ST. LAWRENCE HIGH SCHOOL

TOPIC – Theorems on Concurrence and Construction

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

WORKSHEET NO. - 4 **Solutions** **Date: 16.11.2020**

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

i) G is the centroid of Δ ABC. If area of Δ GBC is 12 sq. cm, then th area of Δ ABC is
c) 36 sq. cm

ii) If the length of circumradius of a right angled triangle is 5cm, then the length of hypotenuse is
b) 10 cm

iii) The length of the circumradius of the triangle having sides 9cm, 12cm and 15 cm is
d) 7.5 cm

iv) O is the circmcentre of the Δ ABC. If /BOC = 100°,then measure of /BAC is
a) 50°

v) In the Δ ABC, AD is a median and G is the centroid. If AG = 5 cm, then measure of GD is
d) 2.5 cm

vi) O is the incentre of Δ ABC. If /BAC = 30°,then measure of /BOC is
c) 105°

vii) In Δ ABC, /B is rt.angle. D is the midpoint of the side AC. If AB = 6cm and BC = 8cm, then length of BD is
c) 5cm

viii) G is the centroid of Δ ABC. If AG = 8cm, then length of the median through A is
b) 12 cm

ix) G is the centroid of Δ ABC, and if CF is a median, then CF : CG is
a) 3 : 2

x) The incentre of a Δ ABC is O. If /ABO = 40° and /ACO = 30°, then measure of /BOC is
a) 110°

xi) In Δ ABC , O is the orthocenter. If /BAC = 70°, then measure of /BOC is
a) 110°

xii) O is the orthocentre of Δ ABC . If /BOC = 120° , then measure of /ACO is
a) 30°

xiii) At least how many conditions are needed to construct a triangle?
b) 3

xiv) At least how many conditions are needed to construct a quadrilateral?
d) 5

xv) The point of intersection of the medians of a triangle is called _____
c) Centroid

-Chaitali Roy