International Talent Search Examination - 2022-23

अंतर्राष्ट्रीय प्रतिभा खोज परीक्षा – २०२२-२३

Organized by

**Savitri Skill Development Institute, Training Partner with
Ministry of Micro Small & Medium Enterprises (MSME), Govt. of India.**

Ministry of Micro, Small and Medium Enterprises,
Government of India

TEST BOOKLET

Name : ....

Class : .... School: ....

Father's Name : .... Father's Occupation : ....

Mother's Name : .... Mother's Occupation : ....

Categories : Gen ☐   OBC ☐   SC ☐   ST ☐

Correspondence Address :...

Date of Birth : ☐☐ ☐☐ ☐☐☐☐

Father's Contact No : ☐☐☐☐☐☐☐☐☐☐

Home/Mother's Contact No. : ☐☐☐☐☐☐☐☐☐☐

WhatsApp No. : ☐☐☐☐☐☐☐☐☐☐

Basic Instructions:

i.   Ensure that your personal data has been entered correctly.
ii.   Immediately after opening the test booklet verify that all the pages are printed properly and are in order. If there is a problem with your test booklet, immediately inform the invigilator. You will provided with the replacement.
iii. All questions in are compulsory.
iv.   For every correct answer you will be awarded with 4 marks and for all incorrect answer 1 mark will be deducted.
v.   Directions for answering the questions are given. Read those directions carefully and answer the question by circling the bubble in the OMR Sheet Provided to you. Test booklet/OMR Sheet will be submitted at the end of the examination.
vi.   Follow the instructions given by the invigilator. Students found violating the instructions will be disqualified.
vii. Rough work can be done separately or on the Question paper.
viii. Please fill the bubbles in OMR sheet with Blue or Black pen only.
ix.   Do not tear the question paper or OMR sheet else you will be disqualified in the examination.

CLASS-7 MATHEMATICS

1. Which of the following is different from the others?

   (a) $20 + (-25)$ (b) $(-37) - (-32)$ (c) $(-5) \times (-1)$ (d) $(45) \div (-9)$

2. Which of the following shows the maximum rise in temperature?

   (a) $23°$ to $32°$ (b) $-10°$ to $+1°$ (c) $-18°$ to $-11°$ (d) $-5°$ to $5°$

3. If a and b are two integers, then which of the following may not be an integer?

   (a) $a + b$ (b) $a - b$ (c) $a \times b$ (d) $a \div b$

4. For a non-zero integer a which of the following is not defined?

   (a) $a \div 0$ (b) $0 \div a$ (c) $a \div 1$ (d) $1 \div a$

5. On dividing 7 by $\frac{2}{5}$, the result is

   (a) $\frac{14}{2}$ (b) $\frac{35}{4}$ (c) $\frac{14}{5}$ (d) $\frac{35}{2}$

6. $2\frac{2}{3} \div 5$ is equal to

   (a) $\frac{8}{15}$ (b) $\frac{40}{3}$ (c) $\frac{40}{3}$ (d) $\frac{8}{3}$

7. $\frac{4}{5}$ of 5 kg apples were used on Monday. The next day $\frac{1}{3}$ of what was left was used. Weight (in kg) of apples left now is

   (a) $\frac{2}{7}$ (b) $\frac{1}{14}$ (c) $\frac{2}{3}$ (d) $\frac{4}{21}$

8. The picture interprets

   (a) $\frac{1}{4} \div 3$ (b) $3 \times \frac{1}{4}$ (c) $\frac{3}{4} \times 3$ (d) $3 \div \frac{1}{4}$

9. Out of 5 brands of chocolates in a shop, a boy has to purchase the brand which is most liked by children. What measure of central tendency would be most appropriate if the data is provided to him?

   (a) Mean   (b) Mode   (c) Median   (d) Any of the three

10. There are 2 aces in each of the given set of cards placed face down. From which set are you certain to pick the two aces in the first go?

