

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

SUBJECT: MATHEMATICS

**BLUE PRINT : SA-I CLASS VII**

<b>Unit/Topic</b>	<b>VSA (1 mark)</b>	<b>Short answer (2 marks)</b>	<b>Short answer (3 marks)</b>	<b>Long answer (4 marks)</b>	<b>Total</b>
Integers	1(1)	--	1(3)	1(4)	<b>3(8)</b>
Fractions and Decimals	1(1)	1(2)	1(3)	--	<b>3(6)</b>
Data Handlings	1(1)	--	1(3)	1(4)	<b>3(8)</b>
Simple Equations	1(1)	1(2)	1(3)	--	<b>3(6)</b>
Lines and Angles	1(1)	1(2)	1(3)	1(4)	<b>4(10)</b>
Triangle and its properties	1(1)	1(2)	1(3)	1(4)	<b>4(10)</b>
Practical Geometry	--	1(2)	1(3)	--	<b>2(5)</b>
Exponents and Powers	2(2)	1(2)	1(3)	--	<b>4(7)</b>
<b>Total</b>	<b>8(8)</b>	<b>6(12)</b>	<b>8(24)</b>	<b>4(16)</b>	<b>26(60)</b>

**MARKING SCHEME FOR SA – I**

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

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**SAMPLE PAPER 01 FOR SA - I (2016-17)**

**SUBJECT: MATHEMATICS**  
**CLASS : VII**

**MAX. MARKS : 60**  
**DURATION : 2½ HRS**

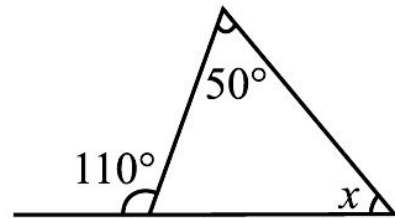
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**General Instructions:**

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
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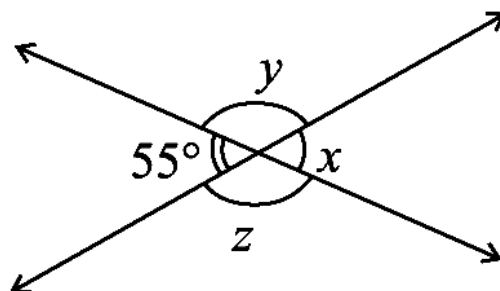
**SECTION – A**

1. Find the median of the data: 24, 36, 46, 17, 18, 25, 35
2. Write equations for the statements: The sum of numbers  $x$  and 4 is 9.
3. Evaluate:  $(-31) \div [(-30) + (-1)]$
4. Express 7 rupees 7 paise as rupees using decimals.
5. Find the angle which is equal to its complement.
6. Find angle  $x$  in the adjoining figure:
7. Express 256 as a power 2.
8. Express 432 as a product of powers of prime factors



**SECTION – B**

9. Solve:  $12p - 5 = 25$
10. Shyama bought 5 kg 300 g apples and 3 kg 250 g mangoes. Sarala bought 4 kg 800 g oranges and 4 kg 150 g bananas. Who bought more fruits?
11.  $\triangle ABC$  is right-angled at C. If  $AC = 5$  cm and  $BC = 12$  cm find the length of AB.
12. Construct a triangle ABC, given that  $AB = 5$  cm,  $BC = 6$  cm and  $AC = 7$  cm.
13. Simplify:  $\frac{(2^5)^2 \times 7^3}{8^3 \times 7}$
14. Find the values of the angles  $x$ ,  $y$ , and  $z$  in the given figure:



### SECTION – C

15. The runs scored in a cricket match by 11 players is as follows:

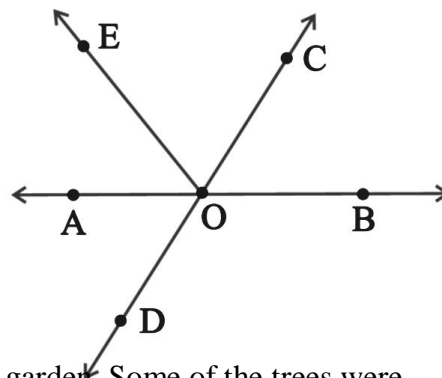
6, 15, 120, 50, 100, 80, 10, 15, 8, 10, 15

Find the mean, mode and median of this data.

16. In the adjoining figure, identify:

(i) Five pairs of adjacent angles. (ii) Three linear pairs.

(iii) Two pairs of vertically opposite angles.



17. People of Sundargram planted a total of 102 trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees. What was the number of fruit trees planted? What are the benefits of eating fruits?

18. A certain freezing process requires that room temperature be lowered from  $40^{\circ}\text{C}$  at the rate of  $5^{\circ}\text{C}$  every hour. What will be the room temperature 10 hours after the process begins?

19. Find  $\frac{3}{4}$  of (i) 36 (ii) 64 (iii) 120

20. A tree is broken at a height of 5 m from the ground and its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.

21. Construct  $\Delta ABC$ , given  $m\angle A = 60^{\circ}$ ,  $m\angle B = 30^{\circ}$  and  $AB = 5.8$  cm.

22. Express the number appearing in the following statements in standard form.

(a) The distance between Earth and Moon is 384,000,000 m.

(b) Speed of light in vacuum is 300,000,000 m/s.

(c) Diameter of the Earth is 1,27,56,000 m.

### SECTION – D

23. The performance of students in 1st Term and 2nd Term is given. Draw a double bar graph choosing appropriate scale and answer the following:

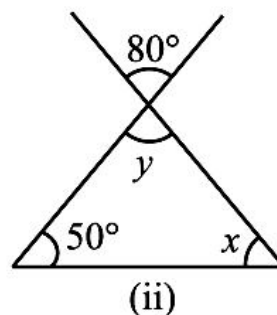
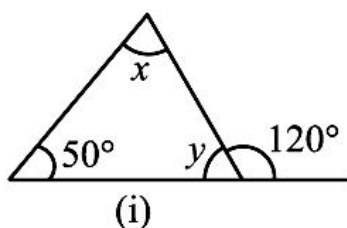
Subject	English	Hindi	Maths	Science	S.Science
1st Term (M.M. 100)	62	72	88	81	73
2nd Term (M.M. 100)	70	65	95	85	75

(i) In which subject, has the child improved his performance the most?

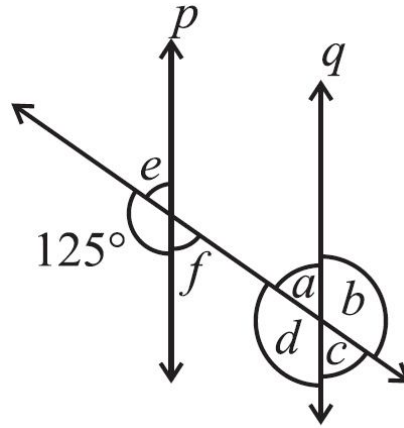
(ii) In which subject is the improvement the least?

(iii) Has the performance gone down in any subject?.

24. Find the values of the unknowns  $x$  and  $y$  in the following diagrams:



25. In the adjoining figure,  $p \parallel q$ . Find the unknown angles.



26. In a test (+5) marks are given for every correct answer and (-2) marks are given for every incorrect answer. (i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers. (ii) Jay also answered all the questions and scored (-12) marks though he got 4 correct answers. How many incorrect answers had they attempted?

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