

S.M MATHEMATICS ZONE

MOCK TEST-2018

CLASS-VII

SUBJECT: MATHEMATICS

FULL MARKS: 50

TIME: 1 HOUR 30 MINUTES

1. Answer the following: (10*1=10)

- (a) Which of the following statement is false: (I) $-7+(-6)=-13$ (II) $-5+1=4$ (III) $2+(-1)=1$ (IV) $8+(-9)=-1$
- (b) What will be the multiplicative inverse of -8: (I) 8 (II) $1/8$ (III) $-1/8$ (IV) 0
- (c) What will be the ans of this $10/0$ gives: (I) 0 (II) 10 (III) 1 (IV) undefined
- (d) Which of the follwing fraction has numerator 5: (I) $2/5$ (II) $5/7$ (III) $12/7$ (IV) $36/5$
- (e) What is the value of $29.35-4.56$: (I) 23.75 (II) 16.35 (III) 16.25 (IV) 24.79
- (f) Median of the data : 13,16,12,14,19,12,14,13,14 is : (I) 14 (II) 19 (III) 12 (IV) 13
- (g) What is the area of the triangle: (I) base* height (II) $\frac{1}{2}$ base * height (III) $\frac{1}{2}$ (base+height) (IV) none of this
- (h) The circumference of circle whose diameter is 14 cm will be: (I) 44 cm^2 (II) 88 cm^2 (III) 44 cm (IV) 88 cm
- (i) Write the expression for the statement: the sum of three time x and 11: (I) $x+3+11$ (II) $3x+11$ (III) $x+11$ (IV) $x+14$

- (j) The value of the expression $2a-2b-4+5-a$ at $a=1$, $b= -2$: (I) 10 (II)-2 (III) 12 (IV)-4

2. Solve the word problems: (5*2=10)

- (I) Divide Rs 16250 among A, B and C in the ratio 5:7:13.
(II) Two numbers are in the ratio 5:8 and their difference is 12. Find the numbers.
(III) If the cost of $25/4$ m of cloth is $₹ 1421 \frac{7}{8}$, then find the cost of 1m of cloth.
(IV) Ankita bought a mobile phone for Rs 2350 and sold it for Rs 2538. Find her gain and gain percent.
(V) The selling price of 12 pens is equal to the cost of 14 pens. Find her gain per cent.

3. Simplification: (4*2.5=10)

- (A) $X-[2x-(3x-4/7)]=(4x-27)/3-3$
(B) $(3x-2)/7-(5x-8)/4=1/14$
(C) $2/3(3x-2)=4/5(2x-3)-4/3$
(D) $(X-2)/3+(X-3)/4=(X-1)/2$

4. Find the value of the following expression: (3*2=6)

- (a) $2ab+3bc-5ca$, $4bc-3ab+7ca$, $2ca-ab-5bc$
(b) $5x+3y-8z$, $2y-3x+5z$, $z-7y-2x$
(c) $2abc-a^2-b^2$, b^2+a^2-2abc , c^2+a^2+4abc

5. Solve the following word problems: (7*2=14)

- (a) The perimeter of a rectangle is $16x^3-6x^2+12x+4$. If one of its sides is $8x^2+3x$, find the other side.

- (b) The speed of sound in air is about 330m/s. express the speed in km/h. how long will the sound take to travel 99 km?
- (c) A racing car covered 600 km in 3 hours 20 min. find the speed in m/s. how much distance will the car cover in 50 secs?
- (d) A can do a piece of work in 6 days and B can do it in 8 days. How long will they take to complete it together?
- (e) A truck uses 20 litres of diesel for 240 km. how many litres will be needed for 1200 km?
- (f) A train travels 700 metres in 35 sec. what is its speed in km/h?
- (g) The cost price of an article is Rs 1200 and selling price is $\frac{5}{4}$ times of its cost price. Find:
- (I) Selling price of the article.
 - (II) Profit or loss as per cent.