

206

Register No.:

November 2022

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. Mention the three modes of transportation.
2. What is Nagpur plan?
3. Define road alignment. Mention the basic requirements of an ideal road alignment.
4. What are the various engineering surveys to be carried out before highway alignment?
5. Define (i) loading gauge (ii) construction gauge
6. Define rail. Name the various types of rail section.
7. Define railway station. What are the main types of stations in India?
8. Draw the neat sketch of way side station and mention its types.
9. Write short notes on Caisson foundation.
10. List out the classification of causeway and draw the cross section of any one type.

[Turn over.....

PART - B

11. (a) Explain in detail of advantage of roads.  
(Or)  
(b) Explain in detail of requirement of ideal roads.
12. (a) What are the points to be considered while alignment of road?  
(Or)  
(b) List out the important points collected while doing of reconnaissance survey.
13. (a) Describe the requirements of an ideal rail.  
(Or)  
(b) Describe the different type of rails with neat sketch?
14. (a) (i) Write short notes on engine shed.  
(ii) Describe with neat sketch of water columns.  
(Or)  
(b) (i) Describe traverser with neat sketch.  
(ii) Write short notes on "fouling marks" with neat sketch.
15. (a) What are the factors to be considered while selecting the type of bridge?  
(Or)  
(b) Explain the type of coffer dams with neat sketch.

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