2811E831   Candidate's Seat No :_____

M.Sc Sem-3 Examination
504
Geoinformatics (EB-Agri)

Time : 2-30 Hours]   November-2024   [Max. Marks : 70

Q-I	A define carbon sequestration. State all the types of carbon pools and provide the inter-relation flowchart	7
	B write a note on the role, significance and limitations of remote sensing(optical and radar with examples of datasets) in assessing leaf area index	7

or

Q-I	A write a note on the importance remote sensing(optical and radar with examples of datasets) in mapping and monitoring of mangroves (with Indian region example). Specifications of datasets is must.	7
	B write a note on the comparative aspects between NDVI, GNDVI, EVI, SVI and TVI	7

Q-II	A define forest stock, forest stock mapping, state the types of forests, and write in detail why forest stock mapping is important	7
	B write in detail on the role of remote sensing in monitoring, mitigating and adapting to the global climate change scenario with special reference to Indian forests	7

or

Q-II	A write a note on the significance and implications of deciphering individual species types and its growth with special emphasis to Indian forest	7
	B write in detail on the advantages and limitations of remote sensing techniques (optical and radar, with eg. of datasets) in assessing impact of forest fires	7

Q-III	A write in detail on the underlying causes of tropical deforestation, its impact on the environment and the ways to mitigate its impact	7
	B define risk zonation and write in detail on the importance of forest fire risk zonation mapping	7

or

Q-III	A write a note on the role and impacts of forestry in society (considering ecology, biodiversity and environment)	7
	B what is taxonomy, forest taxonomy and state the significance of taxonomy.	7

Q IV	A what is water logging, state its causes, impacts and the methods to prevent it	7
	B define watershed and write a detailed note on the role of remote sensing and GIS in watershed monitoring and management	7

or

(P.T.O)

Q-IV	A write a note on the advantages and disadvantages of river valley projects with special emphasis on Indian rivers. Also state the importance of proper planning.	7
	B. explain the significance of GIS in water resource engineering studies	7

QIX	Attempt any seven out of twelve	14

1) Full form of GtC

2) state all the names of the regions covering tropical forests

3) "Tiaga" are also known as _____ and _____ forests
   a) boreal and sub-tropical
   b) boreal and snow
   c) snow and coniferous
   d) boreal and deciduous

4) Give any 5 examples of land biomes
5) state the full form of LIDAR and SONAR
6) What is an open forest

7) Define catastrophe

8) Define plant physiognomy

9) Define "binomen"

10) State the full form of "radar"

11) Define crown fires

12) State the wavelength region of gamma rays in nanometers