Grade - VIII SCHOOL **Mathematics**

Time : 2 hrs 30 min. **ASSESSMENT - I** **MM - 35**

Instructions : Read the question paper carefully. Write neatly and legibly with correct question numbers. Do not over write. Check the answers before submitting the answer sheet.

SECTION - A (each question carry 1 mark)

Q.1) Choose the correct answer.

i) The product of additive inverse and multiplicative inverse of $(-\frac{2}{5})$ is :-

a) 1, b) (-1), c) 0, d) $-\frac{4}{25}$

ii) 648 is a perfect cube.

a) True b) False

iii) Upper limit of the class – interval 75 - 85 is :-

a) 85 b) 75 c) 70 d) 80

iv) The degree of the polynomial $x^2y + x y^2 + 5xy$ is :-

a) 3 b) 2 c) 4 d) 1

v) If d % is the rate of the discount then :-

a) S.P. = $(1 - \frac{d}{100})$ x M.P. b) S.P. = $(1 + \frac{d}{100})$ x M.P.

c) S.P. = $(1 - \frac{d}{100})$ + M.P. d) S.P. = $(1 + \frac{d}{100})$ + M.P.

vi) The co – efficient of y^2 in $(-\frac{2}{5}) \times y^2 z^3$ is :-

a) $(-\frac{2}{5})$ b) $\frac{2}{5}$ c) $\frac{2}{5} \times z^3$ d) $(-\frac{2}{5}) \times z^3$

vii) Diagonals of each of the following bisect each other expect ,

a) rectangle, b) square, c) rhombus, d) kite

viii) A square possesses a rotational symmetry of order _____ about the point of intersection of its diagonals.

a) 2 b) 3 c) 4 d) 5

ix) A _____ of a circle divides the circular region into two parts each called a segment.

a) chord b) tangent c) arc d) radius

x) One and only one tangent can be drawn to pass through a point on the circle.

a) True b) False

SECTION – B (Each carry 2 marks)

(Attempt any 5)

Q.2) Find the difference between a discount of 40 % on Rs. 500 and two successive discounts of 36 % and 4 % on the same amount.

Q.3) A die is thrown once. What is the probability of getting ,

i) a prime number , ii) a composite number,

iii) a number multiple of 2, iv) an odd number.

Q.4) The angles of a quadrilateral are in the ratio 2 : 3 : 7 : 6. Find the measure of each angle of the quadrilateral.

Q.5) Evaluate :- $\sqrt[3]{4\frac{12}{125}}$

Q.6) Verify whether the given statement is true or false :-

$$\frac{(-7)}{24} \div \frac{3}{(-16)} = \frac{3}{(-16)} \div \frac{(-7)}{24}$$

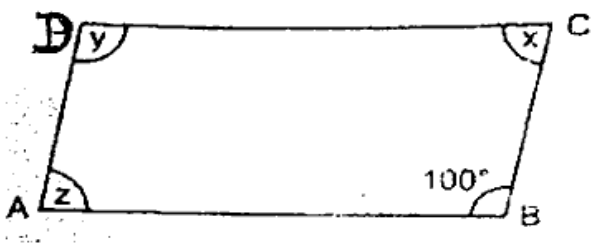
Q.7) Draw a circle with centre O and radius 4.5 cm. Draw a chord AB of length 5.4 cm. Indicate by marking points X and Y , the minor arc AYB of the circle. Shade the major segment of the circle.

SECTION – C (Each question carry 3 marks)

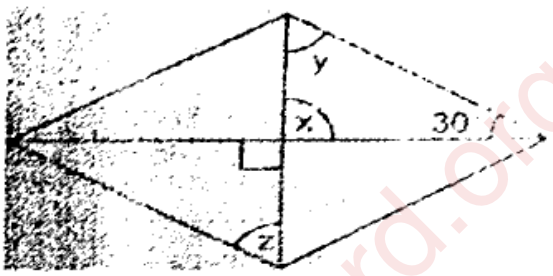
(Attempt any 5)

Q.8) Consider the following parallelograms. Find the values of x,y and z.

a)



b)



Q.9) Add :- $(x^3 - 6x^2y + 7xy^2 + y^3)$; $(2x^2y - 7y^3)$ and $(6y^3 - 5x^3 + 4x^2y - 2xy^2)$.

Q.10) In an examination, Preeti scored 60 out of 75 in science, 84 out of 100 in mathematics, 36 out of 50 in Hindi and 30 out of 45 in English.

i) In which subject her performance is worst ?

ii) In which subject her performance is the best ?

Q.11) Manoj sells two watches for Rs. 5865 each, gaining 15% on the one and losing 15% on the other . Find his gain or loss per cent on the whole transaction.

Q.12) Construct a Δ XYZ such that XY = 3.5 cm and angle X = angle Y = 65°. Draw the lines of symmetry for this triangle.

Q.13) a) 4096 plants are to be planted in a garden in such a way that each row contains as many plants as the number of rows. Find the number of rows and the number of plants in each row.

b) Find 10 rational numbers between $\frac{(-3)}{4}$ and $\frac{5}{6}$.

Q.14) Complete the table given below :

Class - interval	Class – size	Class - mark
50 - 55		
55 – 60		
60 - 65		
65 - 70		
70 - 75		
75 - 80		