


Name:			
Enrolment No:			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, May 2022</b>			
<b>Course: Mobile Mapping</b> <b>Program: B.Tech GIE</b> <b>Course Code: PEGI 4004P</b>		<b>Semester: VIII</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>	
<b>Instructions:</b> <b>All Questions are Compulsory.</b>			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.		Marks	CO
Q 1	Define direct georeferencing in mobile mapping and how is it achieved.	4	CO1
Q 2	Explain the advantage of laser scanning over photogrammetry.	4	CO1
Q 3	List the different categories in which the primary functions of Mobile GIS from client side can be classified.	4	CO3
Q 4	Differentiate between LAN and WAN as GIS communication networks.	4	CO3
Q 5	Define Linear referencing and list its benefits.	4	CO4
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	What is an Inertial measurement unit (IMU) and explain the various the components it can measure. Describe the applications where it is used.	6+4 = 10	CO1
Q 7	An airborne laser scanner has a pulse rate of 20kHz, a scan rate of 50 Hz, a flying height of 1000m and a scan angle of 40 degrees. What is the estimated spacing of pulses along the ground.	10	CO2
Q 8	Illustrate and explain the architecture of Mobile GIS with proper diagram.	10	CO3
Q 9	Briefly summarize the different Mobile GIS protocols.	10	CO3
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q 10	a) Write a note on the advantages of airborne laser systems for terrain mapping.	10	CO2
	b) Explain the process and benefits of Linear referencing in any two real world applications.	10	CO3
Q 11	Describe any two spatial applications detailing the benefits they can achieve from Mobile mapping technologies.	20	CO4