

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(Third Semester)

Branch – ENVIRONMENTAL SCIENCE

**REMOTE SENSING & GIS APPLICATIONS IN ENVIRONMENTAL
MANAGEMENT**

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Which photograph cover large area?
(i) High Oblique (ii) Vertical
(iii) Perpendicular (iv) Low
- 2 Landsat program started at
(i) 1987 (ii) 1974
(iii) 1986 (iv) 1972
- 3 Who launched EOS-01?
(i) UK (ii) India
(iii) France (iv) Russia
- 4 What is the full form of DEM?
(i) Demographic Electric Model (ii) Digital Elevation Mosaic
(iii) Digital Elevation Model (iv) Digital Electric Model
- 5 Which of the following waves has the highest velocity?
(i) S-Waves (ii) Large Waves
(iii) P-Waves (iv) Rayleigh Waves

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) Discuss about the visual image with interpretation key.
OR
b) What is electromagnetic radiation (EMR)?
7. a) Classify and describe about the sensors and its uses.
OR
b) Explain resolution and its types.
8. a) Write a detailed account on SAR and SLAR operations.
OR
b) Enlist the characteristics of RADAR signals.
9. a) Explain in detail about GIS and its components.
OR
b) How accuracy enhancement useful in GIS?
10. a) Describe the application of GIS and remote sensing in forest management.
OR
b) List out the application of GIS in coastal zone management.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a) Explain in detail about the characteristics of remote sensing.
OR
b) Analyse the aerial photography and photogrammetry with its application.
12. a) Describe the difference between the Whiskbroom scanner and Push broom scanner with neat diagram.
OR
b) Tabulate the advantages and disadvantages of various remote sensing platforms.
13. a) Give an account on types of remote sensing.
OR
b) Explain the principle of RADAR and its applications.
14. a) Elucidate the role of data integration in GIS.
OR
b) Explain in detail about image processing in remote sensing.
15. a) Analyse the role of Remote sensing and GIS in LU/LC mapping.
OR
b) Elaborate the GIS application in disaster management.

Z-Z-Z

END