

**SUMMATIVE ASSESSMENT-I, 2016**  
**MATHEMATICS**

**Time : 3 hrs.**

**Class VII**

**M.M: 100**

**Date – 09.09.2016**

**General Instructions:**

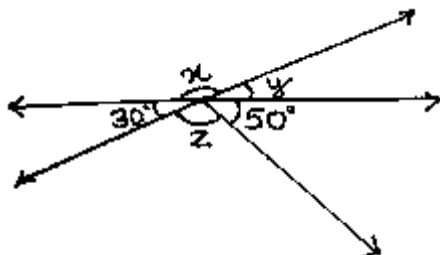
- The question paper consists of 30 questions divided into 4 sections A, B, C and D. Section A comprises 5 questions of 1 mark each. Section B comprises 5 questions of 3 marks each. Section C comprises 12 questions of 5 marks each. Section D comprises 8 questions of 6 marks each.
- In Section - A and B all questions are compulsory. In Section – C solve any 10 questions. In Section – D solve any 5 questions.
- Draw neat diagrams wherever needed.
- Use of calculator is not permitted.

**SECTION – A**

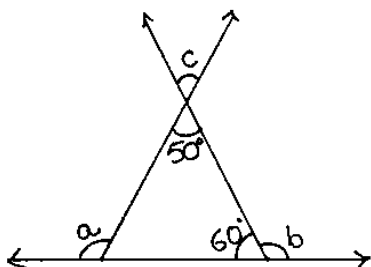
- Q.1** Find  $\frac{2}{5}$  of 30.
- Q.2** A coin is flipped to decide which team starts the game. What is the probability that your team will start?
- Q.3** Find m if  $\frac{m}{6} = 6$
- Q.4** A \_\_\_\_\_ connects a vertex of a triangle to the mid point of the opposite side.
- Q.5** Two circles are congruent if \_\_\_\_\_.

**SECTION – B**

- Q.6** Following are the ages ( in years) of 10 people in a group: 23, 35 , 32, 22, 25, 40, 42, 36, 45, 33.
- i) Find the age of the oldest person of the group
  - ii) Find the age of the youngest person of the group
  - iii) Find the range of the above data.
- Q.7** Solve :  $4(m+3) = 18$
- Q.8** Find x, y and z



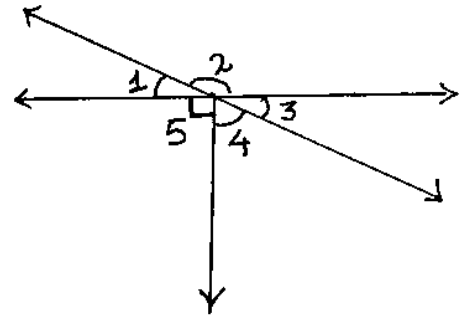
- Q.9** Find a, b and c in the given figure



- Q.10** State True/False:
- i) The mode is always one of the numbers in a data
  - ii) The number of times a particular observation occurs is called its mean.
  - iii) A bar graph is a representation of numbers using bars of uniform width.

## SECTION – C

- Q.11** Subtract the quotient of  $(-12) \div 4$  from the product of  $(-12)$  and  $4$ .
- Q.12** If the cost of a register is Rs.  $7\frac{3}{4}$ , find the number of registers that can be purchased for Rs.  $69\frac{3}{4}$ .
- Q.13** Find the mean, median and mode of the following data:  
14, 15, 13, 14, 12, 11, 11, 14, 12, 15, 13, 11, 12, 11, 23, 14, 14
- Q.14** Solve :  $\frac{2}{7}y - \frac{5}{3} = \frac{2}{5}$
- Q.15** In the adjoining figure, name one pair of angles that are:

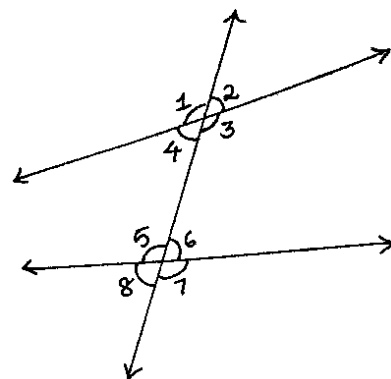


- i) Vertically opposite angles
- ii) Linear pair
- iii) Adjacent angles that do not form a linear pair
- iv) Complementary angles
- v) Unequal supplementary angles

- Q.16** A storm caused a tree to fall from a height of 6m above the ground. The two parts of the tree did not separate and the treetop touches the ground at a distance of 8m from its base. What was the actual height of the tree?
- Q.17** Solve using suitable properties :
- i)  $52 \times (-98) + 52 \times (-2)$
  - ii)  $8 \times 77 \times (-125)$
- Q.18** Divya bought 150 kg 250 g pulses, 500 kg 750 g wheat and 275kg 500g rice. She sent all these things to the flood affected areas in the rainy season.
- a) Which grain was bought in maximum quantity?
  - b) How much total quantity did she buy?
  - c) What moral (value) do you learn from it?
- Q.19** Age of Sharanya's father is 4 years more than five times Sharanya's age. What is Sharanya's present age if her father is 34 years old?

