EMBOCS, NAWALPARASI
SPECIFICATION GRID-2080
First term Exam-2080

Class:6 **F:M-50**
Subject: Mathematics **Time: 2 hours** **P:M-20**

S.N.	Chapters	Types of questions			
		1 mark	2 marks	3 marks	Total
1	Set	1	1	1	6
2	i) Number system ii) Fundamental operation	2	2	1	9
3	Algebra:Upto10.4(constant,variable,expressions,evaluation of algebraic term)	1	3	1	10
4	Geometry: Angle up to Ex no. 14.2	1	1	1	6
5	Geometry: point and line	1	1	-	3
6	Geometry: Triangles up to 15.3(types of triangle,sum of triangle)	1	1	1	6
7	Geometry: Construction using protractor	-	1	-	2
8	Perimeter, Area and volume	1	1	1	6
9	Statistics (collection of data)	-	1	-	2
	Total				50

EMBOCS, NAWALPARASI
Model questions Paper
First Term Exam-2080

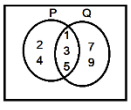
Class:6 **Time: 2 hours** **F:M-50**
Sub: Mathematics **P:M-20**

Attempt all the questions.

Q.1 a) Define set with an example. 1

b) Express the given set in listing as well as set builder method. 2
i) W= {the whole number less than 6}

c) List the elements of each pair of overlapping sets. Then make a set of common elements in given case.



3

Q.2 a) How many millions are there in 3 crore?

1

b) Write the greatest and least number of 9 digits. 2

Q.3 a) Make mathematical expression of: 1
5 is subtracted from the sum of 8 and 7.

b) Ram bought 6 pencils at Rs. 8 each and he gave a Rs. 50 note to the shopkeeper for the payment. How much change did the shopkeeper return him? 2

c) Simplify: $55 \div 11[120 \div 2\{4+(10+5-7)\}]$ 3

Q.4 a) Define monomial expression with an example. 1

b) If x=2, y=3 and z=4, Evaluate: $2x+3y-z$ 2

c) The volume of a cuboid = lxbxh. Find the volume of cuboids in cubic cm. 2

d) Add: 2ab-3bc+4 and ab+4bc-5 2

Q.5 From what expression x^2-5y^2-3xy must be subtracted to get $2x^2-y^2+4xy$? 3

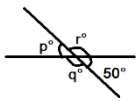
Q.6 i) What is the angle between perpendicular line segments? 1

ii) Name the line segments and their points of intersection in the given figure. 2

Q.7 a) If x° and 60° make a right angle, find the size of x°. 1

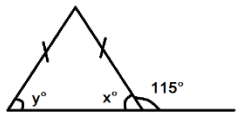
b) Find the complement and supplement of 80°. 2

c) Find the sizes of unknown angles in figure below. 3



Q.8 a) Which triangle has all sides equal? 1

b) Calculate the size of x° and y° in the given 2



c) The angles of a triangle are in the ratio 2:3:4, find them. 3

Q.9 Draw 120° and 40° using protractor. 2

Q.10 a) If the sides of a triangle are xcm, ycm and zcm. Its perimeter=? 1

b) The length of rectangle is 5.5cm and its breadth is 4.5 cm. Calculate its perimeter. 2

c) A squared park is 80 m long. How many meters of wire is required to fence it with 5 rounds? 3

Q.11 The marks obtained by 20 students of class 6 out of 25 full marks in class test are given below prepare a frequency table marks and present the data.

