



C20-MNG-406

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BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER/NOVEMBER—2023

DMNG – FOURTH SEMESTER EXAMINATION

SURFACE MINING

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define the terms (a) surface mining and (b) strip mining.
2. List different stages of surface mining.
3. List different machineries for preparing the ground.
4. Classify the types of shovel used in surface mines.
5. List different parameters connected to drilling of blast holes.
6. Define the term sleeping holes.
7. Define the terms (a) slope angle and (b) angle of repose.
8. List the types of slope failure.
9. Define the term environment.
10. State the purpose of EIA.

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) List any eight merits and eight demerits of surface mining.

(OR)

(b) Explain internal and external dumps.

12. (a) Explain the operation and place of application of dragline with a sketch.

(OR)

(b) Explain the general construction of dumper with neat sketch.

13. (a) Explain the deck charging/deck loading with a sketch.

(OR)

(b) List any eight dangers due to blasting practice in surface mines and its preventive measures.

14. (a) Explain the parameters required for slope design.

(OR)

(b) Explain the methods of preventing slope failures.

15. (a) Explain the relation between environment and ecology.

(OR)

(b) Explain various environmental pollutions (water, air, land pollutions) due to mining operations.

PART—C

10×1=10

- Instructions :** (1) Answer the following question.
(2) The question carries **ten** marks.
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. What is EMP? Explain the salient features of EMP.

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