



Name: ..... Roll No.: .....

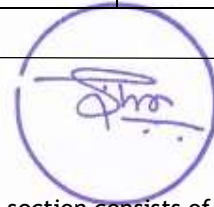
Branch: ..... Signature of Invigilator: .....

Semester: VIth Date: 27/04/2022 (MORNING)

Subject with Code: CE424 ADVANCED SURVEYING

Marks Obtained	Section A (30)	Section B (20)	Total Marks (50)

INSTRUCTION TO CANDIDATE



1. The booklet (question paper cum answer sheet) consists of two sections. First section consists of MCQs of 30 marks. Candidates may mark the correct answer in the space provided / may also write answers in the answer sheet provided. The Second section of question paper consists of subjective questions of 20 marks. The candidates may write the answers for these questions in the answer sheets provided with the question booklet.
2. The booklet will be distributed to the candidates before 05 minutes of the examination. Candidates should write their roll no. in each page of the booklet.
3. Place the Student ID card, Registration Slip and No Dues Clearance (if applicable) on your desk. All the entries on the cover page must be filled at the specified space.
4. Carrying or using of mobile phone / any electronic gadgets (except regular scientific calculator)/chits are strictly prohibited inside the examination hall as it comes under the category of unfair means.
5. No candidate should be allowed to enter the examination hall later than 10 minutes after the commencement of examination. Candidates are not allowed to go out of the examination hall/room during the first 30 minutes and last 10 minutes of the examination.
6. Write on both side of the leaf and use pens with same ink.
7. The medium of examination is English. Answer book written in language other than English is liable to be rejected.
8. All attached sheets such as graph papers, drawing sheets etc. should be properly folded to the size of the answer book and tagged with the answer book by the candidate at least 05 minutes before the end of examination.
9. The door of examination hall will be closed 10 minutes before the end of examination. Do not leave the examination hall until the invigilators instruct you to do so.
10. Always maintain the highest level of integrity. Remember you are a BITian.
11. Candidates need to submit the question paper cum answer sheets before leaving the examination hall.

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI**

**CLASS : B.TECH.**

**SEMESTER : SP/22**

**BRANCH : CIVIL**

**SESSION : 2021-22**

**SUBJECT: CE424 - Advanced Surveying**

**TIME : 2 HOURS**

**FULL MARKS: 50**

**INSTRUCTIONS :**

1. All the questions are compulsory.
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**Section A**

All the questions in “Section A” have 2 marks each.

1. Angle can be measured with a tacheometer
  - (a) Yes
  - (b) No
2. Terrestrial photogrammetry is carried out in
  - (a) Ground
  - (b) Air
  - (c) Water
  - (d) Both Ground and Water
3. A photograph is called vertical if the tilt is
  - (a) < 3 degree
  - (b) < 6 degree
  - (c) < 8 degree
  - (d) None of the above
4. In Passive Remote sensing Sun acts as a source of EM energy.
  - (a) True
  - (b) False
5. Active remote sensing uses its own source of EM energy
  - (a) True
  - (b) False
6. The wavelength of visible light is about
  - (a) 0.40 micrometer
  - (b) 0.48 micrometer
  - (c) 0.58 micrometer
  - (d) 0.65 micrometer
7. GIS stands for
  - (a) Geographic Information System
  - (b) Generic Information system
  - (c) Geological Information System

- (d) Genetic Information System
8. GIS deals with which kind of data
    - (a) Binary data
    - (b) Spatial data
    - (c) Numeric data
    - (d) Complex data
  9. Which of the following statements are true about the capabilities of GIS
    - (a) Data capture and preparation
    - (b) Data management, storage, maintenance
    - (c) Data manipulation and analysis
    - (d) All of the above
  10. Raster graphics are composed of Pixels
    - (a) Yes
    - (b) No
  11. Vector graphics are composed of paths
    - (a) Yes
    - (b) No
  12. NAVSTAR (GPS) was launched by
    - (a) US
    - (b) Japan
    - (c) UK
  13. Simpson's one-third rule is applicable when
    - (a) Number of divisions of the area is even
    - (b) Number of divisions of area is odd.
  14. Area can be computed from map measurements
    - (a) Yes
    - (b) No
  15. Latitudes and Departures may be used to calculate area
    - (a) Yes
    - (b) No

### **Section B**

All the questions in "Section B" have 5 marks each.

1. Compare between different methods of area calculations.
2. What are the components of remote sensing ? Discuss in details.
3. Discuss the layered database concept of GIS.
4. What do you mean by Vector data and Raster data ? Compare between them.