20,15, 22, 24, 19, 15, 20, 24, 19, 24

22, 19, 20, 24, 15, 20, 24, 19, 20, 22 2

The End

EMBOCS, NAWALPARASI
SPECIFICATION GRID-2080
Second term Exam-2080

Class:6 **F:M-50**
Subject: Mathematics **Time: 2 hours** **P:M-20**

S.N.	Chapters	No of questions			
		1 mark	2 marks	3 marks	Total
1	Set	1	1	-	3
2	Operation on whole numbers	1	3	-	7
3	Properties of whole numbers	2	1	1	7
4	Integers	1	-	-	1
5	Algebra	1	2	1	8
6	Geometry: Point and line	1	-	-	1
7	Geometry: angles	1	1	1	6
8	Geometry: triangle and polygons	1	1	-	3
9	Geometry: Construction of an angle.	-	1	-	2
10	Perimeter, Area & volume	-	2	1	7
11	Fraction up to Ex no. 5.3	-	1	-	2
12	Statistics up to ex. 19.2	-	-	1	3
	Total				50

EMBOCS, NAWALPARASI
Model questions Paper
Second Term Exam-2080

Class:6 **Time: 2 hours** **F:M-50**
Sub: Mathematics **P:M-20**

Attempt all the questions.

Q.1 a) Express the set V= {a,e,i,o,u} in descriptive method. 1
b) From the given sets, list the common elements in separate set and show the elements and the common elements of each pair of sets in diagram. 2

Q.2 a) How many millions are there in 3 crore? 1
b) Find the sum of the greatest and the least numbers of 6-digits. 2

Q.3 a) Simplify: 35-{15-(19+5)÷3}+2 2

b) Pratik has 300 rupees. He buys 2 boxes at Rs 60 each and 3 pens at Rs 30 each. How much money is left with him? 2

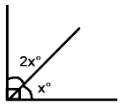
Q.4 a) Evaluate: $(-1)^3$ 1

b) If $x = 2 \; and \; y = 3 \; and \; z = 4, evaluate the \exp ression \frac{x+2y}{z}$ 2

Q.5 a) How many term are there inn mn-5m+7? 1

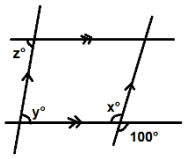
b) Simplify: $4x + 3y -)3x + y)$ 2

c) If a = (p+q), b= (p-q) and c = q^2-p^2, show that ab+c=0 3



Q.6 a) Define perpendicular line segments. 1

b) Calculate the size of unknown angles. 2



Q.7 a) Find the supplements of 45° 1

b) Find the size of unknown angles. 3

Q.8 a) Write the possible factor of 16. 1

b) Find the H.C.F of 28 and 35 by division method. 2

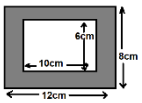
Q.9 a) Find the square of 14. 1

b) Find the least number which is exactly divisible by 18 & 24. 2

c) Find the smallest number by which 80 is multiplied to make it a perfect square. 3

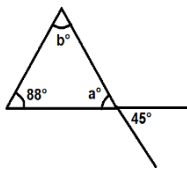
Q.10 a) What is the formula to calculate the area of rectangle? 1

b) A square field is 20m long. If you are running around it, how many meters do you travel in one around? 2



Q.11 a) Find the area of the shaded region. 2

b) The students of a school were participated in the rally on 'children's Day' with tow banners of equal area. If the first banner is 8 ft long and 3ft wide and the second banner was 6ft long, what was the wic the second banner? 3



Q.12 a) How many acute angles are there in an acute angled triangle? 1

b) Find the sizes of unknown angles of the given triangle. 2

c) If, $x°, y°$ and $z°$ are angle of a trianle, then $x° + y° + z°$..... 1

Q.13 The table given below shows the number of different animal kept in a zoo.

Animals	Rabbit	Monkey	Dear	Bird	Tiger
Numbers	20	16	25	40	35

i) Draw a bar graph to show their numbers. 2

ii) Define data.

