Manmohan Technical University Office of the Controller of Examinations **Exam Year: 2082, Mangsir(Model Question)**	**Exam Roll:** …… Exam Roll in words: ……	
School: SOE	Level: BE	Invigilator's Sign: ……..
Program: BCE	Year/Part: IV/I	Superintendent's Sign: ……
Subject: Railway Engineering **(EG416CE)**		Code No. ……

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i. Answers should be given by filling the Multiple-Choice Questions' Answer Sheet.
ii. The main answer sheet can be used for rough work.

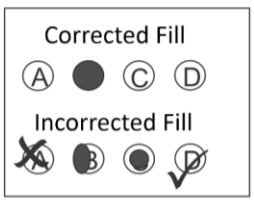
Code No. ____

GROUP A *(Multiple-Choice Questions)*	**[10x1=10]**	**Time: 20 Minutes**

1	Which agency is responsible for operation of Railway in Nepal? a. Department of Railway b.Railway development Project c. Nepal Railway Company d. Local Government
2	Which types of gauge is present in Nepalese Railway in operation? a. Meter Gauge b. Standard Gauge b. Broad Gauge d.Both B and C
3	The main objective of railway planning is to: a. Increase train speed only b. Ensure safe, efficient, and economical transportation c. Build as many tracks as possible d. Reduce ticket prices only
4	Which of the following is another name for Tongue rail? a. Toe Rail b. Lead Rail b. Switch Rail c.Stock Rail
5	The gauge of a railway track refers to: a. The height of the train b. The distance between inner faces of two rails c. The width of the station platform d. The length of the sleepers
6	As per Indian Railway Standard what is the maximum permissible value of super elevation for broad gauge a. 90 mm b. 150mm c. 80 mm d. 165 mm
7	Which of the following is the most important strategic reason for the construction of a new railway line? a. For Creating jobs b. Because of absence of a railway line c. To increase tourists d. To make movement of defense forces easier in case of emergency
8	Which defect is detecting UST test? a. Internal Cracks b. External Cracks c.Air Flow Cracks d.None of the above
9	Which of the following is an old method for track maintenance? a. Beater packing b.Mechanized Maintenance c.Directed Track Maintenance d. Measured shovel packing
10	Maintenance consists of the following action. a. Replace of Components. b. Repair of components. c.Service of components. d. All of the above.

Multiple Choice Questions' Answer Sheet

Marks Secured: _____
In Words: _____
Examiner's Sign: _____ Date: _____
Scrutinizer's Marks: _____
In Words: _____
Scrutinizer's Sign: _____ Date: _____



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Manmohan Technical University
Office of the Controller of Examinations
Exam Year: 2082, Mangsir (Model Question)

School: SOE	Level: BE	Time: 3 Hours
Program: BCE	Year/Part: IV/I	Full Marks: 50
Subject: Railway Engineering **(EG416CE)**		

- ✓ *Candidates are required to give their answers in their own words as far as practicable.*
- ✓ *The figures in the margin indicate **Full Marks**.*
- ✓ *Assume suitable data if necessary.*

Group B (Attempt Any Eight questions) [8*2 = 16]

1	What are different modes of transportation, compare them with rail transportation.
2	Which government agency works in the sector of Railway in Nepal and what are their works?
3	Explain the importance of traffic survey in railway planning?
4	How many gauge exists in Nepalese Railway? Explain
5	State and discuss briefly the factors that control the alignment of a railway track.
6	If the ruling gradient is 1 in 150 on a particular section of broad gauge and at the same time a curve of 4 degrees is situated on this ruling gradient, what should be the allowable ruling gradient?
7	What are the various factors to be kept in mind when conduction a reconnaissance survey for a railway track.
8	Discuss the various methods that ensures that the track is well maintained.
9	What do you understand by modern method of track maintenance?

GROUP C (Long Answer Questions - Attempt Any Six)

1	List out the various gauge prevailing in Nepal with their gauge width. What factor governs the selection of suitable gauge. Discuss
2	What are the objectives of the long-term plans of Nepalese Railways? How do you compare with the existing level of achievements?
3	What are the components parts of a permanent way explain with figures?
4	Calculate the maximum permissible speed on curve of high speed B.G. track having the following particulars: i. Degree of the curve = 1^o ii. Amount of Super elevation = 8.0 cm iii. Length of transition curve = 130 m iv. Max. Speed of the section likely to be sanctioned = 165 kmph
5	List the different task involved in the construction of a new railway line. Describe the procedure of land acquisition.
6	What are the methods of track inspections explain with the inspection equipment's?
7	What is the need of proper maintenance of track? Explain the difference between insulated joints and fish plate joints.

*** ALL The Best ***