

Register No.:

903

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. What is meant by core recovery?
2. Write about bore hole surveying.
3. What is meant by drill index?
4. What is production drilling?
5. List out any three blasting accessories.
6. Mention the points to be considered during storage of explosives.
7. Write about periphery blasting.
8. What is meant by shaft sinking?
9. Write any three differences between primary and secondary blasting.
10. List out any three environmental impacts due to blasting.

[Turn over.....

PART – B

11. (a) Explain the various types of drilling equipments with their merits and demerits.

(Or)

- (b) With simple sketch, explain about directional drilling and state its advantages and disadvantages.

12. (a) With neat sketch, explain about rotary-percussive drilling process.

(Or)

- (b) Explain the different types of drill bits and bit wears with simple sketch.

13. (a) Explain the following blasting agents with its applications.

- (i) ANFO
- (ii) LOX
- (iii) Bulk explosives

(Or)

- (b) Explain the following instrumentations in rock blasting.

- (i) V.O.D probe
- (ii) Vibration monitoring system
- (iii) High speed video camera

14. (a) Explain the controlled blasting techniques with relevant sketch.

(Or)

- (b) Explain the various dangers associated with underground blasting and state their preventive measures.

15. (a) Explain the methods of blasting in surface mines with simple sketch.

(Or)

- (b) Explain about the blasting operation for the following with relevant sketch.

- (i) Dimensional stones
- (ii) Demolition of buildings
- (iii) Road construction