The End

EMBOCS, NAWALPARASI
SPECIFICATION GRID-2080
Third Term Exam-2080

Class:6 **F:M-50**
Subject: Mathematics **Time: 2 hours** **P:M-20**

S.N.	Chapters	No of questions			
		1 mark	2 marks	3 marks	Total
1	Set	1	1	-	3
2	Operation on whole numbers	1	1	-	3
3	Properties of whole numbers	1	1	-	3
4	Integers	1	-	-	1
5	Fraction	1	-	1	4
6	Unitary method	1	1	-	3
7	Percent	1	1	-	3
8	Algebra	1	1	1	6
9	Equation, In equality and graph	-	2	-	4
10	Geometry: Point & line	1	-	-	1
11	Geometry: Angles	-	2	-	4
12	Geometry: Triangle & polygons	-	1	1	5
13	Geometry: Construction up to ex. 16.2	-	1	-	2
14	Coordinates	1	-	-	1
15	Perimeter, Area & volume	1	2	-	4

16	Statistics up to ex. 19.2	-	-	1	3
	Total				50

EMBOCS, NAWALPARASI
Model questions Paper
Third Term Exam-2080

Class:6 **Time: 2 hours** **F.M.-50**

Sub: Mathematics **P.M.-20**

Attempt all the questions.

Q.1 a) Write the method of writing sets. 1

b) State with reasons, whether the following pairs of set are equal or equivalent. 2

A={x:x is an odd number less than 10}

B ={0,1,2,3,4}

Q.2 a) Express 2700 in the expanded forms of power 10. 1

b) If a is at hundreds place, b is at tens place and c is at ones place, write the number formed by these digits. 2

Q.3 a) Factories 12 by factor- tree method. 1

b) Find the cube root of 64. 2

Q.4 Simplify: (+7) + (-8) 1

Q.5 a) Add: $\frac{3}{4}+\frac{5}{8}$ 1

b) Father earns Rs 20,000 in a month. He spends $\frac{1}{4}$ part of his earning on food and $\frac{2}{5}$ part on the education of his children. 2

i) How much money does he spend?

ii) What is his saving in a month?

Q.6 a) If the unit cost of a book is Rs. 150, find the cost of 6 books. 1

b) The cost of 6 oranges is Rs. 540. How many kilograms of oranges can be purchased for Rs. 720? 2

Q.7 a) Covert 20% into its lowest term. 1

b) There are 360 students in a school. 198 of them are boys. 2

i) Find the percentage of boys.

ii)Find the percentage of girls.

Q.8 a) Multiply: $3x^2y \times 2xy^3$ 2

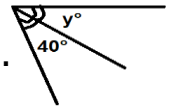
b) Simplify: a(a-b)-b(a-b) (2)

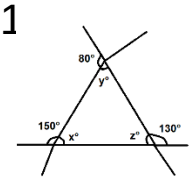
c) If a = (p+q), b= (p-q) and c= q^2-p^2, show that ab+c=0. 3

Q.9 a) Solve: 6x-7=3x+5 2

b) The sum of two numbers is 12. If one of them is 7, find the other number. 2

Q.10 a) Define line. 1

b) Calculate the size of unknown angles. 



2

c) Calculate the size of x°, y° and z°.
2

Q.11 a) a°, 2a° and 60° are the angles of a triangle. Find the size of a° and 2a°. 2

b) Find the sum of interior angles of a pentagon. 3

Q.12 a) Construct 150° and bisect it. 2

b) What is the co-ordinate of origin?
1

Q.13 a) What is the formula to calculate the perimeter of square. 1

b) The perimeter of a rectangle is 28cm and its length is 8cm, and its length is 8cm. 2+2

Q.14 The number of students is the primary level of a school are given below. Draw a bar graph to show the numbers.
3