- Q.20** In the adjoining figure identify:

- i) Two pairs of corresponding angles
- ii) One pair of alternate interior angles
- iii) One pair of vertically opposite angles
- iv) One pair of alternate exterior angles



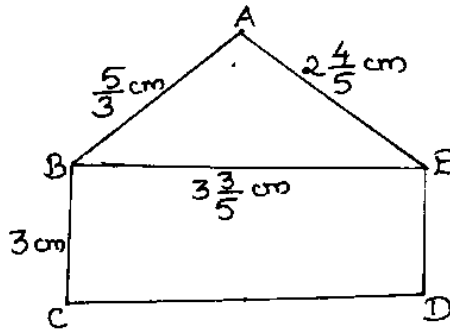
- Q.21** PS is the median of the triangle PQR. Is  $PQ + QR + RS > 2 PS$  ?
- Q.22** Which is greater :  $\frac{6}{7}$  of  $\frac{49}{54}$  or  $\frac{7}{8}$  of  $\frac{40}{49}$  ?

## SECTION – D

- Q.23** In a quiz based programme there are three teams A, B and C. There are total five rounds in a game; 20 marks are given for each correct answer and -10 marks for each wrong answer. No marks are deducted for not attempting a question. Which team won the game if:

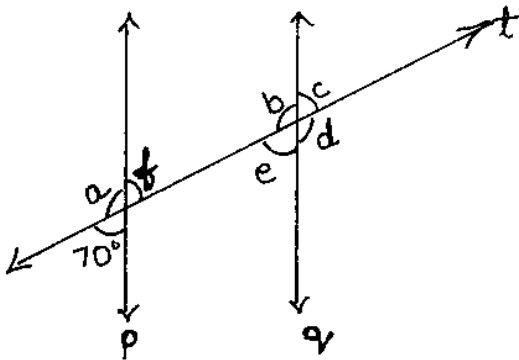
- Team – A gave 3 correct answers and 2 wrong answers.
- Team – B gave 2 correct answers, 2 wrong answers and they didn't attempt 1 question.
- Team – C gave 3 correct answers, 1 wrong answer and they didn't attempt 1 question.

**Q.24** Find the perimeters of triangle ABE and rectangle BCDE.



**Q.25** In an isosceles triangle, the vertex angle is thrice of either base angles. Find the measures of angles of the triangle.

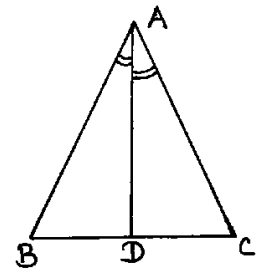
**Q.26** In the adjoining figure line  $p$  is parallel to line  $q$  and  $t$  is the transversal. Find  $\angle a$ ,  $\angle b$ ,  $\angle c$ ,  $\angle d$ ,  $\angle e$  and  $\angle f$ .



**Q.27** Find the perimeter of the rectangle whose length is 40cm and a diagonal is 41cm.

**Q.28** In the given figure,  $AB = AC$  and  $AD$  is the bisector of  $\angle BAC$ .

- State three pairs of equal parts in triangles  $ADB$  and  $ADC$ .
- Is  $\triangle ADB \cong \triangle ADC$ ? Give reasons.
- Is  $\angle B = \angle C$ ? Give reason.



**Q.29** Fill in the blanks:

- 7 paise = Rs. \_\_\_\_\_
- 3 kg 2 gm = \_\_\_\_\_ kg
- 25cm = \_\_\_\_\_ m
- 612 mm = \_\_\_\_\_ cm
- 315 m = \_\_\_\_\_ km
- 82 Rs 2 p = Rs \_\_\_\_\_

**Q.30** The number of girls and boys in the various clubs of a school are given below:

Clubs	Dramatic	Literary	Maths	Eco	Consumer
Girls	35	20	50	40	45
Boys	25	15	70	35	45

Draw a double bar graph to represent the above data.

