

897

Register No.:

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 the classification of roads as per Nagpur plan.
2. List out types of pavements.
3. Mention the materials used in Gravel road.
4. Write the advantages of cement concrete road.
5. Define rail. List the various types of rail section.
6. List out the types of sleepers.
7. Define Examination pit.
8. What is crossing? Mention the types of crossings.
9. What are the various types of foundation used for bridges?
10. Write short notes about Elastomer bearings.

[Turn over.....

PART – B

11. (a) (i) Describe the objective of Highway planning. (6)
(ii) Draw a cross section of two lane city road for National Highway. (8)

(Or)

- (b) What are the methods of parking? Explain it with necessary sketch.

12. (a) Write down the construction steps for water bound macadam road.

(Or)

- (b) (i) Compare alternate bay and continuous bay methods of construction of cement concrete roads.(8)
(ii) List out the disadvantages of cement concrete road.(6)

13. (a) (i) What are the types of pre-stressed concrete sleepers? List out the advantages and disadvantages of it.(7)
(ii) Draw the neat sketch of pre-stressed concrete sleepers with salient parts.(7)

(Or)

- (b) Write short notes on anchors and anti-creepers with neat sketch.

14. (a) (i) Explain the purpose of railway station.(7)
(ii) Write the essential arrangements in junction stations.(7)

(Or)

- (b) Explain about improvements in interlocking and signalling by Indian railway.

15. (a) (i) List out the functions of foundation.(4)
(ii) Explain the factors to be considered while selecting the foundation of bridges. (10)

(Or)

- (b) What are the types of wing walls? Explain any two types with neat sketch.
