

Register No.:

332

April 2024

Time – Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. Name any three coal mining industries in India.
2. Write about the future growth of coal mining industry in India.
3. Write about bord and pillar method.
4. List out the elements influencing the design of bord and pillar.
5. Write about mechanised extraction of pillars.
6. Write about the systematic supports in pillar extraction.
7. What are the safety measures to be followed in longwall mining?
8. Write short notes on salvaging.
9. Write about gallery blasting method.
10. Write short notes on shield mining.

[Turn over.....

PART – B

11. (a) Explain the different types of mode entry in coal mining with simple sketch.

(Or)

- (b) (i) Explain the different terminologies used in coal mine development.(7)
(ii) Explain the factors influencing the choice of coal mining methods. (7)

12. (a) With simple sketch, explain about room and pillar method.

(Or)

- (b) (i) Compare conventional and continuous mining techniques with simple sketch. (7)
(ii) Explain about panel system with neat sketch. (7)

13. (a) With neat sketch, explain about shaft pillar extraction.

(Or)

- (b) Explain about the surface, underground and face arrangements for stowing with relevant sketch.

14. (a) Explain the machineries used for coal extraction under longwall mining.

(Or)

- (b) Explain the elements influencing the design of longwall mine working.

15. (a) Explain about multi slices, sublevel caving and horizon mining with simple sketch.

(Or)

- (b) Explain the following mining methods:
(i) Hydraulic mining
(ii) Wongawali mining
