

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION MAY 2018  
(Third Semester)**

**Branch – ENVIRONMENTAL SCIENCE**

**REMOTE SENSING & GIS**

Time : Three Hours

Maximum : 75 Marks

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(5 x 15 = 75)

- 1 a Write an essay on Electromagnetic radiation and its interaction with atmosphere. (10)
- b What is aerial photographs? List its applications. (5)
- OR
- c Write a detailed note on image interpretation elements. (8)
- d Explain the fundamental concept of remote sensing with neat sketch. (7)
- 2 a Write a brief history of Indian Remote Sensing Programs. (7)
- b Explain in detail about multispectral scanning. (8)
- OR
- c Write a history of LANDSAT. (8)
- d Discuss in details about active and passive sensors with neat sketch. (7)
- 3 a Explain the operation of SAR. (7)
- b How RADAR works? Discuss its advantages. (8)
- OR
- c Explain in detail about microwave remote sensing. (8)
- d Discuss in detail about the operation of SLAR. (7)
- 4 a Briefly explain the concept and components of GIS. (8)
- b What is the difference between supervised and unsupervised classification? (7)
- OR
- c Write in detail about GPS and its application. (7)
- d What is digital image processing techniques? Discuss in detail. (8)
- 5 a How remote sensing and GIS involved in environmental protection and management? (10)
- b Explain the role of remote sensing and GIS in factory studies. (5)
- OR
- c Discuss in detail about land and water resources management using remote sensing and GIS. (15)