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| Discipline :-  **CIVIL ENGG** | Semester:-  **6TH** | Name of the Teaching Faculty:- |
| Subject:-  SURVEY PRACTICE - II | No of Days/per Week Class Allotted :-**6P** | Semester From:- **2nd JAN, 2019** To:- **15th APRIL, 2018**  No of Weeks:- **14** |
| **Week** | **Class Day** | **Practical** |
| 1st | 1st | 1.1 Study of essential features and parts of different types of levels 1.2 Study of essential features of different types of leveling staffs 1.3 Making temporary adjustments of Levels |
| 2nd | 1.4 Determining Reduced Levels of five given points taking staff readings with Levels. 1 |
| 2nd | 1st | 1.5 Determining the difference of levels between two points (3 pairs of points / group) by taking staff readings form single set up of level, recording the readings in level book and application of Arithmetic check |
| 2nd | Conduct Fly Levelling (Compound) between two distant points with respect to R.L. of a given B.M. and reduction of levels by both height of collimation and rise & fall method and applying Arithmetic check |
| 3nd | 1st | 1.7 Finding R. L. of (1) roof, (2) chaja or canopy with reference to the R.L. of given B.M. by taking inverted staff reading. 1.8 Conduct profile leveling along the given alignment for a road / canal for 150m length, taking L. S. at every 15m and C. S. at 1m & 3m apart on both sides at every 30m interval and recording the data in level book and applying arithmetical check |
| 2nd | 1.9 Plotting the profile of the alignment surveyed in Exercise 6.8 and drawing the grade of alignment desired (To be drawn during the class hours ) 1.10 Setting out the given grades for a sewer along a given alignment |
| 4th | 1st | 2.0 CONTOURING : |
| 2nd | 2.1 Locating contour points in the given area by direct method / indirect method |
| 5th | 1st | 2.2 Conducting block level survey inn the given area |
| 2nd | 2.3 Plotting and drawing contour map of a given area by radial method. |
| 6th | 1st | THEODOLITE : 3.1 Study of essential features and parts of transit thodolite, to describe the theodolite with neat sketche |
| 2nd | 3.2 Carry out temporary adjustment of a tansit theodolite and read horizontal and certicla angles to 5 objects |
| 7th | 1st | 3.3 Measurement of horizontal angles (3nos.) by repetition and reiteration method and compare two methods 3.4 Prolonging a given straight line with the help of a theodolite 3.5 Determination of magnetic bearing of 3 given straight lines |
| 2nd | 4.0 THEODOLITE TRAVERSING ; 4.1 Setting out a closed traverse with 6 sides and entering the field data 4.2 Plotting the traverse from exercise 4.1 and checking the error of closure |
| 8th | 1st | 4.3 Setting out an open traverse with 5 sides and entering the field data 4.4 Plotting the traverse from exercise 4.3 and checking the error of closure |
| 2nd | 5.0 TRIGONOMETRICAL SURVEYING & TACHEOMETRY : 5.1 Determination of height of 3 objects whose bases are accessible |
| 9th | 1st | 5.2 Determination of stadia constants 5.3 Determination of horizontal distance an elevation with Staff vertical , by stadia method |
| 2nd | 6.0 SETTING OUT CURVES : 6.1 Setting out a simple circular curve by offsets from long chord |
| 10th | 1st | 6.2 Setting out a simple circular curve by offsets from the tangent 6.3 Setting out a simple circular curve by offsets from chords produce |
| 2nd | 6.4 Setting out a simple circular curve by Rankine’s method of tangent angle (Deflection angles) |
| 11th | 1st | 7.0 SITE SURVEYING : 7.1 Setting out a site the center line and foundation width of a building from the given plan |
| 2nd | 7.2 Setting out the foundation line for a culvert 7.3 Dividing an area into plots of given size |
| 12th | 1st | 8.1 Study of essential features of (i)Microphonic theodolite / digital theodolite. ii) Measure distance, elevation,horizontal and vertical angle of an object with modern theodolite. between two points with electronic distance meter |
| 2nd | 8.2 Total Station and Electronic Distance Meter (I) Set up and use of Total Station/EDM for establishing control, detailing surveying,setting out and coordinate check (II) Extract and relate coordinate information from drawings. |
| 13th | 1st | (III) Record angle and distance observations in the field. (IV) Calculate rectangular coordinate information from the field observation. |
| 2nd | (V) Calculate polar coordinate setting out information from drawings. (VI) Mainain clear records of calculations. (VII) Check for sources of errors with Total Station |
| 14th | 1st | 8.3 Meaure distance between two points with Electronic Distance Meter |
| 2nd | RECORD SUBMIT |