

KENDRIYA VIDYALAYA GACHIBOWLI , HYDERABAD - 32
SAMPLE PAPER 01 FOR SA - II (2016-17)

SUBJECT: MATHEMATICS

BLUE PRINT : SA-II CLASS VII

Unit/Topic	VSA (1 mark)	Short answer (2 marks)	Short answer (3 marks)	Long answer (4 marks)	Total
Congruence of triangles	1(1)	1(2)	1(3)	1(4)	4(10)
Comparison of Quantities	1(1)	1(2)	1(3)	1(4)	4(10)
Rational Numbers	2(2)	1(2)	1(3)	--	4(7)
Perimeter and Area	1(1)	1(2)	1(3)	1(4)	4(10)
Algebraic Expressions	1(1)	1(2)	1(3)	1(4)	4(10)
Symmetry	1(1)	1(2)	1(3)	--	3(6)
Visualizing Solid Shapes	1(1)	--	2(6)	--	3(7)
Total	8(8)	6(12)	8(24)	4(16)	26(60)

MARKING SCHEME FOR SA – II

SECTION	MARKS	NO. OF QUESTIONS	TOTAL
VSA	1	8	08
SA – I	2	6	12
SA – II	3	8	24
LA	4	4	16
GRAND TOTAL			60

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CLASS : VII

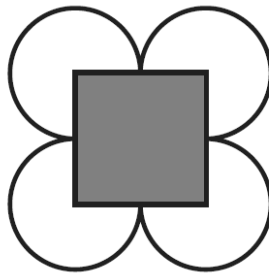
MAX. MARKS : 60
DURATION : 2½ HRS

General Instructions:

1. All questions are compulsory.
2. Question paper is divided into four sections: Section A consists 8 questions each carry 1 marks, Sections B consists 6 questions each carry 2 marks, Sections C consists 8 questions each carry 3 marks and Sections D consists 4 questions each carry 4 marks

SECTION – A

1. Find the ratio of 15 kg to 210 g
2. Write a rational numbers equivalent to $\frac{-2}{7}$
3. If $p = -2$, find the value of $-3p^2 + 4p + 7$
4. Reduce $\frac{-45}{30}$ to the standard form
5. $\triangle ABC$ and $\triangle PQR$ are congruent under the correspondence: $ABC \leftrightarrow RQP$. Write the part of $\triangle ABC$ that correspond to $\angle P$.
6. Find the area of a circle of radius 30 cm (use $\pi = 3.14$).
7. What cross-sections do you get when you give a horizontal cut to the circular pipe?
8. Find the number of lines of symmetry of the given figure:



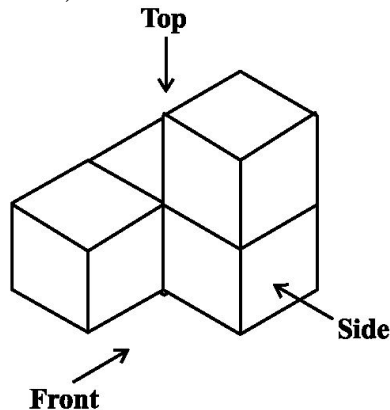
SECTION – B

9. A school team won 6 games this year against 4 games won last year. What is the per cent increase?
10. Find: (i) $\frac{-8}{19} + \frac{(-2)}{57}$ (ii) $\frac{-6}{13} - \frac{-7}{15}$
11. Find the value of the expressions $7a - 4b$ for $a = 3, b = 2$.
12. Draw a rough sketch of a quadrilateral with a rotational symmetry of order more than 1 but not a line symmetry.

13. By applying ASA congruence rule, it is to be established that $\triangle ABC \cong \triangle QRP$ and it is given that $BC = RP$. What additional information is needed to establish the congruence?
14. The circumference of a circle is 31.4 cm. Find the radius and the area of the circle? (Take $\pi = 3.14$)

SECTION – C

15. An article was sold for Rs 250 with a profit of 5%. What was its cost price?
16. Find any three rational numbers between $-\frac{5}{6}$ and $\frac{5}{8}$
17. If $\triangle ABC \cong \triangle FED$ under the correspondence $ABC \leftrightarrow FED$, write all the corresponding congruent parts of the triangles.
18. What cross-sections do you get when you give a (i) vertical cut (ii) horizontal cut to the following solids? (a) A brick (b) A round apple
19. For given solid, draw the top view, front view and side view.

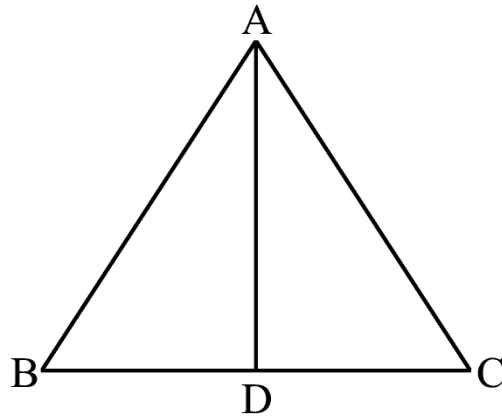


20. State the number of lines of symmetry for the following figures:
(a) An equilateral triangle (b) A square (c) A rectangle
21. The area of a square and a rectangle are equal. If the side of the square is 40 cm and the breadth of the rectangle is 25 cm, find the length of the rectangle. Also, find the perimeter of the rectangle.
22. Subtract:
(i) $-m^2 + 5mn$ from $4m^2 - 3mn + 8$
(ii) $-x^2 + 10x - 5$ from $5x - 10$

SECTION – D

23. Anita takes a loan of Rs 5,000 for donating books to the poor, at 15% per year as rate of interest. Find the interest she has to pay at end of three years. What value depicted from this?
24. Two cross roads, each of width 5 m, run at right angles through the centre of a rectangular park of length 70 m and breadth 45 m and parallel to its sides. Find the area of the roads. Also find the cost of constructing the roads at the rate of Rs 105 per m^2 .

25. In the below Fig, $AB = AC$ and D is the mid-point of BC
- (i) State the three pairs of equal parts in $\triangle ADB$ and $\triangle ADC$.
 - (ii) Is $\triangle ADB \cong \triangle ADC$? Give reasons.
 - (iii) Is $\angle B = \angle C$? Why?



26. From the sum of $2y^2 + 3yz$, $-y^2 - yz - z^2$ and $yz + 2z^2$,
subtract the sum of $3y^2 - z^2$ and $-y^2 + yz + z^2$.
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