ST. LAWRENCE HIGH SCHOOL

TOPIC – Theorems on Concurrence

Subject : Mathematics **Class-9** **Second Term** **F. M. 15**

WORKSHEET NO. - 3 **Solutions** **Date: 14.11.2020**

Q.1) Choose the correct option: **(1x15=15)**

i) If the length of the circumradius of a right angled triangle is 7.5 cm then the length of its hypotenuse is
c) 15 cm

ii) *I* is the incentre of Δ ABC. If /BIC = 130° then measure of /BAC is
d) 80°

iii) The internal bisectors of /B and /C of Δ ABC, intersect at the point O. If /A = 80° , then measure of /BOC is
c) 130°

iv) In Δ ABC , /B = 90°. If AB = 24 cm and BC = 7 cm, then the length of the circumradius of the triangle is
d) 12.5 cm

v) O is the circumcentre of Δ ABC. If /BOC = 80°,then /BAC is
a) 40°

vi) O is the orthocentre of Δ ABC. If /BAC = 40°,then /BOC is
b) 140°

vii) O is the incentre of Δ ABC. If /BOC = 116°,then measure of /BAC is
c) 52°

viii) O is the circumcentre of Δ ABC. If /ABC = 72°, /ACB = 68°, then measure of /OBC is
c) 50°

ix) O is the orthocentre of Δ ABC. If /BOC = 100°,then measure of /BAC is
d) 80°

x) The length of the side of an equilateral triangle is 6cm. Then its circumradius is
c) 2√3 cm

xi) The inradius of an equilateral triangle is what fraction of its height?
c) $1/3^{rd}$

xii) The circumradius of an equilateral triangle is what fraction of its height
b) $2/3^{rd}$

xiii) In Δ ABC, the internal bisector of /ABC and the external bisector of /ACB intersect at O. If /BOC = 40°, then the measure of /BAC is
b) 80°

xiv) The point equidistant from the sides of a triangle is called _____
b) Incentre

xv) The point equidistant from the vertices of a triangle is called _____
d) Circumcentre

-Chaitali Roy