

**M.Sc. II Semester Degree Examination, Sept./Oct. - 2024****APPLIED GEOLOGY****Digital Image Processing****(NEP)**

Time : 1 Hour

Maximum Marks : 30

**Note :** Answer **all** the questions.

1. RADAR data are acquired during the :  
(A) Night only (B) Day only  
(C) Early morning (D) Night and Day
2. LiDAR stands for :  
(A) Light Detecting and Ranging  
(B) Land Developing Radar  
(C) Light Detecting and Radar  
(D) Land Developing and Ranging
3. In the following is not an image data collection :  
(A) Remote Sensing (B) Scanning  
(C) Television (D) Photography
4. In the following is not a Data :  
(A) DEM (B) LiDAR (C) RADAR (D) Thermal
5. Noise refers to random variations in pixel values that can occur during :  
(A) Image acquisition (B) Image loading  
(C) Image printing (D) Image sending
6. The process of assigning map coordinates to image data is called :  
(A) Rectification (B) Registration  
(C) Georeferencing (D) Geocoding



7. Ground Control Points collected using a :  
(A) GPS                      (B) QGIS                      (C) Mobile                      (D) Satellite
8. Higher radiometric resolution allows for \_\_\_\_\_ of subtle differences in surface features and properties.  
(A) Good discrimination                      (B) Medium discrimination  
(C) Better discrimination                      (D) Bad discrimination
9. Image Enhancement Functions are used to improve the :  
(A) Bad quality of images                      (B) Visual quality of images  
(C) Good quality of images                      (D) Medium quality of images
10. Common filters includes :  
(A) Gaussian                      (B) Median                      (C) Sobel                      (D) All of the above
11. Geometric distortion are mainly occurs due to :  
(A) Pitch                      (B) Roll                      (C) Yaw                      (D) All of the above
12. Image Restoration functions are aim to remove :  
(A) Pixels and Blurriness                      (B) Noise and Pixels  
(C) Noise and Blurriness                      (D) None of the above
13. Image Compression functions are to reduce the file \_\_\_\_\_ of an image.  
(A) Width                      (B) Pixels                      (C) Size                      (D) Grids
14. The spatial arrangement of visibly discernible objects is referred to :  
(A) Shape                      (B) Pattern                      (C) Texture                      (D) Slope
15. The arrangement and frequency of tonal variation in particular areas of an image refers to :  
(A) Texture                      (B) Tone                      (C) Slope                      (D) Pattern
16. \_\_\_\_\_ 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



17. The process of making an image conform to another image is called :
- (A) Rectification (B) Registration  
(C) Georeferencing (D) Geocoding
18. 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
19. It refers to the relative brightness or colour of objects in an image is called :
- (A) Size (B) Shape (C) Tone (D) Weight
20. \_\_\_\_\_ of objects in an image is a function of scale.
- (A) Size (B) Shape (C) Tone (D) Weight
21. Geographical referencing of image data is called :
- (A) Rectification (B) Registration  
(C) Georeferencing (D) Geocoding
22. GCP stands for :
- (A) Grid Control Pixel (B) Ground Control Points  
(C) Ground Control Pixel (D) Grid Control Point
23. \_\_\_\_\_ classification can be defined normally as the process of samples of known identity to classify pixels of unknown identity.
- (A) Supervised (B) Unsupervised  
(C) Both (A) and (B) (D) None of these
24. A raster dataset composed of two or more merged raster datasets is called :
- (A) Mosaic (B) Merging (C) Joining (D) Setting
25. Vertical distance of a point above or below a reference surface or datum is called :
- (A) Height (B) Elevation (C) Altitude (D) MSL
26. The 16-bit colour format is developed by :
- (A) Microsoft (B) Google (C) Apple (D) Android



27. Remote sensing images are broadly categorised into :
- (A) two                      (B) three                      (C) four                      (D) five
28. FCC stands for :
- (A) False Colour Composite                      (B) Fake Colour Composite  
(C) Full Colour Composite                      (D) Fun Colour Composite
29. The process by which the geometry of an image is made planimetric is called :
- (A) Rectification                      (B) Registration  
(C) Georeferencing                      (D) Geocoding
30. \_\_\_\_\_ 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 infra red images.
- (A) Ground Verify                      (B) Ground Control  
(C) Ground Truthing                      (D) Ground Seen

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