SCHOOL BASED ASSESSMENT 2024-25

Mathematics Grade 7

Mid-Term

Objective: 10 MCQs (10x1.5=15 Marks) and Subjective: 35 Marks, Total: 50 Marks , Time = 1 Hour 30 minutes

School Name: _____

Student Name : _____ Roll Number : _____ Section : _____

OBJECTIVE PART(MCQs)

Question No.1 : $(3a - b)^2$ **is equal to:**

(a) $9a^2 + 2ab + b^2$ (b) $9a^2 - 6ab + b^2$

(c) $9a^2 - 6ab - b^2$ (d) $9a^2 + 6ab - b^2$

Question No.2 : The point $(-3, -6)$ lies in the quadrant:

(a) I   (b) II

(c) III   (d) IV

Question No.3 : The solution of linear equation $5(2x - 1) = 15$ is:

(a) 2   (b) 3

(c) 4   (d) 5

Question No.4 : The equation of the statment "cost of 5 pencils and 8 books is Rs 1250" will be:

(a) $5y - 8y = 1250$ (b) $5x - 8x = 1250$

(c) $5x - 7x = 1250$ (d) $5x + 8y = 1250$

Question No.5 : Meters in 2.1km are:

(a) 2000m   (b) 2100m

(c) 21000m   (d) 22000m

Question No.6 : 108km/h in m/s will be:

(a) 30m/s   (b) 31m/s

(c) 32m/s   (d) 33m/s

Question No.7 : A train covers a distance of 140 km in 2 hours, its average speed is:

(a) 70 km/h   (b) 140 km/h

(c) 150 km/h   (d) 280 km/h

Question No.8 : The circumference of the circle with radius 5 cm is:

(a) 5π cm   (b) 10π cm

(c) 15π cm   (d) 25π cm

Question No.9 : The area of given figure is:
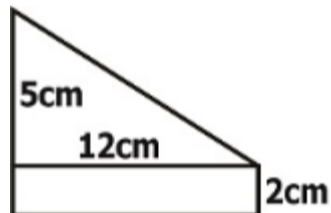
(a) $20\ cm^2$ (b) $24\ cm^2$

(c) $30\ cm^2$ (d) $54\ cm^2$

Question No.10 : The shortest distance of fixed point A from the given line is:
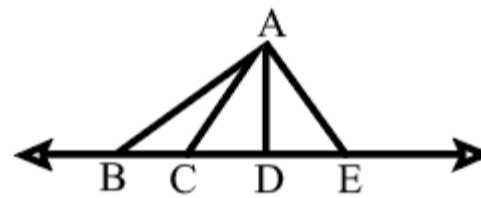
(a) $\overline{AB}$ (b) $\overline{AC}$

(c) $\overline{AD}$ (d) $\overline{AE}$

SUBJECTIVE PART(CRQs)

Question No: 11

a) Factorize $4xy^2 + 6y^3 - 2y^2 - 12xy^3$ **(5 marks)**

b) Solve the equation $8x - 13 = 4(x - 2)$ **(5 marks)**

Question No: 12

a) The speed of a train is 52 km/h in 5 hours and 73 km/h in next 2 hours.Find the avrage speed of the train in 7 hours. (5 Marks)

b) Construct an equilateral triangle ABC of side length 4cm. (5 Marks)

Question No: 13

a) A bus starts travelling at $6 : 15$ **a.m. and stops at 9:50 p.m. Find the journey time.   (8 Marks)**

b) If the radius and height of a cylinder are 5cm and 12cm respectively, then find the volume of the cylinder. (7 marks)