



**M.Sc. II Semester (CBCS) Degree Examination,
September/October - 2022**

APPLIED GEOLOGY

21APG2S2LP : Digital Image Processing

Time : 1 Hour

Maximum Marks : 30

Instruction : Answer **all** the questions.

1. _____ may refer to images taken days, weeks, or even years apart.
(a) Multitemporal (b) Temporal (c) Spatial (d) All of the above
2. _____ is acquired from the interpretation of images taken over the same area, but at different times.
(a) Multitemporal information (b) GIS information
(c) Image information (d) Both (a) and (c)
3. CCD stands for :
(a) Charge Coupled Device (b) Character Coupled Device
(c) Character Code Device (d) Charged Code Device
4. Following is not an Element of Image Interpretation :
(a) Size (b) Shape (c) Tone (d) Weight
5. Binary image consists of :
(a) 1-bit image (b) 8-bit image (c) 16-bit image (d) 32-bit image
6. _____ of objects in an image is a function of scale.
(a) Size (b) Shape (c) Tone (d) Weight
7. The arrangement and frequency of tonal variation in particular areas of an image is refers to :
(a) Texture (b) Tone (c) Slope (d) Pattern
8. _____ is also helpful in interpretation as it may provide an idea of the profile and relative height of a target or targets which may make identification easier.
(a) Shape (b) Shadow (c) Texture (d) Size
9. FCC stands for :
(a) False Colour Composite (b) Fake Colour Composite
(c) Full Colour Composite (d) Fun Colour Composite



10. _____ classifiers do not utilize training data as the basis for classification.
- (a) Supervised (b) Unsupervised
(c) Both (a) and (b) (d) None of these
11. Geographical referencing of image data is called :
- (a) Rectification (b) Registration
(c) Georeferencing (d) Geocoding
12. First order transformation requires minimum :
- (a) Three GCPs (b) Four GCPs (c) Five GCPs (d) Six GCPs
13. It refers to process of assigning map coordinates to image data :
- (a) Rectification (b) Registration
(c) Georeferencing (d) Geocoding
14. _____ is the process of sending technicians to gather data in the field that either complements or disputes airborne remote sensing data collected by aerial photography, satellite side scan radar, or infrared images.
- (a) Ground Verify (b) Ground Control
(c) Ground Truthing (d) Ground seen
15. Ground Control Points are collected using a :
- (a) GPS (b) QGIS (c) Mobile (d) Satellite
16. A raster dataset composed of two or more merged raster datasets is called :
- (a) Mosaic (b) Merging (c) Joining (d) Setting
17. DEM stands for :
- (a) Digital Earth Model (b) Digital Elevation Model
(c) Digital Explore Model (d) Dummy Earth Model
18. TIN stands for :
- (a) Triangulated Interpolation Network
(b) Transformation Interpolation Network
(c) Triangulated Irregular Network
(d) Triangulated Interpolation Node
19. A digital data structure used in a GIS for the representation of a surface is called :
- (a) TIN (b) DEM (c) DTM (d) BTM



20. BTM stands for :
- (a) Baseline Thematic Mapping (b) Basic Terrain Model
(c) Baseline Tin Model (d) Basic Terrain Mapping
21. ASTER stands for :
- (a) Advanced Satellite Thermal Emission and Reflection Radiometer
(b) Automatic Spaceborne Thermal Emission and Reflection Radiometer
(c) Advanced Spaceborne Thermal Emission and Reflection Radiometer
(d) Advanced Spaceborne Thermal Energy and Reflection Radar
22. The rate of rise or fall of a terrain feature is known as :
- (a) Slope (b) Down (c) Flat (d) Oblique
23. Remote sensing images are broadly categorised into :
- (a) TWO (b) THREE (c) FOUR (d) FIVE
24. Any data in computer readable format usually stored on magnetic tape, CD, disk or hard drive is called :
- (a) Digital (b) Electronic (c) Data (d) Softcopy
25. LiDAR stands for :
- (a) Light Detection And Ranging (b) Light Device And Ranging
(c) Light Device Auto Ranging (d) Light Detection Auto Range
26. Following is not a digital satellite imagery data format :
- (a) BIT (b) BSQ (c) BIP (d) BIL
27. The colour images are represented as :
- (a) Red, Grey, Blue (b) Red, Brown, Green
(c) Red, Green, Black (d) Red, Green, Blue
28. Geometric distortion is mainly occurs due to :
- (a) Pitch (b) Roll (c) Yaw (d) All of the above
29. Assign the value of the 16 nearest pixels to the new pixel location is :
- (a) Nearest Neighbour technique (b) Bilinear interpretation
(c) Bicubic convolution (d) None of the above
30. The ability of the entire photographic system, including lens, exposure, processing and other factors, to render a sharply defined image is called :
- (a) Resolution (b) Pixel (c) Image (d) Sensor



