

ST. XAVIER'S SENIOR SECONDARY SCHOOL, DELHI-54

Class : 7

FINAL UNIT TEST 2014-2015

Marks : 20

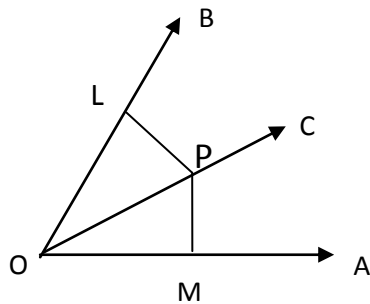
Date : 14.11.14

MATHS

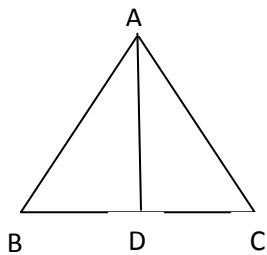
Time : 45 Mins.

Note: All the answers to be done on the answer sheet.

- I. Fill in the blanks : ($\frac{1}{2} \times 6 = 3$)
- a) Two circles are congruent if their _____ are equal.
- b) If $\triangle ABC \cong \triangle PQR$ then the side corresponding to side $\overline{BC} =$ _____
- c) The coefficient of a in $-ab^2c$ is _____
- d) If we subtract $-2y$ from $5y$ we get _____
- e) The value of $x^2 - 7$ if $x = 4$ is _____
- f) The degree of the expression $x^2y^2z^2 - 6xyz$ is _____
- II. Add the following expressions : ($1\frac{1}{2}$)
- $x - 3y + 4z, -2x + y - 8z, 5x - 2y - 3z$
- III. Subtract $x^2 - y^2$ from $2x^2 - 3y^2 + 6xy$ ($1\frac{1}{2}$)
- IV. Find the product :
- a) $-6x^2yz \times (\frac{2}{3} xy^2z^2)$ ($1\frac{1}{2}$)
- b) $-3a^2 \times (2abc^2 - 4a^2bc - 5ab^2c)$ (2)
- V. If $P = 2a - 3b + 4c$ and $Q = a + 3b - 4c$ then find the value of $2P - Q$. ($2\frac{1}{2}$)
- VI. In the given figure $\overline{PL} \perp \overline{OB}$ and $\overline{PM} \perp \overline{OA}$ such that $\overline{PL} = \overline{PM}$. Is $\triangle PLO \cong \triangle PMO$?
Give reasons in support of your answer. ($2\frac{1}{2}$)



- VII In an isosceles $\triangle ABC$ $\overline{AB} = \overline{AC}$ and D is the midpoint of \overline{BC} . Prove that $\triangle ADB \cong \triangle ADC$.



- VII. Two line segments \overline{AB} and \overline{CD} bisect each other at point O then prove that
- a) $\triangle AOC \cong \triangle BOD$
- b) $\overline{AC} \parallel \overline{BD}$ (3)

