Total No. of Printed Pages—3

6 SEM TDC GEOH (CBCS) C 14

2024

(May)

GEOLOGY

(Core)

Paper : C–14

(Remote Sensing and GIS and GPS)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—1

(Photogeology)

(*Marks* : 11)

1. Define aerial photography. Mention different types of aerial photographs. Write about the scale of aerial photographs. 1+2+2=5

2. What do you understand by stereoscopy? Write about the principles of stereoscopy. 3

3. What are the elements of air photo interpretation? Describe with examples. 3

UNIT—2

(Remote Sensing)

(*Marks* : 17)

4. Define digital image processing. Elaborate the geometric and radiometric corrections. 1+4=5

5. Write short notes on any *four* of the following : 3×4=12

(a) Remote sensing

(b) Electromagnetic spectrum

(c) Digital elevation model

(d) Image classification

(e) Satellites and their characteristics

(f) Data formats

UNIT—3

(Geographic Information System)

(*Marks* : 16)

6. Define GIS. What are the components and working mechanism of GIS? 1+4=5

7. Write short notes on any *two* of the following : 2½×2=5

(a) GIS data types

(b) Georeferencing

(c) DEM

8. Explain datum, coordinate systems and projection systems. 6

UNIT—4

(GPS)

(*Marks* : 9)

9. Write short notes on any *three* of the following : 3×3=9

(a) GPS

(b) IRNSS

(c) GLONASS

(d) NavIC

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