



R-8023

M. Arch. - I (Sem. I) Examination

May / June - 2010

Remote Sensing & GIS

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

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| नीचे दृशविवेक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book. | Seat No. : |
| Name of the Examination : | <input type="text"/> |
| <input type="text" value="M. Arch. - 1 (Sem. 1)"/> | <input type="text"/> |
| Name of the Subject : | <input type="text"/> |
| <input type="text" value="Remote Sensing & GIS"/> | <input type="text"/> |
| Subject Code No. : <input type="text" value="8"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="3"/> | <input type="text"/> |
| Section No. (1, 2,.....) : <input type="text" value="Nil"/> | <input type="text"/> |
| | Student's Signature |

- (2) Figure to the right indicate full marks.
- (3) All questions to be answered in one single answer sheet only.
- 1 Fill in the blanks : 5
- (i) The reflectance from each unit of an image is referred to as the _____ number.
 - (ii) Regions of the EMS which remain unaltered by the atmosphere are called _____.
 - (iii) GCP or ground control points are used to correct _____ distortion in an image.
 - (iv) SONAR is an _____ sensor.
 - (v) the smallest unit in the satellite image is called a _____.
- 2 Differentiate : 10
- (i) Image enhancement and image restoration
 - (ii) Spectral and radiometric resolution
 - (iii) GCP and GPS
 - (iv) Google and IRS - 1D images
 - (v) Visual and digital interpretation.
- 3 Answer in detail : (any two) 10
- (i) Write in detail about any two image restoration techniques which you have studied.
 - (ii) Write about any two applications of GIS software for urban development/planning which you have studied.
 - (iii) Explain in detail how visible sensor data can be used for urban applications.

R-8023]

1

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- 4 Tick the correct answers : 5
- (i) Urban planners would avoid using remotely sensed data from :
 - (a) The microwave region
 - (b) The UV region
 - (c) The IR region
 - (d) The visible region
 - (ii) Spatial resolution of a sensor refers to the :
 - (a) Ability to sense the smallest object
 - (b) Frequency of viewing an area
 - (c) Ability to sense suburban structures
 - (d) Ability to sense finer band widths.
 - (iii) Daylight photography is an example of :
 - (a) An active sensor
 - (b) A passive sensor
 - (c) Both active and passive sensor
 - (d) An indifferent sensor.
 - (iv) The visible region ranges from
 - (a) 0.3 to 0.4 micrometer
 - (b) 0.03 to 0.04 micrometer
 - (c) 300-400 nanometer
 - (d) None of the above.
 - (v) Image interpretation is done prior to image processing.
 - (a) True
 - (b) Untrue
 - (c) Partly true
 - (d) None of the above.
- 5 Write short notes on : 10
- (i) Spectral signatures
 - (ii) Chandrayaan
 - (iii) Atmospheric Noise
 - (iv) Charged Coupled Devices
 - (v) National Data Centre.
- 6 Answer in detail : 10
- (i) Cite an interesting case study in India/abroad where in GIS package was used effectively for commercial benefit of a private company.
 - (ii) As a city designer how will you use remotely sensed data along with GLS package to renovate an old area of a city to suite the modern day requirements.
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