

M.Sc Sem-3 Examination

503

Geoinformatics (EC)

Time : 2-30 Hours]

November-2024

[Max. Marks : 70]

Q-I	A define geological structure and explain with 5 points on each - significance of faults and folds. Provide diagram for any 5 folds types with names	7
	B define an outcrop, state its significance, provide the geometric diagram of an outcrop and explain any two in detail (with diagram)	

or

Q-I	A what is structural analysis, state its types and explain each in detail (fig must wherever needed)	7
	B write a note on the reflectance properties of rocks, provide reflectance curves for any three major minerals.	

Q-II	A define lithology, state any (3) significant lithological properties of sandstone and write a note on the role of remote sensing in lithological mapping and analysis	7
	B write detailed comparative note on the optical and SAR technology in lithology and vegetation monitoring. Name 3 sedimentary, igneous and metamorphic rocks	

or

Q-II	A explain with diagram all the elements of remote sensing, explain the role of each	7
	B define scale, state the types of scale (fig must), and write detailed note on the role of scale in geological mapping	

Q-III	A write a note on the significance of remote sensing in understanding the formation of different landscape features (3 features)	7
	B define polarization, atmospheric windows, analogue, ground station, composite image, backscatter, radar shadow, scanner with its types, adsorption, absorption	

or

Q-III	A define volcano and explain with diagram the entire process of volcanism. Explain in detail the cinder cone volcano and a caldera (figures must for each)	7
	B define ablation, abyssal plain, ridge, antecedent drainage, catchment, watershed, love waves, resurgent domes, tephra, lagoon	

Q IV	A write a note on the importance of gravity and geophysical surveys in geology.	7
	B write a note on the significance of surface and subsurface investigations for explorations	

or

(P.T.O)

Q-IV	Awrite a detailed note on the role of GIS in data generation, integration and analysis	7
	B.write a note on the importance and applications of refraction and reflection methods	7

Q V	MCQs attempt any seven out of twelve	14
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- 1) Define etchplanation
- 2) _____ texture is very common in intrusive igneous rocks
 - a) Aphanitic
 - b) Phaneritic
 - c) Pyroclastic
 - d) Porphyritic
- 3) Define aphanitic texture
- 4) define eutectic point
- 5) define foreland basin
- 6) State the unit of viscosity
- 7) Define Anatexis
- 8) Define panplanation
- 9) Define estuary
- 10) Unit of radiant energy is _____
 - a) Joule
 - b) Watt
 - c) Joule/second
 - d) Joule/watt
- 11) Define MAARS
- 12) Define fumaroles