# SNAP 2023 Question Paper

| **Time Allowed :**2 Hours | **Maximum Marks :** | **Total questions :**60 |
|---|---|---|

## General Instructions

1. SNAP 2023 is a **Computer-Based Test (CBT)** of **60 minutes**.

2. The test comprises **60 multiple-choice questions** across three sections: General English (15), Analytical & Logical Reasoning (25), and Quantitative, Data Interpretation & Data Sufficiency (20).

3. **Marking Scheme:** +1 mark for each correct answer; **–0.25 mark** for each incorrect answer.

4. There is **no sectional time limit**. Manage your time wisely.

5. Carry a **colour printout** of your **SNAP 2022 Admit Card** with a recent passport-size colour photo pasted in the space provided.

6. Bring a valid, **original government photo ID** (e.g., Aadhaar, Passport, PAN, Driving Licence).

7. You may carry a **simple black/blue ball point pen** (for attendance/rough work as instructe(d).

8. **Reporting time** and test session are as mentioned on your admit card; late entry may not be permitted.

9. Only the Admit Card, valid Photo ID and a simple ball pen are allowed at your workstation. **Electronic gadgets** (mobile phones, smart watches, calculators, digital devices, etc.) are **strictly prohibited**.

**VERBAL ABILITY**

**Q1.** The given sentence is in active/passive voice. Change the voice of the sentence. Select the correct option from the sentence below.

She has preserved all the old letters of her dead lover.

(a) All the old letters of her dead lover have been preserved by her.

(b) All the old letters of her dead lover has been preserved by her.

(c) All the old letters have been preserved.

(d) The letters of her old lover have been preserved.

---

**Q2.** Identify the figure of speech in the following sentence: "The stars danced in the night sky."

(a) Simile

(b) Metaphor

(c) Personification

(d) Hyperbole

---

**Q3.** Identify the type of clause in the sentence: "Although she tried her best, she couldn't win the competition."

(a) Independent clause

(b) Dependent clause

(c) Subordinate clause

(d) Main clause

---

**Q4.** Which of the following sentences cannot be converted into passive voice?

(a) "The chef prepared a delicious meal for the guests."

(b) "The committee will announce the results tomorrow."

(c) "She has already completed the assignment."

(d) "They built a new bridge across the river."

---

**Q5.** Select the compound word from the following options:

(a) Elephant

(b) Classroom

(c) Jumping

(d) Sunflower

---

**Q6.** Identify the adverb and adjective in the following sentence: "The cat quickly climbed the tall tree."

(a) Adverb: quickly; Adjective: tall

(b) Adverb: cat; Adjective: tree

(c) Adverb: climbed; Adjective: the

(d) Adverb: the; Adjective: quickly

---

**Q7.** Which of the following prefix when added to "Available" makes it an antonym?

(a) An

(b) Un

(c) In

(d) Im

---

**Q8.** Identify the countable and uncountable nouns in the following sentence: "There are two books on the shelf, and I need some advice."

(a) Countable: books; Uncountable: advice

(b) Countable: two; Uncountable: shelf

(c) Countable: need; Uncountable: some

(d) Countable: I; Uncountable: on

---

**Q9.** Fill in the blank with the correct preposition:

She is allergic ......... cats.

(a) in

(b) with

(c) at

(d) to

---

**Q10.** Fill in the blank with the appropriate conjunction:

I will attend the meeting, ............ I have to finish this report first.

(a) so

(b) but

(c) because

(d) nor

---

**Q11.** Choose the correct option to complete the sentence:

The weather was so ............... that we decided to have a picnic in the park.

(a) pleasant

(b) angrily

(c) quickly

(d) slowly

---

**Q12.** Identify the error in the following sentence and choose the correct option:

"The team have been practicing every day for the upcoming tournament."

(a) team

(b) have

(c) every day

(d) No error

---

**Q13.** Arrange the words in the correct order to form a grammatically sound sentence:

(a) Yesterday

(b) to

(c) the

(d) library

e) I

f) went

(a) e, a, f, c, d, b

(b) a, b, c, d, e, f

(c) f, e, d, c, b, a

(d) c, a, e, f, d, b

---

**Q14.** Choose the correct conditional sentence from the options:

(a) If it rains, I am going to the beach.

(b) Unless she studies hard, she won't pass the exam.

(c) He will come if you would invite him.

(d) When I will see her, I will give her the message.

---

**Q15.** Fill in the blanks with the correct articles:

I saw ........... interesting movie last night. It was ............. thriller that kept me on ............ edge of .............. seat.

