

Mid-West University
Examinations Management Office
Chance Examinations 2081

Bachelor level/ B.E. Civil/ 7th Semester
Time: 3 hours

Full Marks: 50
Pass Marks: 25

Subject: Airport and Railway Engineering (CE476/CE492)

- *Attempt all the questions*
 - *Figures in the margin indicate full marks.*
 - *Assume suitable values, with a stipulation, if necessary.*
 - *Candidates are required to answer the questions in their own words as far as possible.*
1. Write about the classification of Railway. What are the organizations working in the sector of Air transportation at national as well as international level? [6]
 2. Why it is necessary to provide adequate drainage facilities for a railway track? Mention the requirements of a good drainage system. [6]
 3. Define sleepers and sleeper density with example. Write about classification of sleepers [5]
 4. Explain Geometric standards for elements of an airport. An airport is planned at an elevation of 385 m above MSL. The monthly mean of maximum and average daily temperatures for the hottest month at the site are 40 degree and 28 degree centigrade respectively. The effective gradient is 0.18%. Determine the length of the runway required at the proposed site if the basic runway length is 1900m [3+6]
 5. What are the three necessary controls in the movements of Aircraft? Describe. Draw a neat sketch showing all the component parts of Aircraft [6]
 6. Define Cumulative Damage Factor (CDF and its importance. Draw and describe pavement structure components for Airport. [6]
 7. Explain the procedure for orienting runway using wind rose diagram of type I. [7]
 8. Describe any four major elements influencing the planning of airports also explain airport marking. [5]

The End