

No. of Printed Pages : 8

Question Booklet Code

A

21APG2S2LP

Question Booklet
Serial Number

M.Sc. II Semester (NEP) Degree Examination, October - 2023

APPLIED GEOLOGY

Digital Image Processing

Time : 1 Hour

Maximum Marks : 30

INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four/two versions of Question Booklets with Question Booklet Code viz. **A, B, C & D / A & B / A** only.
2. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same Code.
3. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him contains all the 30 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same Code. This is most important.
4. A blank sheet of paper is attached to the Question Booklet. This may be used for Rough Work.
5. **Please read carefully all the instructions on the top of the Answer Sheet before marking your answers.**
6. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using **Black Ball-Point Pen** in the OMR Answer Sheet.
7. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator.
8. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.
9. First fifteen minutes is provided to fill the general information of the Student. Eg. Student Name, Student ID, etc. in the OMR Answer Sheet
10. Without the instruction of the Invigilator do not open the Question Paper Booklet Seal.

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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 an 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. 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

7. 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



8. Common filters includes :
- (A) Gaussian (B) Median
(C) Sobel (D) All of the above
9. Remote sensing images are broadly categorised into :
- (A) TWO (B) THREE
(C) FOUR (D) FIVE
10. Image Restoration functions are aim to remove :
- (A) Pixels are Blurriness (B) Noise and Pixels
(C) Noise and Blurriness (D) None of the above
11. Image Compression functions are reduce the file _____ of an image.
- (A) Width (B) Pixels
(C) Size (D) Grids
12. The spatial arrangement of visibly discernible objects is refers to :
- (A) Shape (B) Pattern
(C) Texture (D) Slope
13. The 16-bit colour format is developed by :
- (A) MircoSoft (B) Google
(C) Apple (D) Android
14. The arrangement and frequency of tonal variation in particular areas of an image is refers to :
- (A) Texture (B) Tone
(C) Slope (D) Pattern



15. _____ 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
16. 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
17. FCC stands for :
- (A) False Colour Composite (B) Fake Colour Composite
(C) Full Colour Composite (D) Fun Colour Composite
18. DEM stands for :
- (A) Digital Earth Model (B) Digital Elevation Model
(C) Digital Explore Model (D) Dummy Earth Model
19. Atmospheric correction can be done through :
- (A) Physical modeling (B) Histogram minimum
(C) Regression (D) All of the above
20. Vertical distance of a point above or below a reference surface or datum is called :
- (A) Height (B) Elevation
(C) Altitude (D) MSL
21. Geometric distortion are mainly occurs due to :
- (A) Pitch (B) Roll
(C) Yaw (D) All of the above

29. Each colour image has :

- (A) 8 bpp
- (B) 16 bpp
- (C) 24 bpp
- (D) 32 bpp

30. Ground Control Points collected using a :

- (A) GPS
- (B) QGIS
- (C) Mobile
- (D) Satellite

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SPACE FOR ROUGH WORK



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