STD-7

Maximum Marks : 100
Time : 90 Minutes

INSTRUCTIONS

1. This test of 60 minutes duration, contains 45 questions and is meant to be taken in one sitting. (Std. III to VIII)

2. Marks are **NOT** deducted for wrong answers.

3. Do any rough work on the test itself (wherever space is available). Do not use any additional paper for rough work.

4. You are **NOT** allowed to use a calculator.

5. Read the instructions given in the answer sheet before answering the questions.

   (i) Fill in your Hall Ticket No. in the Boxes provided.

   Ex : | 7 | 5 | 2 | 6 | 4 | 1 | 8 |

6. Each question is provided with four or five answers. The answer which you feel is the best, identify by darkening the circle with pen.

   Example :

   Ⓐ ⬤ Ⓒ Ⓓ

7. Return the OMR answer sheet to the invigilator at the end of the Examination.

8. From Class three onwards, the test booklet can be retained by the student.

NTA Council

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Choose the right answer and darken in the OMR answer sheet

MATHEMATICS

1. **First third and the fourth terms of a proportion are 6, 12 and 36. Then the second term is**

   a) 12　　　　　　　　b) 18

   c) 16　　　　　　　　d) 108

   e) None of these

2. **A truck requires 108 litres of diesel for covering a distance of 594 km, if truck runs from Bombay to Bhopal which is a distance of 1650 km and come back to Bombay, then how much diesel will be required?**

   a) 300 litres　　　　　b) 400 litres

   c) 500 litres　　　　　d) 600 litres

   e) None of these

3. **Ratio of 350 g and 3 kg is**

   a) 116 : 1　　　　　　b) 60 : 7

   c) 7 : 60　　　　　　　d) None of these

4. **The ratio of the heights of A and B is 4 : 3. If B is 1.2 m tall, then the height of A is**

   a) 0.9 m　　　　　　　b) 1.8 m

c) 1.6 m   d) None of these

5. **A man is thrice as old his son. After 12 years, he will be twice as old as his son. Their present ages are**

a) son's age = 10 years, father's age = 30 years

b) son's age = 8 years, father's age = 24 years

c) son's age = 12 years, father's age = 36 years

d) son's age = 14 years, father's age = 42 years

e) None of these

6. **Ratio of number of boys to number of girls in a tutorial is 2:3 if there are 180 girls, then the number of boys is**

a) 36   b) 60

c) 120   d) 100

e) None of these

7. **The ratio of zinc and copper in an alloy is 7:9, if the weights of copper in the alloy is 11:7 kg, then the weight of zinc in alloy is**

a) 8.1 kg   b) 10.1 kg

c) 9.1 kg   d) 11.1 kg

e) None of these

8. **The area of a square plot is 81 square metres. What is the length of one side of the plot?**

a) 81 metres   b) 9 metres

c) 12 metres   d) 7 metres

e) None of these

9. **The number 24 has a total of 8 factors : 1, 2, 3, 4, 6, 8, 12 and 24. What is total number of factors that the number 110 has:**

a) 6   b) 4

c) 12   d) 8

e) None of these

10. **Which one of the following is the prime factorization of 48?**

a) 3.2^3 b) 2.3^4

c) 3.2^4 d) 2.4^3

e) None of these

11. **Which expression is equal to $3(2x+2-x-5)$?**

a) 9x-3   b) 3x-3

c) 3x-9   d) 3x+9

e) None of these

12. **Which of the following measurements of sides can form a triangle?**

(A) 5cm,7 cm, 2 cm   (B) 4 cm, 5 cm, 11 cm

(C) 9 cm, 10 cm, 12 cm   (D) 7cm, 4 em, 15 cm

(E) None of these.

13. **The value of $(36)^{\frac{3}{2}}$ is :**

(A) 36   (B) 216   (C) 261

(D) 54   (E) None of these

14. The average of three numbers is 23. If two of the numbers are 19 and 27, find the third number.

(A) 19   (B) 23   (C) 27

(D) 29   (E) None of these.

15. Which of the following is a perfect square?

(A) 4.9   (B) 0.049   (C) 0.081

(D) 0.09   (E) None of these.

16. A rectangular park has a perimeter of 90 m and width of 12 m. What is the length of the park?

(A) 24 m   (B) 66 m

(C) 33 m   (D) 44 m   (E) None of these

17. $(x + y)^2$ equals :

(A) $(x + y)(x - y)$ (B) $x^2 + y^2 + 2xy$

(C) $x^2 + y^2 - 2xy$ (D) $x^2 - y^2 + 2xy$

(E) None of these.