    (a)   (b)   (c)   (d)

11. The mean of three numbers is 40. All the three numbers are different natural numbers. If lowest is 19, what could be highest possible number of remaining two numbers?

(a) 81   (b) 40   (c) 100   (d) 71

12. Khilona earned scores of 97, 73 and 88 respectively in her first three examinations. If she scored 80 in the fourth examination, then her average score will be

(a) increased by 1   (b) increased by 1.5   (c) decreased by 1   (d) decreased by 1.5

13. Which measure of central tendency best represents the data of the most popular politician after a debate?

(a) Mean   (b) Median   (c) Mode   (d) Any of the above

14. Which of the following equations cannot be formed using the equation x=7?

(a) $2x + 1 = 15$ (b) $7x - 1 = 50$ (c) $x - 3 = 4$ (d) $\frac{X}{7} - 1 = 0$

15. If $\frac{X}{2} = 3$, then the value of $3x + 2$ is

(a) 20   (b) 11   (c) $\frac{13}{2}$ (d) 8

16. Which of the following numbers satisfy the equation $-6 + x = -12$?

(a) 2   (b) 6   (c) - 6   (d) - 2

17. Shifting one term from one side of an equation to another side with a change of sign is known as

(a) commutativity   (b) transposition   (c) distributivity   (d) associativity

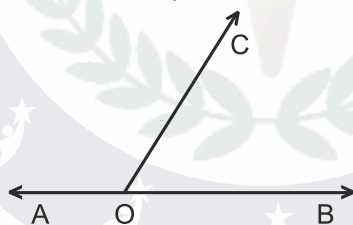18. In Fig. 5.21, ∠AOC and ∠BOC form a pair of

Fig. 5.21

(a) vertically opposite angles   (b) complementary angles

(c) alternate interior angles   (d) supplementary angles
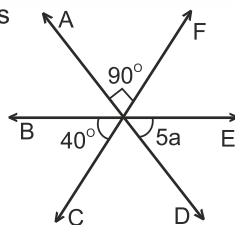
19. In Fig. 5.22, the value of a is

Fig. 5.22

(a) 20°   (b) 15°   (c) 5°   (d) 10°

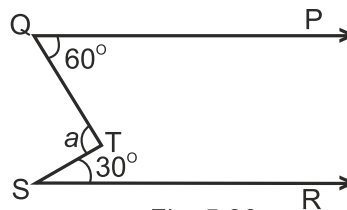20. In Fig. 5.23, if QP II SR, the value of a is

Fig. 5.23

   (a) 40°   (b) 30°   (c) 90°   (d) 80°

21. In which of the following figures, a and b are forming a pair of adjacent angles?

22. Two triangles are congruent, if two angles and the side included between them in one of the triangles are equal to the two angles and the side included between them of the other triangle. This is known as the

    (a) RHS congruence criterion   (b) ASA congruence criterion
    (c) SAS congruence criterion   (d) AAA congruence criterion

23. By which congruency criterion, the two triangles in Fig. 6.19 are congruent?
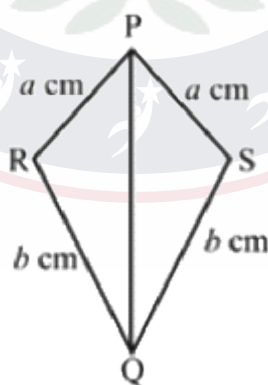
    (a) RHS   (b) ASA   (c) SSS   (d) SAS

