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**3 SEM TDC GEOH (CBCS) C 6**

**2023**

( Nov/Dec )

**GEOLOGY**

( Core )

Paper : C-6

( **Sedimentary Petrology** )

*Full Marks : 53*

*Pass Marks : 21*

*Time : 3 hours*

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

**UNIT—1**

( Marks : 8 )

1. How are sedimentary rocks formed? Write the role of weathering and transportation in the accumulation and formation of sedimentary rocks. 2+3=5

( 2 )

2. Write a short note on any *one* of the following :

3

(a) Heavy minerals as guide to provenance

(b) Stages of diagenesis

**UNIT—2**

( Marks : 10 )

3. Write notes on the following :

3+3+4=10

(a) Particle shape and fabric

(b) Stalactite and stalagmite

(c) Laminar and turbulent

**UNIT—3**

( Marks : 5 )

4 Write an explanatory note on any *one* of the following :

5

(a) Textural classification of sedimentary rocks

(b) Folk classification of sandstone

( 3 )

**UNIT—4**

( Marks : 18 )

5. What do you understand by the term 'diagenesis'? Describe the physico-chemical factors of sedimentation. Describe the process of compaction and cementation.

2+4+4=10

6. Write short notes on any *two* of the following :

4×2=8

- (a) Lithification and authigenesis
- (b) Walther's law of facies
- (c) Palaeocurrent analysis

**UNIT—5**

( Marks : 12 )

7. Write petrological notes on any *two* of the following :

5×2=10

- (a) Arkose
- (b) Fossiliferous limestone
- (c) Mark and chert
- (d) Arenite

8. Answer the following as directed : 1+1=2

(a) Shale is an \_\_\_\_\_ (argillaceous/  
arenaceous) rock.

( Choose the correct one )

(b) In authigenic mineral, the shape of the  
mineral remains same as earlier.

( Write True or False )

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