(a) an, a, an, the

(b) an, the, a, the

(c) an, an, the, a

(d) a, the, an, a

---

## LOGICAL REASONING

**Q16.** In a family, there are three generations — grandparents, parents, and grandchildren. Anil's mother's brother is married to Shreya's sister. Shreya's maternal grandmother is Anil's father's mother-in-law. What is the relationship between Anil and Shreya?

(a) Brother and sister

(b) Cousins

(c) Nephew and niece

(d) Uncle and aunt

---

**Q17.** Rahul said, "My father's sister's husband is the only son of Mary's grandfather." How is Mary related to Rahul?

(a) Sister

(b) Cousin

(c) Niece

(d) Aunt

---

**Q18.** In a family gathering, there are three pairs of siblings — Ram and Shyam, Sita and Geeta, and Anita and Priya. Ram's father is married to Geeta's mother. Sita's brother is married to Priya. What is the relationship between Ram and Priya?

(a) Cousins

(b) Siblings

(c) Uncle and niece

(d) Brother and sister-in-law

**Q19.** Statement: Over the past decade, the average temperature in City X has increased by 2 degrees Celsius.

Which of the following can be reasonably inferred from the statement?

(a) City X is experiencing a colder climate.

(b) The temperature in City X has remained constant.

(c) City X is facing a significant temperature rise.

(d) The temperature in City X has decreased.

**Q20.** Statement: The company's new marketing strategy led to a 20% increase in sales within the first quarter.

Which of the following assumptions is necessary for this conclusion?

(a) There were no external factors influencing the increase in sales.

(b) The company's competitors also experienced a similar increase in sales.

(c) The company had a similar marketing strategy in the previous quarter.

(d) The increase in sales was due to a decrease in product prices.

**Q21.** Argument: The government should invest in renewable energy sources because they are environmentally friendly and can lead to long-term sustainability.

Which of the following, if true, would most strengthen the argument?

(a) The government has successfully implemented renewable energy projects in the past.

(b) Many countries have achieved economic growth by investing in renewable energy.

(c) The current energy sources are depleting rapidly.

(d) Public opinion favors the use of renewable energy.

**Q22.** Situation: There is an increasing trend of teenage substance abuse in a community.

Course of Action:

(a) Implement stricter laws and penalties for the possession of substances by teenagers.

(b) Organize awareness programs in schools and communities to educate teenagers about the consequences of substance abuse.

(c) Conduct random drug tests for all teenagers in the community.

(d) Establish rehabilitation centers specifically for teenagers involved in substance abuse.

---

**Q23.** Situation: There is an increasing trend of teenage substance abuse in a community.

Course of Action:

(a) Implement stricter laws and penalties for the possession of substances by teenagers.

(b) Organize awareness programs in schools and communities to educate teenagers about the consequences of substance abuse.

(c) Conduct random drug tests for all teenagers in the community.

(d) Establish rehabilitation centers specifically for teenagers involved in substance abuse.

---

**Q24.** If January 1, 2023, is a Sunday, what day of the week will March 1, 2023, be?

(a) Monday
(b) Tuesday
(c) Wednesday
(d) Thursday

---

**Q25.** If May 5, 2022, is a Thursday, on what day of the week will May 5, 2023, fall?

(a) Friday
(b) Saturday
(c) Sunday
(d) Monday

**Q26.** At what time between 3:00 and 4:00 will the minute hand and hour hand of a clock be exactly opposite each other?

(a) 3:15 PM

(b) 3:20 PM

(c) 3:30 PM

(d) 3:45 PM

---

**Q27.** Five friends — Alex, Blake, Casey, Drew, and Erin — are sitting in a row facing north. Each likes a different color: Red, Blue, Green, Yellow, and Orange. They also have different favorite fruits: Apple, Banana, Cherry, Mango, and Pineapple. The following information is known:

1) Casey sits at one of the ends of the row.

2) Blake is sitting third to the left of Casey and does not like Red or Yellow.

3) The person who likes Mango is sitting at one of the ends.

4) Drew likes Blue and sits next to Erin, who likes Red.

5) The person who likes Green is sitting in the middle.

6) Alex is at one of the ends and does not like Yellow.

7) The person who likes Pineapple is sitting at the extreme right.

8) Mango is not liked by Alex or Erin.

Based on the given information, answer the following: **Which of the following statements is true?**

(a) Drew likes Apple and sits next to Blake.

(b) Casey likes Yellow and sits at the extreme right.

(c) Alex likes Red and sits next to Casey.

(d) Erin likes Orange and sits next to Drew.

---

**Q28.** Six friends — Alice, Bob, Carol, David, Eve, and Frank — are sitting in a row facing **south**. Each has a different favorite subject: History, Math, English, Science, Geography,

9

and Art. They also have different pets: Dog, Cat, Rabbit, Parrot, Turtle, and Goldfish. The information:

1) Alice, who likes **Science**, is at one of the ends.

