

KATHMANDU UNIVERSITY
End Semester Examination
July/August, 2024

Level : B.Sc.
Year : III
Time : 2 hrs. 30mins.

Course : ESEE 302
Semester : I
F. M. : 55

28 JUL 2024

SECTION "B"

[8 Q. × 5 = 40 marks]

Attempt ANY EIGHT questions. Abbreviations have usual meaning.

1. What is GIS? Explain its components.
2. What is Digital Elevation Model (DEM)? Discuss about the derivatives of DEM.
3. What is GPS? How does it work?
4. What are the various map projections system used in GIS System?
5. What are the essential components of a map?
6. Describe platform and orbits with its types.
7. Write about the major software used in GIS?
8. How do you use temporal data in disaster mapping? What is the application of Buffer tool?
9. List and define the function of different types of file extension used in GIS application.

SECTION "C"

10. Differentiate between **ANY TWO** of the following. [2Q. × 3 = 6]
 - a. Active and Passive sensors
 - b. Raster and Vector data
 - c. Shape file and KML
11. Write Short notes on **ANY THREE** the following. [3Q. × 3 = 9]
 - a. Steps of Remote Sensing
 - b. DBMS
 - c. Types of Cameras in Remote Sensing
 - d. Digitization of Raster Data

KATHMANDU UNIVERSITY
End Semester Examination
July/August, 2024

Marks Scored:

Level : B.Sc.

Course : ESEE 302

Year : III

Semester : I

Exam Roll No. :

Time: 30 mins.

F. M. : 20

Registration No.:

Date

28 JUL 2024

SECTION "A"

[20 Q. × 1 = 20 marks]

Choose and encircle in the most appropriate option from each set of choices

- Which of the following is NOT the software used for GIS.
a. Arc-GIS b. Grass-GIS c. Remote-GIS d. Q-GIS
- The map showing boundaries and ownership of land is
a. Cadastral map b. Contour map c. Topographic map d. Thematic map
- Scanners with rotating mirror and single detectorscanners.
a. Whisk-broom b. Push-broom c. Along track d. Spatial
- The satellite navigation system developed by china is
a. Galileo b. Explorer c. Compass d. Glonass
- Which of the following indicates the principle of GPS?
a. Resection b. Trilateration c. Trisection d. Traversing
- What does LiDAR stand for?
a. Laser Imaging Detection and Ranging b. Light Detection and Ranging
c. Low Intensity Data and Ranging d. Long Range Imaging and Detection
- Which GIS operation combines two or more layers to create a new layer with information from all input?
a. Overlay b. Clip c. Buffer d. Dissolve
- Irrelevant spatial data entered during digitizing scanning or data transfer in GIS is termed as
a. Noise b. Misallocated data c. Null data d. Garbage
- Which of the following is NOT a remote sensing platform?
a. Satellites b. Drones
c. Ground based cameras d. GPS receivers
- In a vector graphics the coordinate (x_1, y_1) is equal to (x_n, y_n) when the geometry is
a. Polyline b. Line c. Polygon d. None
- The term GIS was officially coined byin 1968.
a. C Dana Tomlinson b. Roger Tomlinson
c. Kang tsung Chang d. Charles Picquet

