King Fahd University of Petroleum and Minerals Department of Mathematics and Statistics

Math-201 Semester-163 QUIZ II

NAME: S.No. ID:

Maximum Marks: 10 Section:07 Time Allowed: 30 minutes

(1) Find the area of the region that lies inside  $r = 3 \sin \theta$  and outside  $r = 1 + \sin \theta$ .

(2) Find an equation of a sphere if one of its diameter has ends (2, 1, 4) and (4, 3, 10).

(3) Let A(2,3,0) and B(1,2,-3) be two points in three dimensional space. Find the point C(a,b,c) if  $\overrightarrow{AC}=2$   $\overrightarrow{CB}$ .

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