

**C-4420**

**Sub. Code**

**93511**

**DIPLOMA EXAMINATION**  
**LAND SURVEY ENGINEERING**  
**APRIL 2021 EXAMINATION**  
**&**  
**APRIL 2020 ARREAR EXAMINATION**  
**Non-Semester**  
**BASIC OF SURVEYING AND COMPASS SURVEYING**  
**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is the use of surveying?
2. Define : Linear measurements.
3. What are the instruments used for chaining?
4. What is survey station?
5. Define : Compass Surveying.
6. What is traversing?
7. Give the advantages of plant table surveying.

8. What are the accessories of plant table?
9. Define : Mid-ordinate rule.
10. Give the formula for cross and sectional area.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write about unite of measurements.

Or

- (b) Explain the instruments for chaining.

12. (a) Write about ranging and its types.

Or

- (b) List out the equipments required for chain surveying.

13. (a) Explain the principle of compass surveying.

Or

- (b) Write about filed procedure of compass traverse.

14. (a) Explain the accessories of plane table.

Or

- (b) Write about resection.

15. (a) Explain : Trapezoidal rule.

Or

- (b) Write about the formula for calculation of cross section area and explain how to compute.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write about classification of surveying.

Or

(b) Explain the errors in chaining.

17. (a) Write about surveying character of work.

Or

(b) Write a short note on tape correction.

18. (a) Explain the types of compass.

Or

(b) Write about prismoidal correction for trapezoidal of average end area rule.

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**C-4421**

**Sub. Code**

**93512**

**DIPLOMA EXAMINATION**  
**LAND SURVEY ENGINEERING**  
**APRIL 2021 EXAMINATION**  
**&**  
**APRIL 2020 ARREAR EXAMINATION**  
**Non-Semester**  
**ENGINEERING SURVEYING**  
**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define : Reconnaissance.
2. What is route survey?
3. Give the uses of leveling.
4. Define : staves.
5. What is theodolite?
6. Give the uses of Gale's tables.
7. Define : Tachometric surveying.
8. What is stadia constant?

9. What is the disadvantages of trigonometrically surveying?
10. Explain the term : “Base of the object accessible”.

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) Write about curve ranging.  
Or  
(b) Explain the tangential angles by theodolite.
12. (a) Write about levelling staff sensitiveness.  
Or  
(b) Explain in detail about height of collimation.
13. (a) Write about vernier and microptic.  
Or  
(b) Explain about omitted measurements.
14. (a) Write about stadia systems.  
Or  
(b) Explain : Anallatic lens.
15. (a) Explain the principle of trigonometrically surveying.  
Or  
(b) Give the uses of trigometrical surveying.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Write about correlation of underground and surface surveys.  
Or  
(b) Explain in detail about curvature and refraction.

17. (a) Explain the description and uses of theodolite surveying.

Or

(b) Write about traversing.

18. (a) Explain : Subtense bar.

Or

(b) Write about vertical and normal staffing.

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C-4422

Sub. Code

93513

**DIPLOMA EXAMINATION**  
**LAND SURVEY ENGINEERING**  
**APRIL 2021 EXAMINATION**  
**&**  
**APRIL 2020 ARREAR EXAMINATION**  
**Non-Semester**  
**MODERN SURVEYING**  
**(2019 onwards)**

Duration : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Give the uses of total station.
2. What is distance angle?
3. Give the uses of Edm.
4. What is area DTM value?
5. Write about tripod setup.
6. What are the parts of total station?
7. Write the uses of remote sensing.
8. Define : Electromagnetic energy.

9. What is GPS?
10. Write the principle of GPS.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the characteristics of total station.

Or

- (b) Write about and electronic display and data reading.

12. (a) Explain the procedure for co-ordinate measurements.

Or

- (b) Give the properties of electromagnetic waves.

13. (a) Write about mount instruments tripod.

Or

- (b) Explain in detail about focus on survey point.

14. (a) Explain the principle of remote sensing.

Or

- (b) Draw and explain : Electro magnetic spectrum.

15. (a) Explain the components of GPS system.

Or

- (b) Write about Glonass System.



**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write about satellite navigations constellations.

Or

- (b) Explain : Surveying with GPS.

17. (a) Write about remote sensing in India.

Or

- (b) Explain the Hardware of GIS.

18. (a) Write about data structure of GIS.

Or

- (b) Explain : Map overlay.
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