18. When a number x is added to $\dfrac{6}{x}$, the result is 5. Find the value of x ?

(A) 1 or 2   (B) 3 or 4   (C) 2 or 3

(D) 5 or 6   (E) None of these

19. Which list orders the fractions from the smallest to the largest?

a) $\dfrac{1}{8}, \dfrac{2}{8}, \dfrac{5}{8}$ b) $\dfrac{1}{2}, \dfrac{4}{2}, \dfrac{3}{2}$

c) $\dfrac{3}{4}, \dfrac{1}{4}, \dfrac{2}{4}$ d) $\dfrac{4}{16}, \dfrac{2}{16}, \dfrac{1}{16}$

e) None of these

20. The simplest form of $\dfrac{16}{72}$

a) $\dfrac{2}{9}$ b) $\dfrac{3}{9}$

c) $\dfrac{1}{9}$ d) $\dfrac{4}{9}$

e) None of these

21. Which of the following fractions is the largest
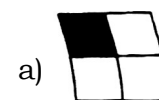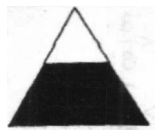
a) $\dfrac{29}{30}$ b) $\dfrac{29}{23}$

c) $\dfrac{29}{27}$ d) $\dfrac{29}{25}$

e) None of these

22. In which of the following does the shaded part represent one third of its whole?

a)   b)

c)

d)
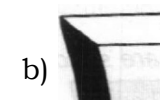
e) None of these

23. The value of $3\dfrac{1}{12} - \left[1\dfrac{3}{4} + \left\{ 2\dfrac{1}{2} - \left(1\dfrac{1}{2} - \dfrac{1}{3} \right) \right\} \right]$ is

a) $\dfrac{1}{2}$

b) 2

c) 1

d) 0

e) None of these

24. If '+' means 'x' '—' means '+', 'x' means ÷ and ÷ means '—' then answer the following based on this information $6 + 7 \times 3 - 8 \div 20 = ?$

a) —3

b) 2

c) 1

d) 7

e) None of these

25. Choose the figure which is different from the rest

(1)　(2)　(3)　(4)

a) 1

b) 2

c) 3

d) 4

e) None of these

SCIENCE

26. In order to put out a fire you should

a) Increase the temperature above the kinding temperature

b) Provide fuel to the fire

c) Minimise the supply of air

d) Do any of the above process

e) None of these

27. The first aid which should be given to a person suffering from snake bite is to

a) Put ice cubes or cold water immediately on that area

b) Clean the affected area with cotton wool soaked is an antiseptic

c) Tie a cloth bandage tightly above the wound area

d) Wash the wound with potassium permanganate

e) None of these

28. A piece of cardboard or sheet of newspaper used to hold a broken bone in its right position is called

a) Sling

b) Splint

c) Bandage

d) None of these

29. Inclined roofs are made in

a) Hot regions

b) Cold regions

c) Hilly areas   d) Deserts

e) None of these

30. The hormone which does not cause growth in plants is:

a) auxin   b) gibberellin

c) ethylene   d) cytokinin   e) none of these

31. If a house is on fire the number you will dial is

a) 100   b) 101

c) 102   d) 103

e) None of these

32. When bitten by an ant, the sting causes irritation due to the presence of :

a) formic acid in the sting.   b) poisonous chemicals

c) a base in the sting.   d) toxic chemicals

e) none of these

33. What is the BEST reason for including fruits and leafy vegetables in a healthy diet?

a) They have a high water content

b) They are the best source of protein

c) They are rich in minerals and vitamins

d) They are the best source of carbohydrates

e) none of these

34. When a glass jar places over a lighted candle the flame goes out

← Glass jar
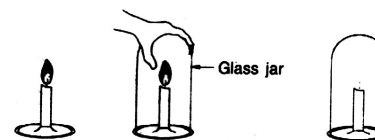
Why does this happen?

a) Fire does not get enough oxygen

b) The jar become too hot

c) The glass makes it cold

d) The jar was put on too fast and the wind makes it go out

e) None of these

35. What is the physical state of water at room temperature ?

(A) Gas   (B) Vapour   (C) Solid

(D) Liquid   (E) None of these.

36. Which of the following statements is correct?

(A) An ore can't be a mineral.

(B) All minerals are ores.

(C) A mineral can't be an ore.

(D) All ores are minerals. (E) None of these

37. Which one among these has the smallest size particles?

(A) Sand   (B) Clay   (C) Gravel

(D) Silt   (E) None ofthese

38. Sandy soil is not good for plant growth because it :

(A) cannot hold water.   (B) Poor aeration

(C) Large particle size   (D) Poor drainage

(E) none of these.

39. Phosphorus is kept in:

(A) alcohol   (B) water   (C) kerosene

(D) petrol   (E) none of these

40. Greenhouse are used for :

(A) growing plants in cold weather.

(B) warm bodies inside.

(C) both (A) and (B).

(D) cooling.   (E) none of these.

41. The purest source of water is:

(A) rain water   (B) ground water

(C) sea water   (D) river water

(E) none of these.

42. Transmission of heat in solid is done by:

(A) radiation   (B) convection (C) conduction

(D) all of these   (E) none of these

43. When cakes are baked, the gas which is evolved making it soft and spongy is :

(A) H_2O (B) O_2 (C) CO_2

(D) NH_3 (E) None of these.

44. The normal blood pressure of a healthy person is:

(A) 140/80   (B) 120/90   (C) 140/90

(D) 120/80   (E) None of these.

45. Which one among the following is not a unit of time?

(A) Micro second   (B) Nano second

(C) Second   (D) Light year   (E) None of these.

46. Write a paragraph on any one of the following

My dream

OR

Importance of sports in one's life

(Write it in your OMR Answer Sheet)