SMETA MATHEMATICS OLYMPIAD SAMPLE PAPER GRADE 5-6



INSTRUCTIONS FOR THE PAPER

- 1.Total Questions: 25
- 2. Marks Distribution: Each question carries 2 marks.
- 3.Total Marks: 50
- 4. Time Allowed: 60 minutes
- 5. Marking Scheme:
- 6. Correct Answer: +2 marks
- 7. Wrong Answer: -1 mark (negative marking applies)
- 8. Unattempted Questions: No marks deducted
- 9. General Guidelines:
- 10.All questions are MCQs-based, with four options provided for each.
- 11.Read each question carefully and select the correct option (a, b, c, or d).
- 12.Do not mark two options for a single question; only one answer will be considered.
- 13. Ensure all answers are marked clearly.
- 14. Submission Instructions:
- 15. Attempt all questions within the given time.
- 16. Recheck your answers before submission to ensure accuracy.
- 17.Note: Negative marking is applied for incorrect answers, so choose wisely!



CHOOSE THE CORRECT ANSWER

1. A bakery sold 215 cupcakes on Monday, 325 on Tuesday, and 275 on Wednesday. On Thursday, they sold 20% more cupcakes than on Wednesday. How many cupcakes did the bakery sell in total during these four days?

- a) 1,015
- b) 1,045
- c) 1,065
- d) 1,145

2. A school has 432 students. If there are 18 classrooms, how many students are there per classroom? If two new classrooms are added, but the total number of students remains the same, what will be the new average number of students per classroom?

- a) 20
- b) 22
- c) 24
- d) 26

3. Zara spent 35% of her money on books and 25% on stationery. After these expenses, she had \$650 left. How much money did she have initially?

- a) \$1,000
- b) \$1,200
- c) \$1,625
- d) \$2,000

4. A factory produces 120 items in an hour. If the factory operates for 8 hours a day and is closed on Sundays, how many items will it produce in a week?

- a) 4,800
- b) 5,760
- c) 6,720
- d) 7,200

5. A farmer harvested 360 apples from his orchard. He packed them equally into baskets, each containing 18 apples. If he decided to sell the apples for \$50 per basket, how much money would he earn in total?

- a) \$1,000
- b) \$1,200
- c) \$1,500
- d) \$2,000

6. A bakery sells cupcakes in boxes of 6. If they have 252 cupcakes, how many boxes can they fill?

- a) 32
- b) 42
- c) 52
- d) 62

7. A submarine is 150 meters below sea level. It rises by 80 meters, then descends by 60 meters. Where is it now relative to sea level?

- a) -130 m
- b) -110 m
- c) -90 m
- d) -100 m

8. On Monday, the temperature was -3°C in the morning and increased by 7°C by noon. By evening, it dropped by 5°C. What was the temperature in the evening?

- a) -1°C
- b) -5°C
- c) -2°C
- d) 1°C

9. What number replaces the question mark in the series: 2, 6, 12, 20,

- **___, 42?**
- a) 28
- b) 30
- c) 32
- d) 36

10. A packet of biscuits costs \$1.35, and a bottle of juice costs \$2.40. If Sarah buys 3 packets of biscuits and 2 bottles of juice, how much money does she spend in total?

- a) \$7.95
- b) \$8.10
- c) \$8.85
- d) \$9.00

11. Ali bought a notebook for \$80 and a pen for \$35. He then purchased 4 pencils, each costing \$15. If he gave the shopkeeper \$500, how much change did he get?

- a) \$275
- b) \$280
- c) \$290
- d) \$325

12. If Mary's age is 3 years more than twice her brother's age and the total of their ages is 27, how old is Mary?

- a) 15
- b) 16
- c) 17
- d) 19

13. A triangle has angles of 40°, 90°, and 50°. What type of triangle is it?

- a) Acute
- b) Right-angled
- c) Obtuse
- d) Scalene

14. A basket contains apples, bananas, and oranges. If there are 12 apples, 8 bananas, and 4 oranges, what fraction of the fruits are bananas?

- a) 1/3
- b) 1/2
- c) 2/5
- d) 3/8

15. A triangular field has sides of 30 m, 40 m, and 50 m. What is its perimeter?

- a) 100 m
- b) 110 m
- c) 120 m
- d) 130 m

16. A sequence of shapes is given: \bigcirc , \bigcirc , \blacktriangle , \bigcirc , \bigcirc , \bigstar , $_$, $_$, $_$. What comes next?

- a) (), () b) ▲, ▲
- c) ⊖, ▲
- d) ⊖, ⊖, ▲

17. A square garden has a side length of 20 m. A path of 2 m width runs around the outside. What is the area of the path?

- a) 88 m²
- b) 92 m²
- c) 96 m²
- d) 176 m²

18. A bar graph shows the sales of books over 5 months:



What is the average number of books sold per month?

- a) 70
- b) 72
- c) 75
- d) 78

19. A shirt originally priced at \$1,200 is on sale with a 25% discount. What is the sale price of the shirt?

- a) \$900
- b) \$850
- c) \$800
- d) \$750

20. A fruit seller buys 50 apples at \$10 each and sells them at \$12 each. What is his profit percentage?

- a) 15%
- b) 20%
- c) 25%
- d) 30%

21. A pie is divided into 8 equal slices. Sarah ate 3 slices, and her brother ate 2 slices. What fraction of the pie is left?

- a) 5/8
- b) 3/8
- c) 2/8
- d) 1/8

22. A book contains 600 pages. If a student reads 25 pages per day, how many days will it take to complete the book?

- a) 20 days
- b) 22 days
- c) 24 days
- d) 25 days

23. A series goes: 2, 4, 8, 16, ___. What comes next?

- a) 20
- b) 24
- c) 32
- d) 36

24. A number is increased by 50%, then decreased by 40%. If the final value is 180, what was the original number?

- a) 200
- b) 210
- c) 220
- d) 240

25. What is the angle between the hands of a clock at 3:15?

- a) 7.5°
- b) 90°
- c) 92.5°
- d) 95°

ANSWER KEY

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1.(D)1,145
 2.(B) 22
 3.(C) $1,625
 4.(B) 5,760
 5.(A) $1,000
 6.(B) 42
 7.(A) -130 M
 8.(A) -1°C
 9.(B) 30
10.(C) $8.85
11.(D) $325
12.(D) 19
13.(B) RIGHT-ANGLED
14.(A) 1/3
15.(C) 120 M
16.(A) (), ()
17.(D) 176 M<sup>2</sup>
18.(A) 70
19.(A) $900
20.(B) 20%
21.(B) 3/8
22.(C) 24 DAYS
23.(C) 32
24.(A) 200
25.(A) 7.5°
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