

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPF-2213

M.Sc. (Final) Examination, 2022

GEOLOGY

Paper - VI

(Sedimentology and Petroleum Geology)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) Describe Heavy Minerals.
- (ii) Describe modes of Sediment Transport.
- (iii) Discuss relation between porosity and permeability.

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- (iv) Describe Isopach maps.
- (v) Describe settling velocity.
- (vi) Differentiate Breccia and Conglomerate.
- (vii) Describe Reservoir rocks.
- (viii) Describe cross bedding.
- (ix) Describe lithification and diagenesis.
- (x) Describe oil well logging.

Section-B

2. Discuss the textures of clastic rocks.

Or

Describe process of formation of clastic sedimentary rocks.

3. Give the outline of marine environment of sedimentation.

Or

Discuss the principles and techniques of petroleum exploration.

4. Discuss in detail the Basin analysis.

Or

Discuss the continental sedimentary environment.

5. Draw suitable diagram indicating top, bottom and paleocurrent patterns of the following sedimentary structures :

- (i) Current bedding
- (ii) Graded bedding
- (iii) Ripple marks

Or

Discuss the organic structures of sedimentary rocks.

6. Discuss the geology of petroliferous basins of India.

Or

Discuss non-clastic sedimentary rocks.

Section–C

7. Discuss in detail the trace fossils.
8. Discuss the classification of Sedimentary Rocks.
9. Discuss the characteristic features of depositional facies of fluvial sedimentary environment.
10. Discuss types of Reservoirs of Oil and Gas.
11. Discuss the petroleum deposits of the world.