KENDRIYAVIDYALAYA, KHAMMAM

Half yearly examination   - 2017-18

Class : VII   subject: Mathematics   Time: 2 ½ hrs

General Instructions:

1. The Question paper is divided into four sections.
    Section   A   [06 Marks]
    Section   B   [12 Marks]
    Section   C   [30 Marks]
    Section   D   [32 Marks]
2. All questions are compulsory.
3. All questions of a particular section must be attempted in the correct order.

SECTION - A

I   Choose the correct option.   6 x 1 = 6

1. The common end point where two rays meet to form an angle is called [   ]
    a) vertex   b)arm   c)ray   d) line segment
2. Multiplicative inverse of 3/8 is   [   ]
    a) 8/3   b)11/3   c)1/3   d)None of these.
3. Linear pair of angles are   [   ]
    a) Complementary angles b)supplementary angles c)reflex angles
    d)right angle

4. a,b,c are integers then a x(b+c)= __   [   ]
    a) axb+c   b)axbxc   c)axb+axc   d)axb-axc
5. The simplest form of 33/55 is   [   ]
    a) 3/5   b) 5/3   c)33/5   d)1/5
6. write the reciprocal form of this fraction 5/2   [   ]
    a) 5/2   b)2   c)2/5   d) 5

SECTION – B

II   Answer the following questions. Each question carries 2 marks. 6x2=12

7. Represent -3/2 on number line.
8. Complete the pattern for four more -1/4, -2/8, -3/12
9. ABC is a triangle right angled at C. If AB=25 cm AC=7 cm find BC
10. Define complementary angle.
11. Solve 10 P + 10 = 100
12. Find the mode of the data 13, 16, 12, 14, 19, 12, 14, 13, 14.

SECTION – C

III   Answer the following questions. Each question carries 3 marks. 10 x 3 = 30

13. Find   a) 0.4 ÷ 2   b) 3.97 ÷ 10
14. Multiply   a) 3/2 x 5/11   b) 5/6 x 12/13
15. Solve a) 4+5 (p-1)=34   b) 16=4+3t
16. Construct 3 equations starting with x=2.
17. Draw the figures for the following   a) parallel lines   b) intersecting lines
18. Find the value of x.   a) angle A=x, angle B=50° , angle C=60°
        b)angle X=30°, angle Y=110° , angle Z=x
19. Define congruence of triangles with an figures.
20. Find the ratio of   a) 3 Km to 300 mtrs. B) 30 days to 36 hours
21. I bought a TV for 10,000 Rs and sold it at profit of 20%. How much money do I get for it?
22. List five rational numbers between -1 and 0.

SECTION – D

IV   Answer the following questions. Each question carries 4 marks. 8 x 4 =32

23. Define rational number, positive rational number and negative rational number with example.
24. The runs are 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 and mode?
25. Draw and mention a)Integer angles   b)exterior angles c)pair of corresponding angles.
26. A tree is broken at a height of 5 metres from the ground and its top touches the ground at a distance of 12 metres from the base of the tree . find the original height of tree ?.
27. Write about SSS , ASA and SAS congruence criteria.
28. Convert the following fractional numbers to percent. A) 5/4 B)3/10 c) 2/5 d) 1/25
29. Find the whole quantity if a) 5 % of it is 600   b) 8 % of it is 40 Liters.
30. Define a)Proper fraction b)improper fraction c) like fraction d) Unlike fraction.