2) Frank sits **third to the left** of Alice.

3) Bob, who likes **History**, is **not** at any end.

4) The **Geography**-lover sits **second to the right of Carol**.

5) Eve, who has a **Rabbit**, is at one of the ends.

6) **David** is sitting **between** Eve and Alice.

7) The **Math**-lover is sitting next to the person with a **Goldfish**.

8) Carol, who likes **English**, is **not** sitting next to Bob.

9) The person with a **Cat** sits **immediately right** of the **Math**-lover. (Remember: facing south, "right" is **our left**.)

. Based on the given information, answer the following:

 **Who likes Math, and what is their pet?**

(a) Carol, Rabbit

(b) Eve, Goldfish

(c) Frank, Turtle

(d) David, Parrot

---

**Q29.** Consider the following alphanumeric series with powers:

$A^1$, $C^3$, $E^5$, $G^7$, $\_\_$, $\_\_$, $I^9$, $\_\_$, $K^{11}$, $M^{13}$, $\_\_$

Based on the observed pattern, complete the series by selecting the correct options:

(a) $N^{15}$, $P^{17}$

(b) $H^9$, $J^{11}$

(c) $Q^{15}$, $S^{17}$

(d) $I^9$, $K^{11}$

---

**Q30.** Given the statements: 1. All cats are animals. 2. Some animals are playful.

Conclusions: I. Some playful creatures are cats. II. All cats are playful.

Select the correct conclusions: (a) Only Conclusion I follows.

(b) Only Conclusion II follows.

(c) Both Conclusions I and II follow.

(d) Neither Conclusion I nor II follows.

---

**Q31.** Given the statements: 1. All smartphones are devices. 2. Some devices are expensive.

Conclusions: I. Some expensive things are smartphones. II. All smartphones are expensive.

Select the correct conclusions: (a) Only Conclusion I follows.

(b) Only Conclusion II follows.

(c) Both Conclusions I and II follow.

(d) Neither Conclusion I nor II follows.

---

**Q32.** Consider the following information:

Set A: Animals that can fly

Set B: Birds

Set C: Animals that live in water

Using Venn diagrams, represent the relationships between these sets and answer the question.

Which region(s) in the Venn diagram represents animals that can **fly** and also **live in water**?

(a) Region A

(b) Region B

(c) Regions A and B

(d) Regions B and C

---

**Q33.** Arrange the following words in lexicographical (dictionary) order from highest to lowest:

1. Elephant

2. Banana

3. Apple

4. Cherry

(a) Elephant, Cherry, Banana, Apple

(b) Elephant, Cherry, Apple, Banana

(c) Cherry, Elephant, Banana, Apple

(d) Cherry, Elephant, Apple, Banana

---

**Q34.** Arrange the following words in lexicographical (dictionary) order from highest to lowest:

1. Sunflower

2. Rainbow

3. Mountain

4. Ocean

(a) Sunflower, Ocean, Rainbow, Mountain

(b) Ocean, Rainbow, Sunflower, Mountain

(c) Sunflower, Rainbow, Mountain, Ocean

(d) Rainbow, Sunflower, Ocean, Mountain

---

**Q35.** Identify the pattern in the number series and complete the sequence: 2, 5, 10, 17, __, __

(a) 26, 37

(b) 25, 36

(c) 28, 41

(d) 24, 33

---

**Q36.** Identify the pattern in the number series and complete the sequence: 3, 8, 15, 24, __, __

(a) 35, 46

(b) 32, 43

(c) 33, 44

(d) 28, 39

---

**Q37. Statement:** Increasing the minimum wage will improve the overall economy.

**Arguments:** I. Higher wages lead to increased consumer spending, which boosts economic activity.

II. Employers will struggle to afford increased wages, leading to job losses.

III. The government should focus on other economic policies rather than raising the minimum wage.

Which of the following is a strong argument?

(a) Only I

(b) Only II

(c) Only III

(d) Both I and III

---

**Q38. Statement:** Regular exercise is essential for maintaining good health.

**Arguments:** I. Many successful people do not prioritize regular exercise, yet they are healthy.

II. People with busy lifestyles cannot find time for regular exercise.

III. Scientific studies consistently show the health benefits of regular exercise.

Which of the following is a strong argument?

(a) Only I

(b) Only II

(c) Only III

(d) Both I and III

---

**Q39.** A person starts walking towards the east and covers a distance of $4$ km. Then, the person turns right and walks $3$ km. After that, the person turns left and covers $5$ km. Finally, the person turns left again and walks $2$ km. In which direction is the person now with respect to the starting point?

