| 70 | 30           |
|----|--------------|
|    | чх.          |
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| Code | . 1 | SC | F54 | T  |
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| Couc |     | 3  | -   | 41 |

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| Number   |        |   | 5 1A<br>5 20 0 | 535 |  |   |

## V Semester Diploma Examination, Nov./Dec.-2018

## TRANSPORTATION ENGINEERING

| Tir | ne : | 3 Hours            |                  |                     | · · · · · 1  | Max. M     | arks : 100 |
|-----|------|--------------------|------------------|---------------------|--|------------|------------|
| No  | te : | Answer any s       | ix questions f   | rom Part - A &      | seven questions fron   | n Part – B | L          |
|     |      |                    |                  | PART - A            | e de la composición dela composición de la composición dela composición de la composición de la composición dela composición dela composición de la composic |            |            |
| 1.  | Lis  | t the importance   | e of roads in    | India.              |  |            | . 5        |
| 2.  | Ex   | plain the sight o  | listance and n   | nention factors a   | ffecting the sight dis   | tance.     | 5          |
| 3.  | De   | fine soil stabiliz | cation. Mentic   | on the objectives   | of soil stabilization.   |            | 5          |
|     |      |                    |                  |                     |  |            |            |
| 4.  | Wh   | at are the facto   | rs to be consid  | dered for selection | on of site for a bridge  | e ?        | 5          |
| 5.  | Wh   | at is a coffer da  | ım ? List its re | equirements.        |  |            | 5          |
| 6.  | Wh   | at are the advar   | ntages of unife  | ormity of gauges    | ?  |            | 5          |
| 7.  | List | the requirement    | nts of an ideal  | rail joint.         |  | a (#)      | 5          |
| 8.  | List | the objects of     | signalling.      |                     |  | (a)        | 5          |
|     |      |                    | dur' en          |                     | 10   |            |            |
| 9.  | Def  | ine:               |                  | 1177                |  |            | 1×5=5      |
|     | (a)  | Apron              | GSF #8           |                     |  |            |            |
|     | (b)  | Runway             |                  |                     |  | 65         |            |
|     | (c)  | Dock               |                  |                     |  |            |            |
|     | (d)  | Break water        |                  |                     |  |            |            |
|     | (e)  | Buoys              | 0.00             | 8                   | = 91,  |            |            |
|     |      |                    |                  | 1 of 2              |  | 17         | Turn over  |

## PART - B

| - 2 |  |    |
|-----|--|----|
| 10. | Draw a neat sketch of cross-section of road in embankment and explain briefly the  | е  |
| 8.5 | various cross-sectional elements.  | 10 |
|     |  |    |
| 11. | Explain the method of construction of Water Bound Macadam (WBM) road with  |    |
|     | neat sketch.   | 10 |
| 12. | Give the comparison between flexible pavement and rigid pavement.  | 10 |
| 13. | Explain briefly the sub-structure components of a bridge with a neat sketch.   | 10 |
|     |  |    |
| 14. | Define bridge bearing. List the different types of bearings and explain briefly Rocke  |    |
|     | and Roller bearing.  | 10 |
|     | Draw a typical cross-section of a permanent way. Discuss the basic functions of  | f  |
| 15. | various components of railway track.   | 10 |
|     | various components of run way water.   |    |
| 16. | List the duties of Permanent Way Inspector.  | 10 |
|     |  |    |
| 17. | Mention the different types of yards and explain briefly with a neat sketc   |    |
|     | marshalling yard.  | 10 |
|     | The state of the s |    |
| 18. | Explain the method of transferring the alignment to inside the tunnel with a new<br>sketch.  | 10 |
|     | SACILII.   |    |
| 19. | Define tunnel lining and list the objects of lining of tunnels.  | 10 |
|     |  |    |