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SEAT No. _____ SARDAR PATEL UNIVERSITY

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T.Y.B.Sc.6th SEMESTER EXAMINATION

2nd APRIL 2018, Monday

10.00 AM to 1.00 PM

Oceanography & Remote Sensing (US06CENV04)

Total Marks-70

Q.1 Select the correct answer and write in answer sheet 10

1. Between _____ depths, the temperature declines rapidly throughout much of the ocean.
a. 2000 & 4000 m b. 100 & 200 m c. 200 & 1000m d. 500 & 6000m
2. The _____ is an underwater mountain range.
a. continental slope b. mid-ocean ridge c. continental shelf d. guyot
3. Tides may not be affected by _____ feature.
a. Oceanic physiographic b. Tidal Organism c. Sun d. Moon
4. In hydrology, $P = R + L$ where, R stands for _____.
a. run-off b. reservoir c. restoration time d. retaining time
5. Hydrological experiments were completed on cotton during 1994 by _____.
a. Friend b. Bunce c. Korner d. Hunsaker
6. There are mainly _____ types of sensors.
a. five b. four c. three d. two
7. The continuum of solar radiation is divided into several division which is known as _____.
a. bands b. scales c. light d. platform
8. Wetness index for soil moisture was tried in 1984 by _____.
a. Imhoff b. Nag & Vande c. Crist & Cicone d. Griend
9. _____ is a spatial feature of raster data model
a. polygon b. square c. triangle d. rectangle
10. Visual Interpretation for land use/land cover comprises of _____ steps.
a. 4 b. 5 c. 6 d. 7

(P.T.O.)

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Q.2	Answer the following in brief (any ten)	20
	1. Explain the term Oceanography.	
	2. Draw the schematic bar diagram of distribution of world water bodies	
	3. Write in brief about continental margin	
	4. Explain Hydrology.	
	5. How infiltration works in hydrology?	
	6. What is hydraulic conductivity?	
	7. How data acquisition helps in remote sensing?	
	8. Write a short note on principle of Remote Sensing.	
	9. Define the term remote sensing	
	10. Discuss in brief application of remote sensing in agriculture	
	11. Write a note on uses of GIS in remote sensing	
	12. Prepare a flow chart for methodology for soil mapping using Remote Sensing.	
Q3.	Discuss temperature and salinity of ocean water.	10
	OR	
Q3.	a. Write a note on tidal origin with its types	5
	b. Give a brief account on continental shelf	5
Q4.	a. Discuss runoff and groundwater as an element of hydrology	5
	b. Explain the world hydrological cycle.	5
	OR	
Q4.	a. Give a note on Darcy's law	5
	b. Write a note precipitation in hydrology	5
Q5.	a. Write a note on Indian Imaging system.	5
	b. Give a note on atmospheric window.	5
	OR	
Q5.	a. Explain about sensors and satellites.	5
	b. Discuss spectral signature with suitable diagram.	5
Q6.	a. Explain the components and data models of GIS briefly.	5
	b. How remote sensing helps in hydrology?	5
	OR	
Q6.	Discuss Digital image processing used in land use/land cover.	10