

Total Pages—5

UG/III/GEOL/H/VI/18(New)

2018

GEOLOGY

[Honours]

PAPER –VI

Full Marks : 90

Time : 4 hours

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their
own words as far as practicable*

Illustrate the answers wherever necessary

[NEW SYLLABUS]

GROUP – A

(Stratigraphy)

1. Answer any *five* of the following : 5 × 5
- (a) What is "Index fossil" ? Describe its importance ? 5

(Turn Over)

- (b) What is intertrappean ? 5
- (c) (i) Define the term 'facies'.
(ii) Explain the terms, 'aggradation',
'progradation' and 'retrogradation'. 1 + 4
- (d) Write a short note on Banded Gneissic
complex ? 5
- (e) (i) What is bio-stratigraphic unit ?
(ii) What is acme biozone ? Explain why
this biozone do not provide a reliable
means of time stratigraphic correlation.
1 + 4
- (f) Briefly discuss the principles of radiometric
dating of geological samples. Name one
mineral each, that is used for Rb-sr and
U-Pb dating. 4 + 1
- (g) Briefly describe the Jurassic stratigraphy of
Kutch. 5
- (h) Write a short note on Closepet Granite ? 5

(3)

2. Answer any two of the following : 10×2

(a) Give an account of Cuddapah Super Group of rocks with reference to its mineral wealth ? 10

(b) (i) Write about the Talchir formation of Gondwana.

(ii) Write about the evidences of marine influence in Barren Measure formation of Gondwana. $6 + 4$

(c) (i) Write a short note on Jayantia Group in Assam.

(ii) Write down the sedimentation history of Assam basin. $5 + 5$

(d) Describe the stratigraphic succession of Singhbhum craton ? 10

GROUP – B

(*Economics Geology*)

3. Answer any *five* of the following : 5×5

(a) What is Skarn ? Describe associated ore deposits ? 5

- (b) (i) What is residual deposit? Give example.
(ii) Give examples of sedimentation deposits and evaporation deposits. 3 + 2
- (c) Write a short note on Porphyry copper deposit. 5
- (d) (i) What is Mn-nodule?
(ii) Write about the genesis of sedex deposit. 1 + 4
- (e) Describe stratiform and strata bound deposit. 5
- (f) Narrate the unconformity associated uranium deposits. 5
- (g) Describe plant as indicators. 5
- (h) Write about channel sampling method for vein type deposit. 5
4. Answer any two of the following : 10 × 2
- (a) (i) Describe the petroleum occurrence at Bombay High.

(5)

- (ii) Write a note on primary migration of petroleum. 5 + 5
- (b) Give the distribution and mode of occurrence of Gondwana coal in India. 10
- (c) Write a brief note on Khetri Copper belt of Rajasthan? 10
- (d) Write short note on : 5 × 2
- (i) Placer deposit
 - (ii) Kimberlites
 - (iii) Chromite deposit
 - (iv) Strategic minerals
 - (v) Supergene enrichment.
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