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6 SEM TDC GEO M 1

2019

(May)

GEOLOGY

(Major)

Course : 601

(Mining and Engineering Geology)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

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

UNIT—19.1

(Mining Geology)

(Marks : 24)

1. Briefly write about the importance of mining. 2
2. What are the factors that determine the mining method? 2
3. Describe the various stages of activities in modern mining. 4

(2)

Or

Discuss any three problems associated with underground mining and how these problems are managed in the field.

4. Describe the underground mining methods in a weak country rock with suitable diagrams. 4
5. Write explanatory notes on any *three* of the following : 4×3=12
- (a) Mining of placer deposit
 - (b) Ore reserve estimation
 - (c) Breaking of rocks
 - (d) Sub-level stopping

UNIT—19.2

(**Engineering Geology**)

(Marks : 24)

6. What are the objectives of a geologist in mega construction project? 2
7. Mention the properties of rock for engineering construction purpose. 2

8. What geological guidelines you will recommend for construction of an RCC building in a seismically active zone? 4

9. Describe the geological considerations for selection of site and design for a bridge. 4

Or

Discuss on the geological factors that need to be considered for a tunnel construction.

10. Write explanatory notes with suitable diagrams on any *three* of the following :
4×3=12

(a) Landslide and its causes

(b) Highway

(c) Parts of a dam

(d) Crushing strength and shearing strength

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