SNAP 2021 Question Paper

Time Allowed :2 Hours	**Maximum Marks :**120	**Total questions :**60

Q1. Milk and water in two vessels A and B are in the ratios 4:3 and 2:3 respectively. In what ratio should the liquids from both vessels be mixed to obtain a new mixture (vessel C) that is half milk and half water?

(A) 1:1
(B) 7:5
(C) 2:4
(D) 1:3

Q2. There are 6 tickets to the theater, 4 of which are for seats in the front row. If 3 tickets are selected at random, what is the probability that exactly two of them are for the front row?

(A) 0.6
(B) 0.7
(C) 0.9
(D) $\dfrac{1}{3}$

Q3. When 75% of a number is added to 75, the result is the same as the number. Find the number.

(A) 150
(B) 300
(C) 100
(D) 450

Q4. If five spiders can catch five flies in 5 minutes, how many flies can one hundred spiders catch in 100 minutes?

(A) 100
(B) 1000

(C) 500

(D) 2000

Q5. The value is $5^{1/4} \times (125)^{0.25}$

(A) 5

(B) 25

(C) 50

(D) 10

Q6. The average of five consecutive numbers is n. If the next two numbers are also included, then the average will–

(A) remain the same

(B) increase by one

(C) increase by 1.4

(D) increase by 2

Q7. When a heap of pebbles is grouped in 32, 40, or 72, it leaves remainders 10, 18, and 50 respectively. What is the minimum number of pebbles in the heap?

(A) 1416

(B) 1418

(C) 1412

(D) 1420

Q8. Symbiosis runs a corporate training programme. At the end of the first programme, the total takings were ₹ 38950. There were more than 45 but fewer than 100 participants. What was the participants' fee?

(A) ₹ 410

(B) ₹ 450

(C) ₹ 500

(D) ₹ 510

Q9. Three friends had dinner at a restaurant. When the bill arrived, Amit paid $\frac{2}{3}$ as much as Veena paid, and Veena paid $\frac{1}{2}$ as much as Tanya paid. What fraction of the bill did Veena pay?

(A) $\frac{1}{3}$

(B) $\frac{3}{11}$

(C) $\frac{12}{31}$

(D) $\frac{5}{8}$

Q10. Starting from his house one day, a student walks with a speed of $2\frac{1}{2}$ km/h and reaches school 6 minutes late. Next day he increases his speed by 1 km/h and reaches 6 minutes early. How far is the school from the house?

(A) 1 km

(B) $1\frac{1}{2}$ km

(C) $1\frac{3}{4}$ km

(D) 2 km

Q11. The number of students studying Physics, Chemistry, and Zoology are in the ratio $4 : 3 : 5$. If the numbers in these three disciplines increased by 50%, 25%, and 10% respectively in the next year, what is the new respective ratio?

(A) $24 : 15 : 22$

(B) $18 : 11 : 13$

(C) $24 : 13 : 17$

(D) CANNOT BE DETERMINED

Q12. A, B, and C start a business, each investing ₹20,000. After 5 months, A withdraws ₹5,000, B withdraws ₹4,000, and C invests ₹6,000 more. At the end of the year, the total profit is ₹69,900. What is B's share of the profit?

(A) ₹20,500
(B) ₹21,200
(C) ₹28,200
(D) ₹27,300

Q13. The difference between two numbers is 1365. When the larger is divided by the smaller, the quotient is 6 and the remainder is 15. What is the smaller number?

(A) 240
(B) 360
(C) 270
(D) 295

Q14. Given below are three statements. Study the question and statements to identify which options are necessary to answer the question:

Question: What is the principal sum?

I. The interest amount after 30 months is half the interest amount after five years.

II. The sum amounts to ₹750 in five years at simple interest.

III. The rate of interest is 8% p.a.

(A) One and three only
(B) Two and three only
(C) One and two only
(D) One and three only or two and three only

Q15. A man purchased 40 fruits: apples and oranges for ₹ 17. Had he purchased as many oranges as apples and as many apples as oranges (i.e., swapped the quantities), he would have paid ₹ 15. Find the cost of one pair (one apple + one orange).