24. By which of the following criterion two triangles cannot be proved congruent?

    (a) AAA   (b) SSS   (c) SAS   (d) ASA

25. In △ABC, ∠A = 50°, ∠B = 70° and bisector of ∠C meets AB in D (Fig. 6.17). Measure of ∠ADC is.
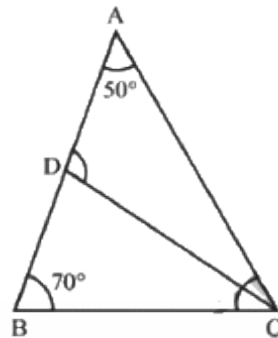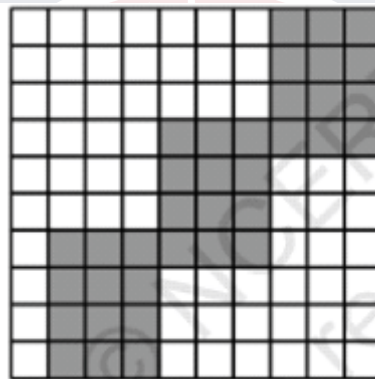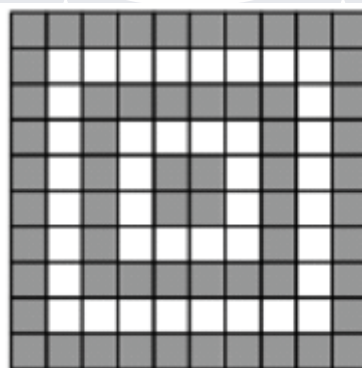

Fig. 6.17

    (a) 50°   (b) 100°   (c) 30°   (d) 70°

26. The per cent that represents the unshaded region in the figure.


(a) 75%   (b) 50%   (c) 40%   (d) 60%

27. The per cent that represents the shaded region in the figure is


(a) 36%   (b) 64%   (c) 27%   (d) 48%

28. A farmer bought a buffalo for ₹ 44000 and a cow for ₹ 18000. He sold the buffalo at a loss of 5% but made a profit of 10% on the cow. The net result of the transaction is

(a) loss of ₹ 200   (b) profit of ₹ 400   (c) loss of ₹ 400   (d) profit of ₹ 200

29. If Mohan's income is 25% more than Raman's income, then Raman's income is less than Mohan's income by

(a) 25%   (b) 80%   (c) 20%   (d) 75%

30. The interest on ₹ 30000 for 3 years at the rate of 15% per annum is

(a) ₹ 4500   (b) ₹ 9000   (c) ₹ 18000   (d) ₹ 13500

31. How many rational numbers are there between two rational numbers?

(a) 1   (b) 0   (c) unlimited   (d) 100

32. In the standard form of a rational number, the denominator is always a

(a) 0   (b) negative integer   (c) positive integer   (d) 1

33. To reduce a rational number to its standard form, we divide its numerator and denominator by their.

(a) LCM   (b) HCF   (c) product   (d) multiple

34. Which is greater number in the following:

(a) $\dfrac{-1}{2}$ (b) 0   (c) $\dfrac{1}{2}$ (d) - 2

35. What is the radius of the largest circle that can be cut out of the rectangle measuring 10 cm in length and 8 cm in breadth?

(a) 4 cm   (b) 5 cm   (c) 8 cm   (d) 10 cm

36. The perimeter of the figure ABCDEFGHIJ is
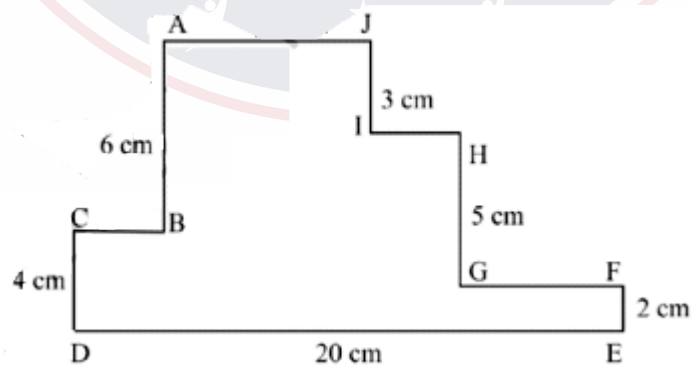
(a) 60 cm   (b) 30 cm   (c) 40 cm   (d) 50 cm

