

1523**Code : 15CE54T**Register
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V Semester Diploma Examination, Nov./Dec. 2017**TRANSPORTATION ENGINEERING****Time : 3 Hours]****[Max. Marks : 100**

- Note :** (1) Part – A : Answer any **six** questions. Each question carries **five** marks.
(2) Part – B : Answer any **seven** questions. Each question carries **ten** marks.

PART – A

1. Explain the importance of transportation. **5**
2. What is gradient ? List its objects and types. **5**
3. What are the requirements of a good drainage system ? **5**
4. List the classification of bridges according to all the parameters. **5**
5. Define : Scouring, Free board, Afflux, Cofferdam and Bridge bearing. **5**
6. What is creep ? And list the causes of creep. **5**
7. List the functions of Ballast. **5**
8. What are the objects of signalling ? **5**
9. Define : Runway, Apron, Breakwater, Jetty and Dock. **5**

PART – B

10. Mention the various surveys to be conducted for road alignment and explain briefly preliminary and final location of surveys. **10**
11. Explain the method of construction of WBM road with a neat sketch. **10**
12. (a) Compare Flexible pavement and Rigid pavement. **10**
(b) What are the objects of Road Arboriculture ?

13. Explain briefly the substructure components piers, Abutments and wing walls with sketch. 10
 14. What are the points to be considered while selecting a site for bridge ? 10
 15. What are the various components of permanent way and the requirements of good railway track ? 10
 16. (a) Draw a typical sketch of a turn out and label the components. 10
(b) Explain briefly way side station on a single line section with sketch.
 17. (a) List the duties of PWI (Permanent Way Inspector). 10
(b) List the types of rail joints.
 18. (a) Explain briefly marshalling yard with sketch. 10
(b) Draw a typical cross-section of an elevated railway.
 19. List the objects of Tunnel Lining and also the objects of Tunnel Ventilation. 10
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