(A) 70 paise

(B) 60 paise

(C) 80 paise

(D) 1 rupee

Q16. If $n = 1 + X$ where X is the product of four consecutive positive integers, which of the following are true?

1. n is odd   2. n is prime   3. n is a perfect square.

(A) 1 and 3 only

(B) 1 and 2 only

(C) 1 only

(D) none of these

Q17. A rainy day occurs once in every 10 days. Half of the rainy days produce rainbows. What percent of all the days do **not** produce a rainbow?

(A) 95%

(B) 10%

(C) 50%

(D) 5%

Q18. Inside a triangular park, there is a flower bed, forming a similar triangle. Around the flower bed runs a uniform path so that the sides of the park are exactly double the corresponding sides of the flower bed. The ratio of areas of the path to the flower bed is:

(A) 1:1

(B) 1:2

(C) 1:3

(D) 3:1

Q19. Area of a square natural lake is 50 (square miles). A diver wishing to cross the lake diagonally will have to swim a distance of—

(A) 10 miles

(B) 12 miles

(C) 15 miles

(D) None of the above

Q20. A ladder is leaning against a wall which is 5 meters high. If the ladder's foot is 2 meters from the wall and the top touches the top edge of the wall, what is the length of the ladder?

(A) 5 m

(B) 5.25 m

(C) 7.75 m

(D) 4 m

Q21. Virtuoso means?

(A) Skilled performer.

(B) Amateur.

(C) Good person.

(D) Professional.

Q22. Hierarchy : ranked :: ?

(A) Equation : solved

(B) Critique : biased

(C) Chronology : sequential

(D) Infinity : fixed

Q23. She ordered the taxi driver, "Drive faster, _____?"

(A) Won't you

(B) Will you

(C) You must

(D) Can't you

Q24. Her written statements failed to be consistent _____ what she said earlier.

(A) On

(B) With

(C) In

(D) To

Q25. Choose the correct alternative that best explains the following idiom: "Writing on the wall."

(A) Graffiti

(B) Obvious truth

(C) Foreboding

(D) Prediction

Q26. Although many of the members were _____ about the pending deal, others were _____ about the benefits it would bring.

(A) Euphoric   confident

(B) Optimistic   dubious

(C) Angry   skeptical

(D) Confused   pleased

Q27. Select the letter pair that best expresses a relationship similar to that expressed by the original pair: **BOOK:RIVER**.

(A) Vein : artery

(B) Path : highway

(C) Yard : alley

(D) Pen : paper

Q28. 'But for cancer, I would not have given up his smoking.' In this sentence, 'But' is —

(A) An adverb

(B) A preposition

(C) An adjective

(D) A verb

Q29. For the following sentences, choose the correct option:

I. The team quickly took their positions on the field.

II. The team quickly took its position on the field.

(A) The first sentence is wrong.

(B) The second sentence is wrong.

(C) Both are correct.

(D) Both are wrong.

Q30. Choose the erroneous underlying segment or option D if no error: He carried his clothes (a) in a black heavy (b) steel trunk (c).

(A) A
(B) B
(C) C
(D) D

Q31. Choose the erroneous underlying segment or option D if no error: The corpse (a) had been dead (b) for five days (c).

(A) A
(B) B
(C) C
(D) D

Q32. Identify the odd one:

(A) Ashoka was one of the greatest kings.
(B) Ashoka was greater than many other kings.
(C) Ashoka was the greatest king.
(D) Very few kings were as great as Ashoka.

Q33. Identify the sentence that gives the same meaning as: He said, "Yes, I'll come and see you."

(A) He accepted that he will come and see me.
(B) He said that he will come and see me.
(C) He agreed that he will come and see me.
(D) He said that he would come and see me.

Option A: a   Option B: an   Option C: the   Option D: none

Q34. I had met him ＿＿＿ year ago.

(A) a

(B) an

(C) the

(D) none

Q35. He is ＿＿＿＿＿ honorable man.

(A) a

(B) an

(C) the

(D) none

Given series for Q36–Q37:

6 7 8 9 8 9 8 7 9 7 7 8 9 7 8 7 6 9 6 8 9 7 7 9 8 9 7 7 6 6 8 7

Q36. How many such digits are there in the given series each of which, when subtracted from the following digit, gives 1 as the result?

