

EIS-196-197

B.E. (Vth Sem.) (CGPA) Civil Engg. Exam.-2016

SURVEYING-II

Paper - CE-504

Time Allowed : Three Hours

Maximum Marks : 60

Note : Attempt all questions.

All question carry equal marks.

Unit-I

- Q.I (a) What is GPS ? State its application.
- (b) State various features of total station. Explaining control panel features in details.

or

- (a) Explain construction and working of digital planimeter.
- (b) Write and discuss the principle of electronic distance measurement system.

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Unit-II

- Q.II (a) Determine azimuth and altitude of a star from following data—

Latitude of observer = $48^{\circ}N$

Hour angle of star = 43°

Declination of star = $18^{\circ}20' N$

- (b) What do you understand by equinox, sidereal time and solstice ?

or

- (a) Describe the field procedure for determining latitude by ex-meridian observation on sun.
- (b) List all the coordinate systems used to locate the position of heavenly bodies in celestial sphere. Describe any one in details.

Unit-III

- Q.III (a) Write a detailed note on DTM.
- (b) Differentiate between GIS and GPS.

or

- (a) What are the various GPS techniques used in surveying. Explain.

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- (b) Describe the components of GPS in detail.

Unit-IV

Q.IV (a) Define—

- (i) Airbase
- (ii) Tilt displacement
- (iii) Principle points
- (iv) ISO center

- (b) Derive an expression for height distortion in an anal photograph.

or

- (a) What are the photo/image interpretation methods by stereoscope, Explain anal photo interpretation keys with suitable example.
- (b) Write short notes on the following—
- (i) Flight planning for areil photography
 - (ii) Stereoscopic vision on vertical photographs

Unit-V

Q.V (a) Write short notes on the following—

- (i) Indian remote sensing satellites
- (ii) Software and hardware components of GIS

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- (b) Classify remote sensing and discuss various data analysis methods.

or

- (a) List advantages of GIS.
- (b) Describe in detail remote sensing and GIS application in urban growth analysis

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