(a) North

(b) South

(c) East

(d) West

---

**Q40.** A car travels $10$ km towards the north, then turns left and covers $5$ km. After that, it turns right and travels $8$ km. Finally, the car turns left and covers $3$ km. In which direction is the car now with respect to the starting point?

(a) North

(b) South

(c) East

(d) West

---

 **QUANTS**

**Q41.** The mean of $50$ observations is $28$. Later it was found that the value $70$ had been recorded as 7 and the value $24$ had been recorded as $42$. Find the correct average.

(a) 27.1

(b) 26

(c) 24.5

(d) 32.2

---

**Q42.** If $\log(10x) = 3$, what is the value of $x$?

(a) 10

(b) $100$

(c) $1,000$

(d) $1$

---

**Q43.** A printing press is assigned the task of printing a certain number of books. The press has three machines: A, B, and C, each working at a different speed. If all three machines work together, they complete the task in 4 hours. If machine C is not used, the task is completed in 6 hours. If only machines A and B are used, the task is completed in 9 hours. How many hours would it take for machine C alone to complete the entire task?

(a) $12$ hours

(b) $15$ hours

(c) $18$ hours

(d) $24$ hours

---

**Q44.** A shopkeeper marked a watch 25% above its cost price, sold it with a 15% discount, and received $850. Find the cost price.

---

**Q45.** A trader marked up shirts by 40%, offered a 20% discount during a sale, and sold each for $234. Find the number of shirts he purchased.

---

**Q46.** In a group of $5$ students, how many ways can the positions of *president*, *vice-president*, and *treasurer* be filled?

(a) $60$

(b) $120$

(c) $30$

(d) $210$

**Q47.** In a division sum, the divisor $d = 457$, the quotient $q = 110$, and the remainder $r = 242$. Find the dividend.

(a) 50512

(b) 50270

(c) 50272

(d) 50702

**Q48.** Three bells ring once every 12 minutes, 20 minutes and 36 minutes respectively. If all of them ring together at 6:30 a.m., at what time will they next ring together on the same morning?

(a) 8:30

(b) 9:30

(c) 10:30

(d) 11:30

**Q49.** The mean of 50 observations was 36. It was found later that an observation 48 was wrongly taken as 23. The corrected new mean is?

**Q50.** In a collection of coins, the ratio of the number of 2-rupee coins to 5-rupee coins to 1-rupee coins is $3 : 4 : 5$. If the total value of these coins is |18.75, how much money is represented by the 5-rupee coins?

(a) |3.75

(b) |5.00

(c) |6.25

(d) |7.50

**Q51.** Rubina could get equal number of |55, |85 and |105 tickets for a movie. She spends |2940 for all the tickets. How many of each did she buy?

(a) 10

(b) 12

(c) 15

(d) 20

---

**Q52.** Six–elevenths of a first number equals twenty-two percent of a second number. The second number equals one-fourth of a third number. If the third number is $2400$, then what is $45\%$ of the first number?

(a) 111.7

(b) 117.6

(c) 123.4

(d) None of these

---

**Q53.** From a bank, Ram and Shyam together took loans under simple interest and lent the total to Mohan at $2\%$ *higher* simple interest. After $4$ years, Ram's total money earned (after paying the bank interest) was |400 more than Shyam's. By how much was the amount borrowed by Ram more than that borrowed by Shyam?

A. |10000

B. |20000

C. |5000

D. |25000

---

**Q54.** |160000 is divided into two equal parts. One part is invested in a scheme giving $12\%$ interest compounded annually for $2$ years. The other part is invested in a scheme offering

17

simple interest of $13\%$ for $2$ years. Find the difference between the interest earned in the two schemes.

A. |512

B. |426

C. |448

D. |568

---

**Q55.** A principal of $\$25000$ is invested at $7\%$ p.a., compounded semi-annually. Find the total amount after $1.5$ years.

(a) $\$26722.50$

(b) $\$26406.25$

(c) $\$26561.25$

(d) $\$26890.00$

---

**Q56.** What is the sum of an infinite geometric series with first term equal to $1$ and common ratio $\frac{1}{2}$?

---

**Q57.** If $3^{(x-y)} = 27$ and $3^{(x+y)} = 243$, find the value of $x$.

(a) $4$

(b) $6$

(c) $2$

(d) $0$

---

**Q58.** Write $8^{\,2x+3}$ in the form $2^{\,y}$ and express the relation between $x$ and $y$.

---

**Q59.** If $a$ and $b$ are whole numbers such that $ab = 121$, find the value of $(a-1)b + 1$.

---

**Q60.** The base area of a cylinder is $154$ cm$^2$ and the height is $5$ cm. Find the volume of the cylinder.

---