

Roll No

CE-7004 (1) (CBGS)

B.E. VII Semester

Examination, November 2019

Choice Based Grading System (CBGS)

Pavement Design

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

iii) Assume missing data suitably if required.

1. a) Calculate ESWL of a dual wheel assembly carrying 2044 kg each for trial pavement thickness values of 150, 200 and 250 mm centre to centre spacing between the two tyres = 270 mm and clear gap between the walls of the tyres = 110 mm. 7
- b) Explain various factors affecting the design of flexible pavement. 7
2. a) Discuss different component of a cross-section of flexible pavement with neat diagram. 7
- b) Write a short note on the stress distribution through various layer in flexible pavement. 7
3. Explain the plate bearing test procedure for calculation of the modulus of subgrade reaction (K) and how are the correction for the subgrade modulus, K made for a different plate size and for accounting for worst moisture conditions. 14