(A) Three

(B) Four

(C) None

(D) More than four

Q37. Which number is obtained when the **18th number from the right end** is added to the **19th number from the left end** of the series?

11

(A) 17

(B) 15

(C) 16

(D) 18

Directions (Q38–Q40). Each of the following consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question:

Q38. Eight persons are standing in two parallel rows, such that four persons stand in row-X facing north and four stand in row-Y facing south. In this way, person in one row faces the person of other row. Who faces C?

Statement I: A is second to the right of B, who is an immediate neighbor of D. E stands in row-Y and faces G, who is immediate left of H. C is on the immediate right of the one who faces A.

Statement II: F stands at the left end in row-Y. A is facing I, who is second to the left of E. A stands in row-X. C and F are the immediate neighbors of I.

A.If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C.if the data either in statement I alone or in statement II alone is sufficient to answer the question.

D.If the data in both statement I and II together are not sufficient to answer the question.

Q39. Point Z is in which direction from Point B?

Statement I: Point X is towards 15m south of Point Y. Point Z is towards 5m west of Point X, which is 13m south-east of Point B.

Statement II: Point B is 6m west of Point X. Point Y is 12m east of Point Z, which is 8m to the north of Point X.

A.If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C.if the data either in statement I alone or in statement II alone is sufficient to answer the question.

D.If the data in both statement I and II together are not sufficient to answer the question.

Q40. Find the code for "drive"?

Statement I: 'slow move road' is coded as 'ge hu ba' and 'traffic rules drive' is coded as 'to la se'.

Statement II: 'road rules follow' is coded as 'hu ue la' and 'slow traffic change' is coded as 'to ba nu'.

A.If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

C.if the data either in statement I alone or in statement II alone is sufficient to answer the question.

D.If the data in both statement I and II together are not sufficient to answer the question.

Directions (41-42):study the following information carefully and answer the below questions Twelve persons are sitting in a parallel row and opposite to each other. In row 1-L,M,N,O,P and Q face the south. In row 2-A,B,C,D,E and F face the north but not necessarily in the same order.

L sits opposite to the one who sits second to the left of F. only two persons sits between B and F. B sits to the left of F. the number of persons sists to the left of L Is the same as the number of persons sits right to the P. N sits second to the right of P. A sits immediate left of D, none of them ists at the end of the row. C sits opposite to the one who sits second to the left of Q. O and P are not immediate neighbours.

Q41. What is the position of **Q** with respect to **L**?

(a) immediate left

(b) immediate right

(c) second to the right

(d) second to the left

Q42. Who among the following pairs are sitting next to each other? I. OB   II. PE   III. LD IV. MF

(a) only II and III

(b) only I and II

(c) only III and IV

(d) only I and III

Q43. Statements: All myntra is Ajio.

Some ajio is flipkart

Only a few flipkart if amazon

No amazon is lenskart

Conclusions: I) Some flipkart is not lenskart

II) All ajio is lenskart is a possibility

(A) Only conclusion I is followed

(B) Both conclusions I and II followed

(C) Neither conclusion I and II is followed

(D) Only conclusion II follows

Q44. Statements: Some planets are earth

Only a few earth is sun

Only sun is galaxy

No sun is milkyway

Conclusions: I) Some earth is not milkyway

II) Some galaxy is planet is a possibility

(A) Only conclusion I is followed

(B) Both conclusions I and II followed

(C) Neither conclusion I and II is followed

(D) Only conclusion II follows

Q45. Statements: Some science is not maths

All maths is physics

Only a few physics is chemistry

Some chemistry is statistics

Conclusions: I) Some maths is chemistry

II) All statistics is science is a possibility

(A) Only conclusion I is followed

(B) Both conclusions I and II followed

(C) Neither conclusion I and II is followed

(D) Only conclusion II follows

Q46. Statements: No gold is bronze

Only a few bronzes are silver

All silvers are copper

Some coppers are diamond

Conclusions: I) All golds are diamond

II) Some diamonds are not gold

(A) Only conclusion I is followed

(B) Both conclusions I and II followed

(C) Neither conclusion I and II is followed

(D) Either conclusion I or II follows

Q47. Statements: All boats are stream

No stream is a cruise

Some cruises are captain

Some captains are not pilots

Conclusions: I) All pilots can be cruise

II) No boat is captain

(A) Only conclusion I is followed

(B) Both conclusions I and II followed

(C) Neither conclusion I and II is followed

(D) Only conclusion II follows

Direction(48-50)- study the following information carefully and answer the following below questions-

