U. S. Ostwal International School

Ostwal Wondercity, Boisar (E)

Term -1

Name:_____ **Date:_____**

Subject: Maths **Roll No: _____**

Grade: VI **Marks: 80**

Time: 2.5 hrs

General Instructions:

- **All questions are compulsory.**
- **Do not write the questions. Directly write the answers.**
- **Write the paper neatly. Reading time:15 minutes.**

Section -A.

(Any-4) (40 marks)

Question:-.1

A Find ratio between :- (4)

a)1 kg of 900 gram

b)1 m 30 cm and 40 cm.

B. The number 5,21,25 and x are in proportion. Find x. (3)

C. If cost of 6 soaps is 54 .Find the cost of 10 such soaps? (3)

Question -2

A. Write the given set in set builder form :- (3)

(iI A={7,14,21,28,35,42}

(ii)Y={Saturday, Sunday}

B. Find n (X)for each of the following. (3)

a) X ={x|x is a letter of INTERSECTION }

b) X={x|9x+36=0,x€Z}

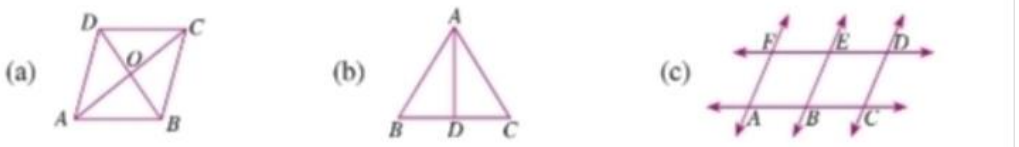
c) X={x|x is an even number and also divisible by 0}

C. Identify the following set as finite infinite or empty set. (4)

a. A={x|x£W and x2<26}. b)B={2,4,6,8,10….}

c)={x|x is an even prime number} d){x|x<0,x€W}

Question -3



A How many segments are there in the following figure (3)

B .Is the set containing all the elements of two different finite set finite? (3)

Explain your answer.

C. Write true or false. (3)

a) Sets {a,e,i,o,u} and {u,e,o,i,a} are not same.:-

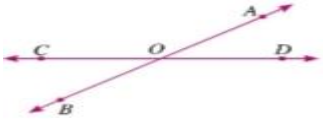
b) If B is the set of letter in the word STATISTICS,

then B ={S,T,A,I,C} :-

c) A set of first four prime number in set builder form is given by {2,3,5,7}

Question -4

A.In the adjoining figure identify all vertically opposite angle, and linear pairs. (3)



B. Classify following pairs of angles as congruent supplementary or complementary.

a)75°and 15°. b)120°and 60°. C)27°and27°. (4)

d)99°and81°

C. Construct the following angle using protractor :-160°. (3)

Question -5

A. Divide 75 in the ratio 2:3. (3)

B. the side of a triangle are in the ratio 4:7:9. If the perimeter of triangle is 400 cm find the side of triangle . (4)

c. The weight of 12 chair is 60 kg what will be the weight of 18 chair. (3)

Section -2 (40 marks)

(Attempt any -4)

Question -6

A. i)Write first 4 multiple of 2:- (4)

ii) Write first 4 multiple of 12:-

B. Find prime factor of 1500.

(3)

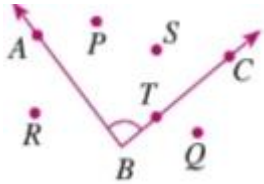
C. Fine HCF using prime factorization method 64, 320. (3)

Question -7

A.Using protractor draw the angle of. 120° and bisect it. (3)

B. assignment of 5 cm. Then draw its perpendicular bisector which intersect the line segment at O (4)

C.In the adjoining figure, name the points which are. (4)



(i) in the interior of <ABC-

(ii) in the Exterior of <ABC

(iii) on the boundary of <ABC

Question -8

A.Which triangles can have equal median and altitude. explain your answer. (3)

B. Is it possible to draw an angle of 46° using a ruler and a compass. What is the major of an angle which is closest to the given angle and can be drawn using ruler and compass? (3)

C .Name two objects around you that are : (4)

a)square in shape:- b) rectangle in shape:-

Question 9

A.Find 45% of 5000

B.The 12% of a number be 216. What is the number? (3)

C. Out of 30,000 voters in a democracy 65% voted.

Find the number of voters who did not vote. (3)

Question -10

A.How many right angle are made a complete angel (3)

B. If A and B are vertically opposite angle and a equal to 35° .Find the supplementary angle of B.

C The product of two different prime number is an odd (3)

Number. State the following statement as true or false?

Also give reason to support your answer.

i)One of the prime number is 2.

ii) The product is more than 10.

ALL THE BEST