37. A rectangular piece of dimensions 3 cm x 2 cm was cut from a rectangular sheet of paper of dimensions 6 cm x 5 cm (Fig. 9.14).
Area of remaining sheet of paper is
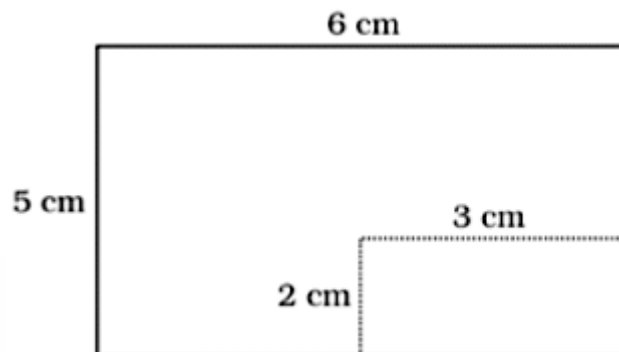
(a) $30cm^2$　　　　　(b) $36cm^2$　　　　　(c) $24cm^2$　　　　　(d) $22\ cm^2$

38. Circumference of a circle is always

    (a) more than three times of its diameter

    (b) three times of its diameter

    (c) less than three times of its diameter

    (d) three times of its radius

39. Which of the following is a pair of like terms?

    (a) $-7xy^2z, -7x^2yz$　　　　　(b) $-10xyz^2, 3xyz^2$

    (c) $3xyz, 3x^2y^2z^2$　　　　　(d) $4xyz^2, 4x^2yz$

40. Identify the binomial out of the following:

    (a) $3xy^2 + 5y - x^2y$　　　　　(b) $x^2y - 5y - x^2y$

    (c) $xy + yz + zx$　　　　　(d) $3xy^2 + 5y - xy^2$

41. The sum of $x^4 - xy + Zy^2$ and $-x^4 + xy + 2y^2$ is

    (a) Monomial and polynomial in y　　　　　(b) Binomial and Polynomial

    (c) Trinomial and polynomial　　　　　(d) Monomial and polynomial in x

42. For non-zero numbers a and b, $\left(\dfrac{a}{b}\right)^m \div \left(\dfrac{a}{b}\right)^n$, where m> n, is equal to

    (a) $\left(\dfrac{a}{b}\right)^{mn}$　　　　　(b) $\left(\dfrac{a}{b}\right)^{m+n}$　　　　　(c) $\left(\dfrac{a}{b}\right)^{m-n}$　　　　　(d) $\left(\left(\dfrac{a}{b}\right)^m\right)^n$

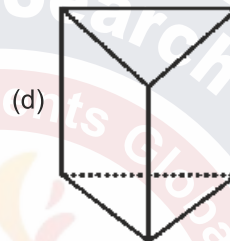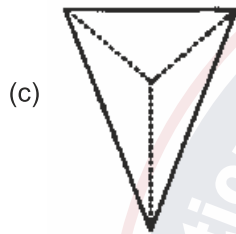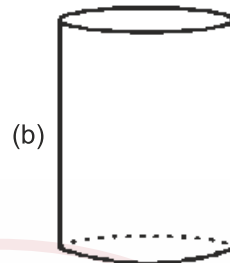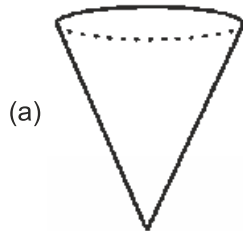43. Which of the following is not true?

(a) $3^2 > 2^3$ (b) $4^3 = 2^6$ (c) $3^3 = 9$ (d) $2^5 > 5^2$

44. Which of the following 3-dimensional figures has the top, side and front as triangles?

45. If we rotate a right-angled triangle of height 5 cm and base 3 cm about its base, we get:

(a) cone of height 3 cm and base 3 cm   (b) cone of height 5 cm and base; 5 cm

(c) cone of height 5 cm and base 3 cm   (d) cone of height 3 cm and base 5 cm