

Total No. of Printed Pages—3

6 SEM TDC GEO M 5

2018

(May)

GEOLOGY

(Major)

Course : 605

(Environmental Geology and Remote Sensing)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—23.1

(Environmental Geology)

(Marks : 24)

1. Write on different causes of flood. What are the structural and nonstructural measures adopted for mitigation of flood in Assam? 4+4=8

Or

Write on the environmental impact due to disposal of hazardous radioactive waste. Mention the methods of their safe disposal.

6+2=8

2. Describe the various agents which cause pollution of surface water. 8

Or

Explain the hazards associated in the coastal region and write on the methods of their mitigation. 8

3. Write briefly on any *two* of the following : $3 \times 2 = 6$

- (a) Impact of open-cast mining
- (b) EIA
- (c) Earthquake preparedness

4. Fill in the blanks : $1 \times 2 = 2$

- (a) A disposable method where solid organic wastes are burnt to convert into residue and gas is called ____.
- (b) If the depths of the focus of earthquakes are within 70 km to 300 km from earth's surface, then they are called ____ focus earthquake.

UNIT—23.2

(Remote Sensing)

(Marks : 24)

5. What is an mss sensor? Describe the parts and working principles of the mss used in early Landsat satellites. $1+7=8$

Or

Write on various types of aerial photographs and about their merits, limitations and applications. 8

6. Describe the distinguishing characteristics of igneous, sedimentary and metamorphic rocks in aerial photographs and remote sensing data. 8

Or

Write an essay on the Indian remote sensing satellites. Describe their sensors and spatial resolutions. 8

7. Write briefly on any *two* of the following : $3 \times 2 = 6$

- (a) Infrared sensor
- (b) GIS data formats
- (c) GPS

8. Fill in the blanks : $1 \times 2 = 2$

(a) ___ sensors can be used during cloudy weather to have information of earth's surface features.

(b) The best season for taking aerial photographs for geological purpose is ___.
