

Railway & Bridge Engg. Ph No - 7008468395
6th Sem, civil Engg.
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Short question 2 marks

- * Define gauge of railway. Mention different types of gauge.
- * List the different types of rail joint.
- * Write Dicken's & Ryve's formula for the determination of flood discharge.
- * Define cant & cant deficiency.
- * Define creep of rail & buckling of rail.
- * Explain heel block & distance block.
- * Define fish plate & spike.
- * Define skew bridge.
- * Define afflux & force board.
- * Write down coffer dam.
- * What is ballast?
- * Define permanent way with sketch.
- * Define sleeper density.
- * Distinguish between bridge & culvert.
- * Explain tilting of the well foundation.
- * Mentioned different type of RCC bridge loading.
- * What is coning of wheel?
- * What are the two types of switches used in Railway Point & crossing.
- * What do you mean by linear waterway.
- * Define grade compensation.
- * What is fitting of rails? why it is provided.
- * What do you mean by throw of switch?
- * Define cross drainage.

Important Long question 5 marks

- * Write the requirement & characteristics of a good crossing
- * Explain the various functional requirement of sleeper
- * Describe briefly the purpose of providing fish plate
- * What is creep of rail? write its effects on railway track
- * Describe briefly function of good ballast
- * What is superelevation or cant? write the objects of providing superelevation
- * Describe buckling of rail why & how it occurs
- * Describe briefly about failure of rail
- * What are the various points required to be checked during the inspection of point & crossing?
- * Explain briefly the necessity of providing bearing in bridge?
- * What is bearing plate? write its advantages & disadvantages
- * What is wing wall? write at least three function of wing wall
- * What is rail wear? what are the type of wears on rail write the methods to reduced wear
- * What are the requirement of good track drainage system?
- * Write down the requirement of an ideal rail section
- * Differentiate between temporary & Permanent bridges
- * What are the advantages of Track maintenance?
- * Differentiate between culvert & bridge
- * What are the traffic requirement of highway

bridge ?

- * Define the culvert & explain the types of culvert.

Important Long question 10 Marks

- * Define a gauge. What are the different types of gauge used in India? Discuss the factor affecting the selection of a particular gauge.

- * Write down the merits & demerits of wooden sleepers & concrete sleepers.

- * What are the different types of rail? Write the function of rail.

- * Describe briefly about failure of rail with neat sketch.

- * Calculate the maximum permissible speed on a curve of high speed BG group A route having the following particulars: degree of curve = 1° , super-elevation = 50 mm, length of transition curve = 120 m, maximum speed likely to be sanctioned for the section = 160.

- * What is sleeper? Write the advantages & disadvantages of metal sleeper.

- * What is ballast? Why is it used in the railway track? Briefly describe the various types of ballast used.

- * Prepare a neat sketch of a typical cross-section of an embankment with the ballast section for a single-line or double line broad gauge.

- * Write down classification of bridge & describe its component.

- * What is turnout? Draw a neat line diagram of right & left hand turnout & show their

Component.

- * Explain the function of component of a permanent way with levelling sketch.
- * What are the various factors which effect the selection of site of bridge?
- * Define the culvert & explain the type of culvert.
- * What is meant by crossing? what are the essential requirement of good crossing? Explain the various type of crossing in use on Indian Railway.
- * Describe the component of bridge with neat sketch.