Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CE) (2012 to 2017) (Sem.–4)

GEOMATICS ENGINEERING

Subject Code : BTCE-401

M.Code : 56083

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.**

SECTION-A

Answer briefly :

1. List various types of photogrammetry.
2. What are the various requirements of aerial camera?
3. Name various components of stereoscopic plotting instruments.
4. How is the horizontal angle measurement made with the help of Total Station?
5. Draw schematic diagram of geodimeter.
6. Define crab and drift.
7. Name various data input methods in GIS.
8. What are the various sources of error in GIS?
9. Draw a schematic diagram of Generic GPS receiver.
10. Give broad classification of remote sensing.

SECTION-B

11. How the overlapping photographs are captured for aerial platform? Explain in brief.

12. What is orbit of a satellite? Explain geosynchronous and sun-synchronous orbits.

13. Define GIS. Describe key components of GIS.

14. Why is the GPS signal so complicated? Explain.

15. Explain various types of EDM instruments in detail.

SECTION-C

16. What is Parallax bar? How is parallax bar constant measured? Derive various parallax equations.

17. a) Explain the role of remote sensing to monitor land use changes.

    b) What are the utilities of remote sensing in mapping science?

18. a) Why is GIS advantageous than CADD or other mapping software?

    b) What do you understand by spatial data model? Describe conceptual and logical data models for spatial data.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.