter.

21. IRHMEJ

- (1) 743 ↑ @ 2 (2) 243 ↑ @ 2 (3) 743 ↑ @ 7
(4) 243 ↑ @ 7 (5) None of these

22. TFIKAR

- (1) 4\$7#6% (2) 4\$7#64 (3) %\$7#6%
(4) %\$6#74 (5) None of these

23. MHEJKQ

- (1) ©3@2# ↑ (2) ↑3@2# ↑ (3) ↑3@2#©
(4) ©3@2#@ (5) None of these

24. FIKLRU

- (1) \$7#948 (2) \$7#94\$ (3) 87#948
(4) 87#94\$ (5) None of these

25. ALFJHE

- (1) @9\$236 (2) 69\$236 (3) @9\$23@
(4) 69\$23@ (5) None of these

Q. 26-30. Study the following information carefully to answer these questions.

Seven friends K, M, L, H, F, D and C are sitting around a circle facing the centre. L is second to the right of H who is to the immediate right of C. M is third to the left of D and to the immediate right of F.

26. Who is third to the left of 'C'?

- (1) L (2) K (3) F
(4) K or F (5) None of these

27. Which of the following pairs of persons represents the neighbours of K?

- (1) LD (2) FM (3) ML
- (4) CH (5) None of these

28. Who is to the immediate right of L?

- (1) K (2) D (3) H
- (4) M (5) None of these

29. Who is second to the right of 'C'?

- (1) M (2) L (3) D
- (4) F (5) None of these

30. Which of the following pairs of persons has the first person sitting to the immediate right of second person?

- (1) DL (2) KF (3) CH
- (4) DH (5) None of these

Q. 31-35. Study the following information carefully to answer these questions.

Seven friends P, Q, R, S, T, U and V are teaching different subjects Maths, Physics, Biology, English, History, Psychology and French not necessarily in the same order. Each one of them has liking for a different colour Pink, Green, Blue, Red, Yellow, White and Orange again not necessarily in the same order.

T teaches Biology and likes Green colour. Q teaches

History and he does not like Yellow or Orange. The one who likes Red teaches physics. P teaches French and likes Blue. The one who teaches English likes Pink. R teaches Maths and V teaches psychology. U does not like Red. Maths teacher does not like Yellow.

31. Which colour is liked by V?

- (1) Pink (2) White (3) Orange
- (4) Yellow (5) None of these

32. Who teaches English?

- (1) U (2) S (3) R
- (4) Cannot be determined (5) None of these

33. Who likes White?

- (1) R (2) S (3) U
- (4) V (5) None of these

34. Who likes Orange?

- (1) V (2) S (3) R
- (4) Cannot be determined (5) None of these

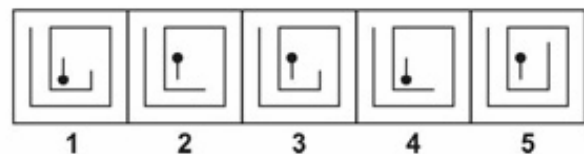
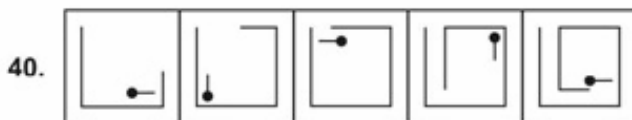
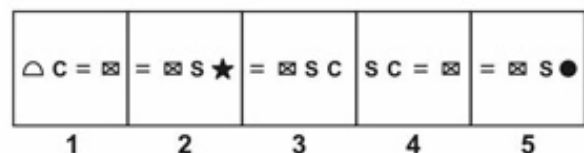
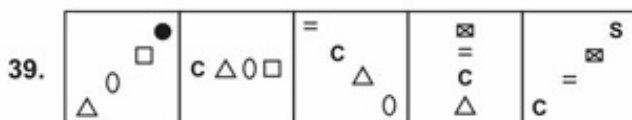
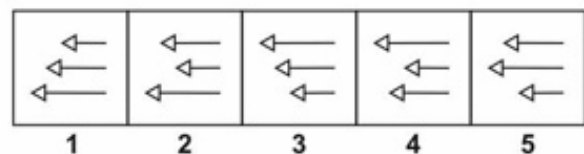
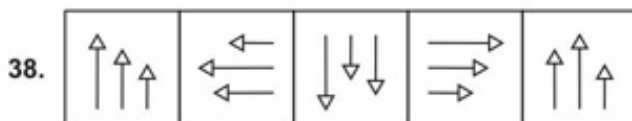
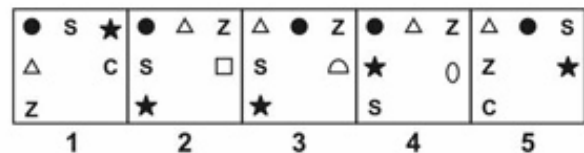
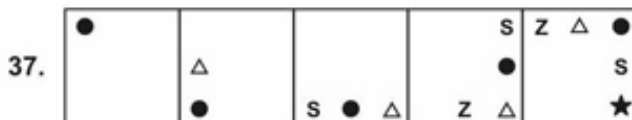
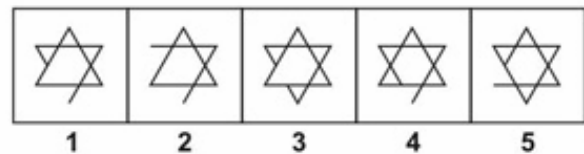
35. Which of the following combinations is definitely correct?

- (1) Red—T—Physics (2) Pink—U—English
- (3) Red—S—Psychology (4) Yellow—U—Biology
- (5) None of these

Q. 36-40. In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left of the sequence were continued?

PROBLEM FIGURES

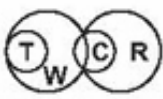
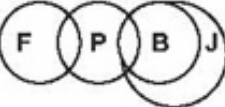
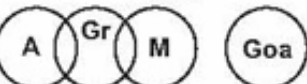
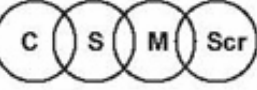

ANSWER FIGURES



ANSWERS AND EXPLANATIONS

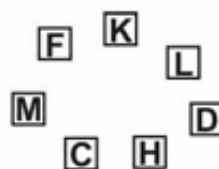
1. (1)
 2. (2) DE TA IL AL TE D hence SUBMIT = MITBUS. The next letter in alphabet is the code, i.e. N J U C V T
 3. (4) RATE and TEAR.
 4. (3) FA and RN.
 5. (5) Others are prime numbers. It is divisible by 3 and 7.
 6. (5) 7. (4) 8. (1) 9. (5) 10. (2)

11. to 15.

11. (2) 
12. (1) 
13. (2) 
14. (4) 
15. (5) 

16. (1) 17. (5)
 18. (1) 19. (4)
 20. (5) 21. (3)
 22. (2) 23. (3)
 24. (3) 25. (2)

26. (2)
 27. (5)
 28. (1)
 29. (3)
 30. (4)



Qs. 31-35.

- | | P | Q | R | S | T | U | V |
|---------|------|-------|--------|-----|-------|------|---------|
| | Fr | Hist | Maths | Phy | Bio | Eng | Psy |
| | Blue | White | Orange | Red | Green | Pink | Yellow |
| 31. (4) | | | | | | | 32. (1) |
| 33. (5) | | | | | | | 34. (3) |
| 35. (2) | | | | | | | 36. (1) |
| 37. (2) | | | | | | | 38. (1) |
| 39. (2) | | | | | | | 40. (1) |