

Roll No. :

Total No. of Questions : 16]

[Total No. of Printed Pages : 3

DDPG-564

Post-Graduate Diploma in Geoinformatics and Remote Sensing Examination, 2023

FUNDAMENTALS AND APPLICATIONS OF REMOTE SENSING

Paper - PGD-102

Time : 3 Hours]

[*Maximum Marks : 100*

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 7 × 5 = 35)

Note :- Answer *five* questions in all, selecting at least *one* question from each Unit. (Answer limit **200** words). Each question carries **7** marks.

Section-C

(Marks : 15 × 3 = 45)

Note :- Answer *three* questions in all, selecting *one* question from each Unit. (Answer limit **500** words). Each question carries **15** marks.

Section-A

1. (i) What do you mean by Remote Sensing ?
- (ii) What is EMR ?
- (iii) Define atmospheric window.

BRI-370

(1)

DDPG-564 P.T.O.

- (iv) What is image interpretation ?
- (v) Define Aerial Photographs.
- (vi) Write any *two* factors which can affect aerial photographs.
- (vii) Write any *two* limitations of satellite remote sensing.
- (viii) What is Parallax ?
- (ix) Define satellite remote sensing.
- (x) Write any *two* names of software used for mapping the natural features of earth.

Section-B

Unit-I

- 2. Write short note on remote sensing and its types.
- 3. What do you understand by Electromagnetic Radiation ? Describe briefly.
- 4. What is Microwave Remote Sensing ? Explain.

Unit-II

- 5. Give brief account on aerial cameras and photographic films.
- 6. Write a short note on Orthophotos.
- 7. What is Satellite Remote Sensing ? Discuss it.

Unit-III

- 8. Write any *two* applications of remote sensing in natural hazards assessment.
- 9. Give detailed account on role of remote sensing in Environmental Impact Assessment.
- 10. Differentiate between an aerial photo and a satellite image.

Section–C

Unit–I

11. Explain about the introduction, principles and history of remote sensing. What are the scopes of remote sensing ?

Or

12. What do you mean by Atmospheric Window ? Explain the spectral reference curve in detail.

Unit–II

13. What is aerial photograph ? Give detailed account on types, scale and resolution in aerial photographs.

Or

14. Write notes on the following :

- (a) Parallax
- (b) Relief displacement

Unit–III

15. Define image interpretation. Discuss the various elements of visual image interpretation.

Or

16. Explain the applications of remote sensing in :

- (a) Resource evaluation
- (b) Urban and regional planning