SURVEY CAMP

BEG 353 CI

Year: III **Part: I**

Teaching Schedule Hours/week			Examination Scheme						Total Marks
			Final				Internal Assessments		
			Theory		Practical		Theory	Practical	
L	T	P	Duration	Marks	Duration	Marks			
-	-	-	-	-	-	40	-	60	100

Course Objective:

Two primary objectives of the survey camp are as follows:

a) It will provide the students ample opportunities to consolidate and update their practical and theoretical knowledge in engineering surveying in the actual field conditions with practical problems.

b) It will provide the students' real field based exposure to learn and apply different surveying, modern instruments, computational practices and ways of presentation of their final reports.

To fulfill this purpose a field works of 14 days close survey camp is prescribed

1.0 Topographic surveying

1.1 Horizontal and Vertical Control Practices for Large Area: Major Traversing (4 days)

Around 1500 m periphery (not less than 15 stations) shall be enclosed by forming the close traverse and coordinates of those traverse stations shall be controlled with reference to national grid system (Using GPS or Resection method).Easting and northing coordinates shall be controlled by Total Station and elevation must be controlled by Auto Level (fly leveling)

1.2 Horizontal and Vertical Control inside the Major Traverse: Minor traversing (2 days)

Detailed Topographic survey shall be conducted within the perimeter of semi built up area around 500 m^2 of land(about 3 to 6 control stations).Easting and Northing coordinates shall be controlled by total station and elevation must be controlled by Auto level(fly leveling).Link traverse exercise is compulsory.

1.3 Computation and plotting (2 days)

Computation for major and minor traverses shall be performed for horizontal and vertical coordinates in proper format. Plotting shall be done in A1 grid sheet. Orientation check of plot shall be performed to proceed.

1.4 Topographic surveying: detailing **(2 days)**

After proper computation and plotting of traverse in prescribed format and detailing shall be proceeded. For this propose detailing shall be done by Total station. Data saving in data logger (electronic field book) and manual booking both should be practiced.

2 .0 Bridge site survey **(2 days)**

Detail topographic survey of suitable bridge site shall be conducted by which topographic map, longitudinal section; cross section etc shall be prepared at standard scale.

3.0 Road alignment survey **(2 days)**

At least 700 m road alignment survey shall be done from where plan, longitudinal section, cross section etc shall be drawn at standard scale including selection of grades formations levels.

R**equirements:**

Number of students in each groups should be 4 or 5. As far as possible modern surveying equipments such as GPS, total stations, EDM, Theodolite, planimeter etc are introduced to conduct the survey camp .Each facilitator should not have more than 2 groups.