No.of printed pages : 4

ATOMIC ENERGY CENTRAL SCHOOL
MODEL PAPER ANNUAL EXAMINATION

CLASS VII MARKS : 70
MATHEMATICS TIME:2.15 HRS

VERY SHORT ANSWER QUESTIONS
(EACH QUESTION CARRIES 1 MARK)

I. CHOOSE THE CORRECT ANSWER

i). The ratio of 5 km to 400 m is

a) 5 : 400 b) 1 : 20 c) 25 : 2 d) 2 : 25

ii). The cost of 8 pencils is ₹ 10. Find the cost of 20 pencils.
(a) ₹ 20 (b) ₹ 25 (c) ₹ 24 (d) ₹ 30

iii). 0.1 as per cent is
(a) 1% (b) 10% (c) 100% (d) 0.1%

iv). What is 5% of 200?
(a) 2 (b) 5 (c) 10 (d) 100

v) The standard form of $\frac{35}{-15}$
(a) $\frac{7}{3}$ (b) $\frac{7}{-3}$ (c) $\frac{-7}{3}$ (d) $\frac{-3}{1}$

vi) The circumference of a circle of diameter d is
(a) πd (b) 2πd (c) 12 πd (d) πd^2

vii) The area of a square plot is 1600 m^2. The side of the plot is
(a) 40 m (b) 80 m (c) 120 m (d) 160 m

viii) Which of the following is not the value of π ?
(a) $\frac{22}{7}$ (b) $\frac{7}{22}$ (c) $\frac{355}{113}$ (d) 3.14.

ix) The radius of a circle is 7 cm. Its circumference is
(a) 22 cm (b) 44 cm (c) 11 cm (d) 66cm

x) How many terms are there in the expression 2y + 5?
(a) 1 (b) 2 (c) 3 (d) 4

xi) What is the coefficient of x in the expression 4x + 3y?
(a) 1 (b) 2 (c) 3 (d) 4

xii) The exponential form of 100000 is
(a) 10^3 (b) 10^4 (c) 10^5 (d) none of these

xiii) The value of $(-2)^3$ is
(a) 8 (b) -8 (c) 16 (d) -16

xiv) $(-1)^{\text{even number}}$ =

(a) -1 (b) 1 (c) 0 (d) none of these

xiv) If $2^3 \times 2^4 = 2^?$, then ? =

(a) 3 (b) 4 (c) 1 (d) 7

xvi) $3^0 \times 4^0 \times 5^0$ =

(a) 1 (b) 3 (c) 4 (d) 5

xvii) Area of a parallelogram =

(a) base × height (b) $\frac{1}{2}$ × base × height (c) $\frac{1}{3}$ × base × height (d) $\frac{1}{4}$ × base × height

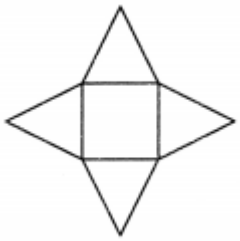
xviii) 1 cm^2 =

(a) 10 mm^2 (b) 100 mm^2 (c) 1000 mm^2 (d) 10000 mm^2

xix) 1 hectare =

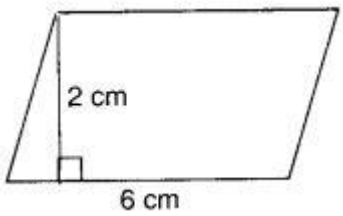
(a) 10 m^2 (b) 100 m^2 (c) 1000 m^2 (d) 10000 m^2

xx). What shape would we get from the given figure?



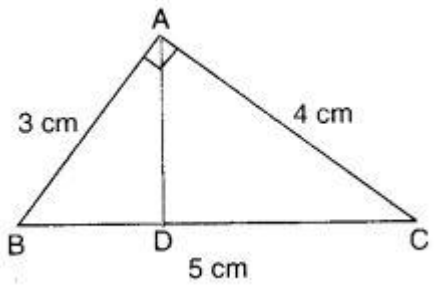
(a) Square prism (b) square pyramid (c) triangular prism (d) triangular pyramid

xxi) Find the area of the following parallelogram:



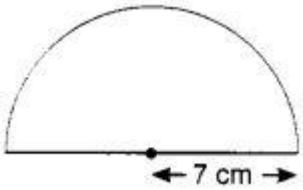
(a) 12 cm^2 (b) 6 cm^2 (c) 24 cm^2 (d) 8 cm^2

xxii) Find AD in the following figure :



(a) 3 cm (b) 4 cm (c) 5 cm (d) 2.4 cm

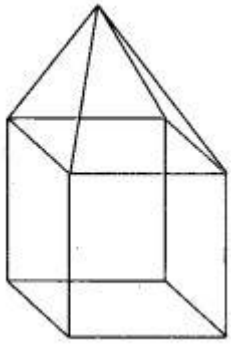
xxiii) The perimeter of the following figure is



(a) 27 cm (b) 28 cm (c) 36 cm (d) 40 cm

xxiv) How many lines of symmetry are there in a regular pentagon?
(a) 1 (b) 2 (c) 3 (d) 5

xxv). The number of vertices of the solid shape is



(a) 9 (b) 4 (c) 6 (d) 8

SHORT ANSWER QUESTIONS I
(EACH QUESTION CARRIES 2 MARKS)

2. Dray any two letters of English alphabet which has no line of symmetry.

3. Represent $\frac{5}{4}$ and $\frac{-3}{4}$ on number lines.

4. Insert four rational numbers between $\frac{-2}{3}$ and $\frac{-1}{2}$

SHORT ANSWER QUESTIONS II
[EACH QUESTION CARRIES 3 MARKS]

5. The radius of a circle is 3.5 cm, find its circumference and area. [Use $\pi = \frac{22}{7}$]

6. Add:
(i) a + b – 3, b + 2a – 1

(ii) Subtract $3x^2 – x$ from $5x – x^2$.

7. Draw an equilateral triangle whose each side is 4.5 cm.

LONG ANSWER TYPE QUESTIONS
[EACH QUESTION CARRIES 4 MARKS]

8. Find:
(i) 36% of 400
(ii) $16\frac{2}{3}$% of 32

9. Write the number of line symmetry and the order of rotational symmetry of the following
(i) parallelogram
(ii) an equilateral triangle

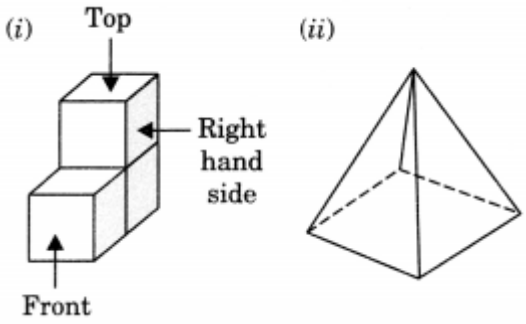
10. The cost of a flower vase is ₹ 120. If the shopkeeper sells it at a loss of 10%, find the price at which it is sold.

11. Draw the tree diagram for the given expressions:
(i) -3xy + 10
(ii) $x^2 + y^2$

12. A wire of length 176 cm is first bent into a square and then into a circle. Which one will have more area?

13. From the sum of $2x^2 + 3xy – 5$ and $7 + 2xy – x^2$ subtract $3xy + x^2 – 2$.

14. For the solids given below sketch the front, side and top view



Also draw the net of a hexagonal pyramid

15. A rectangle park is 45 m long and 30 m wide. A path 2.5 m wide is constructed outside the park. Find the area of the path.

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