In a certain code language

'judo golf cycling rugby fencing'

Means '32 48 96 82 95'

'soccer rugby pool hockey karate'

Means '63 67 09 51 48'

'curling archery soccer fencing golf'

Means '19 32 82 25 63'

'fencing pool soccer cricket judo'

Means '95 51 63 28 32'.

Q48. Which of the following may be the code for "golf cricket" in the given code language?

(A) 67 32

(B) 82 48

(C) 82 28

(D) 96 51

Q49. Which of the following is the code for "judo cycling rugby" in the given language?

(A) 82 48 25
(B) 82 96 51
(C) 32 48 19
(D) 95 96 48

Q50. What does the code "09" stand for in the given language?

(A) pool
(B) either E or C
(C) karate
(D) soccer

Q51. A man has a job which requires him to work eight straight days and rest on the 9th day. If he started work on a Monday, the 12th time he rests will be on what day of the week?

(A) Sunday
(B) Wednesday
(C) Tuesday
(D) Friday

Q52. How many minutes before 12 noon is it when it is 27 minutes past 10:00 AM?

(A) 30
(B) 93
(C) 49
(D) 94

Q53. A, B, C, D, E, F and G are the members of a family consisting of four adults and three children, two of whom F and G are girls. A and D are brothers, and A is a doctor. E is an engineer, married to one of the brothers and has two children. B is married to D, and G is their child. Who is C?

(A) G's father

(B) F's father

(C) E's daughter

(D) A's son

INSTRUCTIONS- Read the following information carefully and then answer the questions given below.

Use the code: $P\#Q = P$ is the **father** of Q; $\quad P + Q = P$ is the **mother** of Q; $\quad P - Q = P$ is the **brother** of Q; $\quad P * Q = P$ is the **sister** of Q.

Q54. If $A + B \# C - D$, then A is D's _____.

(A) Sister

(B) Grandfather

(C) Grandmother

(D) Father

Q55. Which of the following shows that A is the **aunt** of E? (Use the same code: $\# =$ father, $+ =$ mother, $- =$ brother, $* =$ sister.)

(A) $A - B + C\#D * E$

(B) $A * B\#C * D - E$

(C) $A\#B * C + D - E$

(D) $A + B - C * D\#E$

INSTRUCTIONS- During their school Silver Jubilee Reunion, four alumini were discussing their starting annual salaries back in 1981. The salaries in question were rupees 40,50,60 and 70 thousand per year. Of course, the present Md of our private company earned the most. Arvind earned more than biswajit, and the doctor earned more than druv the engineer. Chinamay could not remember what he started on Biswajit, the lawyer did not start on 50,000 nor did dhruv.

Q56. What was the lawyer's starting salary?

(A) 40,000

(B) 50,000

(C) 60,000

(D) 70,000

Q57. Who received the highest starting salary?

(A) Arvind

(B) Biswajit

(C) Chinmay

(D) Dhruv

Q58. Find the missing number in the series: $24, 28, 30, 34, \ldots$

(A) 40

(B) 38

(C) 35

(D) 36

Q59. For the assertion A and the reason R given below, choose the correct alternative:

A — Copper is used to make electric wires.

R — Copper has very low electric resistance.

(A) A is true, R is false.

(B) A is false, R is true.

(C) Both A and R are true, and R is not the correct explanation of A.

(D) Both A and R are true, and R is the correct explanation of A.

Q60. Pointing at Ankit, Shruti said: "his father is the only son of my grandfather." How is Ankit related to Shruti?

(A) Sister

(B) Daughter

(C) Mother

(D) Brother