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**K.P.C. PUBLIC SCHOOL, KHARGHAR**

**Assessment II 2022-2023**

**GRADE: VII MARKS: 50**

**SUB: MATHS TIME: 2 HRS**

**Q1: choose the correct answer: 6M**

1. Write the standard form of $\frac{-44}{-77}$
2. $\frac{-44}{-77}$ b. $\frac{44}{77}$ c.$\frac{-4}{-7}$ d. $\frac{4}{7}$
3. Write the multiplicative inverse of $\frac{-14}{29}$
4. $\frac{29}{-14}$ b. $\frac{14}{29}$ c.$\frac{-29}{14}$d.$\frac{-14}{29}$
5. In ∆RST, RS=ST=RT=5cm. Identify the type of triangle.
6. Scalene triangle b. Equilateral triangle c. Isosceles triangle d. None of these
7. Median is a line segment joining a vertex of a triangle to the\_\_\_\_\_\_\_\_ of the opposite side.
8. Midpoint b. side c. Angle d. Vertex
9. Complement of 65o = \_\_\_\_
10. 115 o  b. 90 o c. 0 o d. 25 o
11. 360 o is a \_\_\_\_\_\_\_\_\_\_ angle.
12. Zero b. Reflex c. Complete d. Obtuse

**Q2: solve the following activity: 8M**

1. Compare $\frac{5}{7} and\frac{6}{13}$

 B C

1. Look at the figure and answer the following:
2. ∠DOE is adjacent to \_\_\_\_\_ and \_\_\_\_\_\_ A O D
3. ∠AOE and ∠DOE are forming a \_\_\_\_\_\_\_

 E

1. Find out whether 3,4 and 5 are Pythagorean triplets?
2. Find the measure of the angles in the adjoining triangle

**Q3: Evaluate the following: [ANY 3] 9M**

1. Add $\frac{17}{20} and \frac{-4}{30}$
2. Write any 6 rational numbers between $\frac{-5}{7}$ and $\frac{6}{11}$
3. Find the measure of ∠A, ∠B, ∠C, ∠D and ∠E in the given figure if *x* ∥ *y and y* ∥ *z*
4. Find the value of *x* using Pythagoras theorem

 6cm *x*

 8cm

**Q4: Evaluate the following: [ANY3] 12M**

1. Simplify $\frac{-12}{25}+\frac{3}{-5}-\frac{4}{27}$

1. A ladder, 45 ft tall, when set against a wall of a house, just reaches the window at a height of 27 ft. How far is the lower end of the ladder from the base of the wall?
2. In the given figure, two angles ∠ABC and ∠XYZ A X

 are given with measures 60° and 90 degrees respectively.

1. Find the complement of ∠ABC.

 600 900

 b. Find the supplement of ∠ABC and ∠XYZ. B C Y Z

c. Are ∠B and ∠Y supplementary?

 d. Do ∠B and ∠Y form a linear pair?

1. Find the value of *x* in the adjoining figure

 B

 (5x + 10) 0 (148 - 4x)0

A O C

**Q5: Solve the following: [ANY 3] (15M)**

1. Simplify $\left(\frac{1}{3}-\frac{1}{4}+\frac{1}{5}-\frac{1}{6}\right)÷\left(\frac{2}{5}-\frac{5}{9}+\frac{3}{5}-\frac{7}{18}\right)$
2. A big pizza was ordered for a birthday party. Ganesh ate $\frac{1}{2}$ of the pizza, Rohan ate $\frac{1}{4}$th and Girish ate $\frac{1}{5}$th of it. What fraction of pizza was eaten and what fraction was left to be finished?
3. A tree broke by a windstorm. However, it did not break into two pieces but bent so that the top of the tree touched the ground 3 m away from the foot of the tree. The point where the tree broke was 4 m above the ground, find the total height of the tree before it broke.
4. In the given figure, *l* and *m* are two lines which intersect at a point O, forming four angles a, b, c, d.

a. Name two pairs of equal angles.

b. Name four pairs of adjacent angles. *a*

c. Name four pairs of angles forming a linear pair.

 *d b*

d. Find the supplement of *a* if a = 100°. C

e. If a = 105°, then find the measure of b, c and d.