

KATHMANDU UNIVERSITY
End Semester Examination
August, 2018

Marks scored:

Level : B.Sc./B.Tech.
Year : III

Course : ENV5 306
Semester: II

Exam Roll No. :

Time: 30 mins.

F. M. : 20

Registration No.:

Date AUG 10 2018

SECTION "A"

[20 Q.×0.5=10 marks]

Mark "√" in the appropriate box.

1. The vector geographic data have their topology but the raster have their ----- value.
 coordinate figure feature cell
2. An ----- value is a specific instance of the characteristic associated with a geographic feature.
 raster spatial attribute vector
3. ----- region (1mm to 1m) is another portion of EM spectrum that is frequently used to gather valuable remote sensing information.
 Radiowave Shortwave Visiblewave Microwave
4. Local ----- is defined as the origin and orientation of latitude and longitude lines.
 ellipsoid datum projection UTM
5. ----- features in the vector model, such as roads and rivers, can be stored as a collection of point coordinates.
 Linear Non-linear Similar Identical
6. Maps in the ----- projections normally give the coordinates for the standard parallels
 Orthorhombic Cylindrical Conic Azimuthal
7. NAD27 and the ----- Datum of 1950 are local datums.
 South American Asian African European
8. ----- is the first generation Administration of Oceanic and Atmospheric satellites and was as the first operation operational remote sensing satellite system.
 NOAO NAAO NOAA NOOA
9. Nepal falls under zones----- on UTM system.
 45 and 46 54 and 55 44 and 45 43 and 44
10. ----- are imaginary lines joining the points of equal elevations.
 Contours Controls Countours Counter
11. ----- features in the vector model, such as sales territories and river catchments, can be stored as a closed loop of coordinates.
 Polygonal point line volume

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12. The shape of streams, rivers shown in a topographical map are known as ----- pattern.
 tributary vein shrinkage drainage
13. ----- resolution is a remote sensing instrument (sensor), which is determined by the band-widths of the Electro-magnetic radiation of the channels used.
 Radiometric Spectral Spatial Temporal
14. The ----- in RS of water is dependent on water quality, the bottom material, suspended and soluble materials.
 incidence refraction reflectance persistence
15. ----- systems are for capturing and manipulating drawings.
 SAD PAD CAD DOD
16. ----- is usually a visual obstacle for image interpretation.
 resolution texture Shadow pattern
17. Mercator's Projection, was introduced in ----- by Flemish Cartographer.
 1245 1569 1665 1856
18. A ----- image comprises a collection of grid cells rather like a scanned map or picture.
 photo vector hybrid raster
19. Temporal Resolution is related to the ----- coverage of the ground by the remote-sensing.
 Partial total once repetitive
20. The advantage of using UTM coordinates is its ----- nature.
 coverage metric parabolic oval

SECTION "B"

[20 Q. × 0.5 = 10 marks]

II. Mark "T" for true and "F" for false

1. A working GIS integrates five key components: hardware, software, data, man, and methods. []
2. The Space Segment consists of the Constellation of NAVASTAR earth orbiting satellites. []
3. Austria was the pioneer in development of geographic information systems as a result of innovations dating back to the early 1960s. []
4. Calculation of a map projection requires definition of the circleroid. []
5. Contours are imaginary lines joining the points of unequal elevations. []
6. Reduction of the sunlight's intensity called extinction. []

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7. Geographic data are generally available in two forms. []
8. The GPS satellites are arrayed in 6 orbital planes, inclined 65 degrees to the equator. []
9. A CAD system is like a part of a raster GIS. []
10. The forward overlapping during the aerial photography is normally 60-80%. []
11. In the vector model, information about points, lines, and polygons is encoded and stored as a collection of x,y coordinates. []
12. More than 800 different map projections have been proposed. []
13. The shortest line passing through the center of the earth is known as Equator. []
14. Transforming, two-dimensional space onto a three dimensional map is called "projection". []
15. The first LANDSAT 1 was launched in 1979. []
16. The Electro-Magnetic Radiation (EMR), which is reflected or emitted from an object, is the usual source of RS data. []
17. GIS technology is of limited value without the people who manage the system and develop plans for applying it to real world problems. []
18. Vehicles or the carriers which carry remote sensors are called sensors. []
19. The most recently developed and widely used datum is the World Geodetic System of 1984 (WGS84). []
20. In satellite or aerial photography, resolution can be defined as the ability of the entire photographic system, including lens, exposure, processing, and other factors, to render a sharply defined image. []

