

Mid-West University
Examinations Management Office
End Semester Examinations 2081

Bachelor level/ B.E. Hydropower/ 5th Semester

Time: 3 hours

Subject: Geographical Information System and Remote Sensing (HE305/HE455)

Full Marks: 50

Pass Marks: 25

- 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. a) What is GIS? Explain its area of application. (5)
b) Explain the difference between Raster data model and Vector data model. (5)
2. a) Explain about data base processing and management systems. (5)
b) Classify the types of map projection system. (5)
3. a) What do you mean by remote sensing? Explain its area of application. (5)
b) What do you mean by GPS? Explain the working principle of GPS. (5)
4. a) Write down the steps for calculating catchment area of any watershed from GIS. (5)
b) Describe the digital elevation model (DEM). Explain its area of application. (5)
5. a) Explain the difference between Geo referencing and map scale in GIS. (5)
b) Write the run length encoding steps. (5)

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22	22	23	24	24	25	25	26
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The End