

**BE Semester- \_V\_\_\_ (CIVIL) Question Bank**

**(RAILWAY BRIDGE AND TUNNELLING)**

**All questions carry equal marks(10 marks)**

Q.1	Give classifications of signals. Draw the sketch of semaphore signal
Q.2	Enlist requirements of an ideal railway track
Q.3	Enlist various methods for measurement of creep . Explain any one in detail
Q.4	Write short notes on ( <b>Any Two</b> )  1. Lock Spike 2. Chairs and keys 3. Composite sleeper index 4. stress distribution under ballast
Q.5	Enlist various methods to be adopted for control of safe movement of train. Explain C.T.C.(Centralized Traffic Control) <b>OR</b> A.T.C.(Automatic Traffic Control ) in detail.
Q.6	Define ( <b>Any Five</b> )  1. Capacity of railway track 2. Sleeper density 3. Creep of rail 4. Turn out 5. Switch Angle 6. Long Welded rail 7. Theoretical nose of crossing
Q.7	Enlist various forces acting on railway track. Explain any two in detail.
Q.8	Enumerate various factors affecting choice of gauge.
Q.9	Explain causes of rail failure.
Q.10	Enlist various measures to minimize wear of rail
Q.11	Describe: Maintenance of Concrete sleepers.
Q.12	Define ballast. Enlist functions of ballast and requirements of ideal ballast material.
Q.13	What are the causes of failure of railway embankment?. Suggest remedial measures to check it.
Q.14	Enlist advantages and disadvantages of constructing shaft in tunnel work
Q.15	Enlist advantages and disadvantages of tunnels.

Q.16	Enlist various methods of tunneling in hard rock. Explain any two in detail.
Q.17	Enlist various factors controlling the alignment of railway track. Explain any two in detail.
Q.18	Describe different types of surveys to be carried out in case of a new railway project.
Q.19	Write short notes on ( <b>Any Two</b> ) <ol style="list-style-type: none"> <li>1. Marshalling Yard</li> <li>2. Fixed Heel type switch</li> <li>3. Fish Plate</li> </ol>
Q.20	Classify the bridges in various types considering various factors.
Q.21	Enlist Ideal bridge site characteristics.
Q.22	Enlist various types of low cost bridges. Explain any one in detail with sketches.
Q.23	Explain functions of bridge bearings.
Q.24	Write short notes on ( <b>Any Two</b> ) <ol style="list-style-type: none"> <li>1. Bridge Piers</li> <li>2. Abutments</li> <li>3. Approaches</li> </ol>
Q.25	Enlist various methods for river training. Explain Guide banks and spurs in detail.
Q.26	Enlist data to be collected and drawings to be prepared for planning a bridge.
Q.27	Enlist general works of maintenance for bridges
Q.28	Enlist various methods of assessing safe carrying capacity of bridge. Explain any one in detail.
Q.29	Explain: Rebuilding of bridges.
Q.30	Write short notes on ( <b>Any Two</b> ) <ol style="list-style-type: none"> <li>1. Lighting of tunnel</li> <li>2. Tunnel approaches</li> <li>3. Tunnel alignment and grade</li> </ol>
Q.31	Enlist various methods of tunneling in soft soil. Explain any two in detail.
Q.32	Enumerate different causes of accidents in tunnels. Enlist safety measures to be adopted to overcome it.
Q.33	Explain: Lining in tunnel

Q.34	Enlist various difficulties experiences during tunneling.
Q.35	Classify the tunnels in various ways considering various factors.
Q.36	Explain: System of drainage in tunnel
Q.37	Explain Ventilation in tunnel
Q.38	Give the procedure of routine maintenance of railway track
Q.39	Give classification of railway lines. According to speed and tonnage
Q.40	Write a short note on broad gauge and narrow gauge