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1 SEM TDC GEOH (CBCS) C 1

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(March)

GEOLOGY

(Core)

Paper : C-1

(Earth System Science)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

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

UNIT—1

(Universe and Solar System)

(Marks : 8)

1. Write True or False (any five) : 1×5=5

- (a) Muon is an example of quark.
- (b) First element appeared in the universe after Big Bang is Helium.
- (c) Ganymede is the largest natural satellite of our solar system.

(2)

- (d) TON 618 is the supermassive black hole residing in our galaxy.
 - (e) Oort cloud is the belt of planetesimal debris lying at the edge of our solar system.
 - (f) Dark age lies between recombination and the formation of the 1st star.
 - (g) Baryons are inclusive of Hadrons.
2. Write a short note on any *one* of the following :
- (a) Asteroid
 - (b) Grand unification epoch
 - (c) Nucleosynthesis

3

UNIT—2

(**Earth System**)

(Marks : 10)

3. Write explanatory notes on any *two* of the following : 5×2=10
- (a) Earth's magnetic field and magnetosphere
 - (b) Theories of formation of earth
 - (c) Discontinuities of earth's interior

UNIT—3

(Introduction to Geology)

(Marks : 35)

4. Write about the different processes of rock weathering. 6
5. Write briefly on any *three* of the following : 3×3=9
- (a) Coriolis effect
 - (b) Heat budget of earth
 - (c) Uniformitarianism
 - (d) Soil profile
6. Write about the physiographic divisions of India. 5
7. Write about the geomorphic features of glacial environment. 5

Or

Write about the geomorphic features of coastal environment.

8. Answer in short any *two* of the following : 5×2=10
- (a) Write about the erosional activities of wind.

- (b) Write about the difference between gradualism and catastrophism.
- (c) Write about the significances of different stratigraphic studies.
- (d) Compare ocean current and sea waves.
