

B. Tech. Sem – VIII (Civil Engg.) (2014 COURSE) (CBCS) :
WINTER - 2018

SUBJECT : INFRASTRUCTURE ENGINEERING

Day : Thursday
Date : 15/11/2018

W-2018-2611

Time : 02.30 PM TO 05.30 PM
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

- Q. 1** a) Discuss the development of highway in India. (05)
b) What is BOOT? Discuss its applications. (05)

OR

- a) How the surveys are carried for fixing of highway alignment? (06)
b) Discuss the scope of road transportation by road. (04)

- Q. 2** a) What is camber? What are the different types of camber? (05)
b) Draw a typical cross section of road in cutting. (05)

OR

- a) What is gradient? Briefly discuss types of gradients and their suitability. (05)
b) Draw any two types of road intersection and give their suitability. (05)

- Q. 3** Discuss the CBR method for flexible pavement design. (10)

OR

Enlist methods of design of rigid pavement and explain any one of them. (10)

- Q. 4** a) What is ballast? Give the functions of ballast. (05)
b) What is LWR and SWR? (05)

OR

- a) Give the classification and functions of sleepers. (05)
b) What are the different types of rails? Give the function of rail flow detector. (05)

- Q. 5** a) What is Turnouts? Briefly explain diamond crossing. (05)
b) Discuss the concept of metro. (05)

OR

- a) What is cant deficiency? Give the values of gradients used in railways. (05)
b) What is signaling? How is useful in railway engineering? (05)

- Q. 6** a) Discuss aprons and terminal area in airport. (05)
b) Discuss air port obstructions. (05)

OR

Prepare a layout for national airport and show all details? Compare your layout suitability with any airport in India. (10)

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