



AF-3591

M.Sc. (Final)
Term End Examination, 2017-18

GEOLOGY

Paper - I

Environmental and Hydrogeology

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 36

Note : Answer **all** questions. All questions carry equal marks. Draw neat sketches wherever necessary.

Unit-I

1. Write notes on the following :

- (a) Global warming caused by CO₂
- (b) Global changes in ecosystem

OR

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(Turn Over)

(2)

Write notes on the following :

- (a) Time scale of global changes in ecosystem
- (b) Climate changes due to afforestation and fossil fuel consumption.

Unit-II

2. Write notes on the following :

- (a) Water logging problems due to canals and reservoirs
- (b) Soil degradation due to use of pesticides and fertilizers

OR

Write notes on the following :

- (a) Palaeotemperature evaluation with ice-cores
- (b) Contamination of groundwater due to industrialization

Unit-III

3. Write notes on the following :

- (a) Renewable and non-renewable groundwater resources
- (b) Global earthquake belts

OR

(3)

Write notes on the following :

- (a) Siesmic-hazards
- (b) Sp. yield, Sp. retention, Porosity of rocks

Unit-IV

4. Write notes on the following :

- (a) Confined and unconfined aquifers
- (b) Problems of arsenic and fluoride in drinking water

OR

Write short answers of the following :

- (a) Hydrostratigraphic units
- (b) Methods of pumping tests

Unit-V

5. Write short answers of the following :

- (a) Artificial recharge of groundwater
- (b) Groundwater legislation

OR

Write short answers of the following :

- (a) Types of wells
- (b) Geophysical methods used in groundwater explorations
