

1. What is Modelling in GIS? Explain different types of models with examples.
2. What is thermal Remote Sensing? Explain basic thermal radiation principles, process and properties.
3. What is Geospatial Services? Explain WMS, WFS, WCS and WPS with its uses.
4. What is PCA? Explain PCA transformation process.
5. What is Hyperspectral Remote Sensing? Explain Spatial scanning, Spectral scanning, Non-scanning and Spatio-spectral scanning.

**Section - B**  
**(Short-Answer-Type Questions)**

Note - Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only.  
(5 × 7 = 35)

1. What is LIDAR technology in Remote Sensing and why it is required?
2. What is Microwave SAR?
3. What is the difference between Land Use and Land cover? Describe with examples.
4. What is Spatial Data Infrastructure?
5. What is 3D GIS? Describe applications of 3D GIS.

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(MGIS-11/16/17)****Second Year, Examination - 2019****Time : 3 Hours****Max. Marks : 80**

6. What is Spectral Rationing?
7. What is WMS and WFS ?
8. What is OGC? Which OGC standard is used for online Geo-processing?

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Note - This Paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the Questions contained in these sections according to the detailed instructions given therein.

**Section - A****(Long-Answer-Type Questions)**

Note - Section 'A' contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any Three (03) questions only.

(3 × 15 = 45)