SECOND SEMESTER B.A./B.Sc. DEGREE EXAMINATION, APRIL 2020

(CBCSS—UG)

Geology

GEO 2C 03—DATA SOURCES OF REMOTE SENSING AND GIS

(2019 Admissions)

Time : Two Hours   Maximum : 60 Marks

Answer **all** *questions.*

Draw neat sketches wherever necessary.

Section A

I. Answer in one *or* two sentences. Each question carries 2 marks :

1   Kirchoff's law.

2   Passive remote sensing.

3   Optical remote sensing.

4   Spectral reflectance.

5   Pitch and Yaw.

6   Attitude sensors.

7   GPS.

8   Spectrometer.

9   Hyperspectral imaging.

10   LiDAR.

11   Geodesy.

12   Raster data model.

(Maximum 20 marks)

Section B

II. Write short notes. Each question carries 5 marks :

13   Microwave remote sensing.

14   Types of satellite orbits.

15   Sensor parameters.

16   Methods of scanning in remote sensing.

17   GIS as a multidisciplinary science.

18   Application of GIS in Land Information System.

19   Non-spatial data models.

(Maximum 30 marks)

Section C

III. Write long essay on any *one* of the following. The question carries 10 marks :

20   Describe the different types of remote sensing platforms.

21   Give an account of the various sources of data in GIS.

(Maximum 10 marks)

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Geology

GEO 2B 03—DYNAMIC GEOLOGY AND GEO INFORMATICS

(2019 Admissions)

Time : Two Hours   Maximum : 60 Marks

Answer **all** *questions.*
(Draw neat sketches wherever necessary)

Section A

I. Answer in one *or* two sentences. (Each question carries 2 marks) :

1	Frost action.	2	Barchans.
3	Inselbergs.	4	Moraine.
5	Consequent stream.	6	Knick-point.
7	Karst topography.	8	Water table.
9	Vector data.	10	Overlay functions.
11	EMR.	12	Temporal resolution.

(Maximum 20 marks)

Section B

II. Write short notes. (Each question carries 5 marks) :

13 Factors influencing weathering.

14 Glacial erosional landforms.

15 Drainage patterns.

16 Types of aquifers.

17 Spatial data input in GIS.

18 Application of GIS in mineral exploration.

19 Multispectral Scanning Systems.

(Maximum 30 marks)

Turn over

Section C

III. Write long essay on any of the following. (Each question carries 10 marks) :

20 Describe the geological work of stream highlighting on the erosional and depositional fluvial landforms.

21 Give a brief account of the types of sensors and platforms in remote sensing.

(Maximum 10 marks)