

C20-MNG-306

7267

BOARD DIPLOMA EXAMINATION, (C-20) OCTOBER/NOVEMBER—2023

DMNG - THIRD SEMESTER EXAMINATION

MINING GEOLOGY

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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.** State the objectives of stratigraphy.
- **2.** State the economic importance of Vindhyan rocks.
- **3.** Define the terms (a) Resource and (b) Reserves.
- **4.** List any three various processes of mineralization.
- **5.** List the equipment required for preliminary prospecting ore deposits.
- **6.** List any three geophysical methods of prospecting.
- **7.** State the different stages of coal formation.
- **8.** State the distribution of oil fields in India.
- **9.** Define the terms (a) Runoff and (b) Infiltration.
- **10.** List any three factors affecting infiltration.

PART—B 8×5=40

Instructions: (1) Answer any **five** 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)* Explain the Gondwana systems distribution classification and state its economic importance.

(OR)

- (b) Explain the stratigraphy of Andhra Pradesh.
- **12.** (a) Explain the metamorphic process of mineralization and list the minerals formed in the process.

(OR)

- (b) Explain the sedimentation and evaporation processes of mineralization.
- **13.** (a) Explain the gravity methods of geophysical prospecting for ore deposits.

(OR)

- (b) Explain the radiometric method of geophysical prospecting for minerals/ore deposits.
- **14.** (a) Explain the In-situ and drift theories of coal seams formation.

(OR)

- (b) Describe the coalfields of India.
- **15.** (a) Explain the hydrological cycle with a sketch.

(OR)

(b) Explain evaporation and evapotranspiration.

Instructions: (1) Answer the following question.

- (2) Each question carries ten marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **16.** Explain the physiographic divisions of India.

