Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Applications of Geoinformatics **Semester: VII**
Program: B. Tech. GIE **Time 03 hrs.**
Course Code: GIEG 404 **Max. Marks: 100**
Instructions:

SECTION A

S. No.		Marks	CO
Q 1	Write the RS derived image and terrain characteristics used for identification of sedimentary rock shale	**4**	**CO2**
Q 2	Give four examples of geomorphology and terrain association	**4**	**CO2**
Q 3	Briefly describe concept and approach of RS & GIS based national project - FASAL	**4**	**CO3**
Q 4	Give empirical relationships of satellite based agricultural drought indices – VCI & TCI	**4**	**CO3**
Q 5	List RS derived indicators used for irrigation system performance evaluation	**4**	**CO3**
	SECTION B		
Q 6	Give brief account of genetic classification of drainage with schematic diagrams.	**10**	**CO1**
Q 7	Write the approaches of use of hyperspectral RS technique in hydrocarbon exploration	**10**	**CO2**
Q 8	List various methods of digital LULC change analysis. Discuss the approach of change vector method of LULC change detection	**3 + 7**	**CO3**
Q 9	Describe briefly with flow diagram, the methodology of national snow cover mapping project using RS satellite data	**10**	**CO3**
	OR		
	Give an account on rainfall - runoff modeling using SCS method utilizing RS inputs and GIS		**CO3**
	SECTION-C		
Q 10	Discuss in details RS based techniques for global monitoring and early warning of volcanic eruption.	**20**	**CO3**
Q 11	Draw the flow diagram of methodology of national wetland mapping project, and approach of flood forecasting modeling using RS & GIS	**10 + 10**	**CO3**
	OR		
	Describe the objectives, data layers available in NUIS (National Urban Information System) and flowchart of methodology of NUIS		**CO4**