**SAINTGITS COLLEGE OF APPLIED SCIENCES**

 **PATHAMUTTOM, KOTTAYAM**

**FIRST INTERNAL EXAMINATION, FEBRUARY 2020**

**Department of Business Administration, Semester II**

**MATHEMATICS FOR MANAGEMENT**

Total : 50 **marks** Time: **2 hours**

**Section A**

*Answer any 5 questions. Each question carries 2 marks.*

1. Find the distance between the points (9, -1) and (-2, 10)

2. Find the mid point of the line joining the points (0, 0) and (6, 8)

3. Find the centroid of the triangle with vertices (3, 2), (-1, -4) and (-5, 6)

4. Define section formula

5. Find the slope of the line joining the points (4, 2) and (5, -3)

6. Write down the equation of the line parallel to x axis and at a distance of 8 units from it

**Section B**

*Answer any 5 questions. Each question carries 5 marks.*

7. Prove that the triangle with vertices (7, 3), (5, 5) and (-1, -3) is isosceles

8. Show that the points (11, 3), (-1, -15), (-13, -7) and (4, -14) lie on a circle whose centre is

 (-1, -2)

9. If the point (a, -4) is at a distance of 10 units from the point (-8, 2), find the value of a

10. Find the area of the triangle with vertices (3, -7), (-3, 3) and (7, 9)

11. Show that the points (-1, 6), (-10, 12) and (-16, 16) are collinear

12. Write the equation of the line joining the points (-1, 2) and (2, 2)

**Section C**

*Answer any 1 questions. It carries 15 marks.*

13. Find the length of all medians of the triangle with vertices (7, 5), (2, 3) and (6, -7)

14. Find the equation of the line through the point (2, 2) such that the sum of its intercepts

 on the axes is 9



*[Scan QR code for Answer Key]*