

T.E. Civil V CBSGS

(3 Hours)

[Total marks: 80]

- Note
1. Question No 1 is compulsory.
  2. Attempt Any 3 out of remaining
  3. Assume any suitable data wherever required.
- Q.1
- a. State the role of Transportation in economic development of the nation. 5
  - b. Using sleeper density of M+6. Estimate the quantity of track material required for constructing a B.G railway track that is 6km long? 5
  - c. Define creep? How it is measured. 5
  - d. Draw and explain the wind rose diagram. 5
  - e. What are Docks? What are different types of docks? 5
- Q 2
- a. a) A  $4^\circ$  curve branches off from an  $2^\circ$  main curve in opposite direction in a B.G. yard. If the speed on the main line is restricted to 35 kmph. Determine the speed restriction on the branch line. 10
  - b. Draw neat sketch of Left hand turnout & Right hand turnout. 10
- Q.3
- a. A taxiway is to be designed for an operating Boeing 707-320 having following characteristics: 10
    - Wheel base = 17.6m Tread of main gear = 6.6m
    - Turning speed = 40Kmph
    - Co-efficient of friction between tyre and pavement = 0.15
  - b. Explain in brief the factors to be considered while selecting the site for airport. 10
- Q.4
- a. Draw the neat sketch of layout of artificial Harbour. 10
  - b. State reasons for Transit curves are provided on both sides of a circular curve on a railway track. 10

TURN OVER

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- Q.5 a. Briefly describe the significance of Airport drainage 10  
b. Explain in brief the factors to be considered while selecting the site for Harbour. 10

- Q.6 Write short notes on ( Answer any four out of six ) 20
- Airport drainage
  - Cross wind component
  - Airport marking and lighting
  - Longitudinal gradient of runway
  - Classification of airport as per ICAO
  - Light house and Light ship