Class	I	II	III	IV	V
No.of students	35	30	40	25	20

The End

EMBOCS, NAWALPARASI
SPECIFICATION GRID-2080
Annual Exam-2080

Class:6 **F:M-50**
Subject: Mathematics **Time: 2 hours** **P:M-20**

S.N.	Chapters	No of questions			
		1 mark	2 marks	3 marks	Total
1	Set	1	1	-	3
2	Operation on whole numbers	1	-	-	1
3	Properties of whole numbers	-	2	-	4
4	Integers	1	-	-	1
5	Fraction & decimal	1	2	-	5
6	Unitary method	-	1	-	2
7	Percent	-	1	-	2
8	Profit and loss	-	1	-	1
9	Algebra	1	1	-	3
10	Equation, Inequality and graph	1	1	-	3
11	Coordinates	-	1	-	2
12	Geometry: point and line	-	1	-	2
13	Geometry: Angle	1	-	1	4
14	Geometry: Triangle and polygons	-	2	-	4
15	Geometry: Construction	-	1	-	2
16	Perimeter, Area and volume	-	1	1	5
17	Symmetrical figures, Design of polygons and tessellation	-	1	-	2
18	Statistics	1	1	-	3
	Total				50

EMBOCS, NAWALPARASI
Model questions Paper
Annual Exam-2080

Class:6 **Time: 2 hours** **F:M-50**
Sub: Mathematics **P:M-20**

Attempt all the questions.

Q.1 A teacher asks to list act the factors of 12. Answer the following questions. 1

a) Express the set in listing method.
1

b) Is 18 a member of the given set? Give reason. 1

c) Re-write the set in set-builder form.
1

Q.2 a) Make the mathematical expression of '4 times the sum of 7 and 2?
1

b) On the occasion of a sunil's Birthday, he distributed 24 snickers and 36 cadburies equally to his friends. What is the greatest number of his friends? Find. 2

c) If the product of two identical numbers is 441, find one of the numbers.
2

Q.3 a) Simplify: (+7) + (-4) 1

b) If the cost of 1kg of rice is Rs $85\frac{1}{2}$, find the cost of 10kg of rice. 2

c) Convert the given fractions into decimal and simplify it. 2

$\frac{105}{100} - \frac{6}{10} + \frac{1}{10}$

d) Convert 20% into decimal. 2

Q.4 a) If the cost of 1 dozen of pencils is Rs 120, find the cost of 1 pencil.
2

b) There are 40 students in class 6. 30% of them are girls.

i) How many are girls? 1

ii)How many are boys? 1

c) Mr. Yadav buys a calculator for Rs 375 and sells it for Rs 450. Find his profit. 2

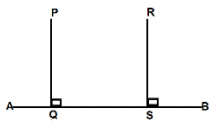
Q.5 a) What is the product of the expressions $5x^2$ and $3x^3$? 1

b) If x = (a+2) and y= (a-2), show that xy= a^2-4. 2

Q.6 a) What is the appropriate symbol '< or > or = ' in the blanks space of 7 ……..4? 1

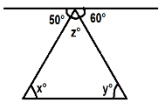
b) Solve: $\frac{3x-1}{4} = 2$ 2

Q.7 a) In the given figure, write down the relationship between. 2 2



i) PQ and AB ii) PQ and Rs

b) Plot the points A(6,5), B(-2,5), C(-2,-1) and D(2,-1) on a graph paper join the points in order. 2



Q.8 a) Define obtuse angle with one example. 1

b) Find the size of unknown angles.

3

Q.9 a) If x° and 30° are the base angles of isosceles triangle, find the value of x°

b) Define circumference of a circle.

1

c) Find the value of unknown angles of the given pc 

2

Q.10 a) Construct an equilateral triangle $\Delta ABC \text{ where } AB = 5cm$. 2

b) Draw a tessellation using the square of some size and colour it. 2

Q.11 a) The length of a side of square field is 5m. 2

i) Find the perimeter of square field.

ii) Convert the perimeter in centimeter (cm) 2

Q.12 The table given below shows the number of students enrolled in a school in the academic session 2079 B.S. from class VI to x.

3

Class	VI	VII	VIII	IX	X
No. of students.	30	35	40	25	30

i) Draw a bar graph to represent the data.

ii) How many total students were enrolled from class VI to Class X?

The End