Ramgarhia Polytechnic College, Phagwara



Civil Engineering Department

- Head of Department: Er. Gurcharan Singh
- Name of the Faculty: Er. Charandeep Singh and Er. Neeraj Sobti
- Discipline: Civil Engineering Department

5th

- Semester:
- Subject: SURVEY CAMP
- Lesson Plan Duration: 16 Weeks

RATIONALE

- a. To impart intensive training in the use of surveying instruments
- b. To train the students to appreciate practical difficulties in surveying on the field
- c. Making the students conversant with the camp life

- d. Training the students to communicate with the local population
- e. Providing an opportunity to the students to develop team spirit
- f. To train the students for self management

Learning Outcomes

- After undergoing the survey camp, students will be able to:
- Interpret the contours
- Work in a teamwork
- Mark a road alignment of a given gradient connecting any two stations on the map
- Calculate the earth work
- Prepare a topographical plan of a given area

PO	\square	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO	\Box							
CO1								

Syllabus

PRACTICAL	Details/Task
1.	
	Preparation of topographical plan of a given area.
	The survey camp will be organized for a duration of
	10 days time span. The students may be assigned
	an undulated area of about 1.5 to 2.00 sq.km. with
	level difference of 15m consisting of good number of
	physical features such as buildings, roads, bridges,
	culverts, railway tracks, electric lines etc. They are
	required to prepare the topographic map of above
	areas showing various features along with contours
	using a suitable contour intervals. They will mark a
	road alignment of given gradient connecting any two
	stations on the map consisting some horizontal and
	vertical curves and will prepare estimate of
	earthwork and submit the detailed technical report
	indicating therein practical difficulties faced during
	surveying for the features like ridge, line, valley
	lines, saddle cliffs etc. The students should be
	divided in the groups consisting of 10-15 in
	numbers. They are required to submit the Report of
	workdone, during survey camp, which will be dully
	examined, while awarding the internal assessment

Delivery/Instructional Methodologies

Sr.No.	Description
1.	Chalk and Talk
2.	PowerPoint Presentation

Assessment Methodologies

Sr. No.	Description	Туре
1.	Student Assignment	Direct
2.	Test	Direct
3.	Board Examination	Direct
4.	Student Feedback	Direct

Gaps in the syllabus - to meet industry/profession requirements

S.NO.	DESCRIPTION	PROPOSED	PO
		ACTIONS	MAPPING
	N/A	N/A	N/A

Topics beyond syllabus/advanced topics

Units	Details	Hours
N/A	N/A	N/A

Web Source References

Sr. No.	URL
1.	https://nptel.ac.in/

Lesson Plan

DAY	
1 st	SITE VISIT, RECONNAISSANCE, FIXING OF STATIONS AND MEASUREMENT OF THE SURVEY LINES.
2 nd	PLAIN TABLING OF THE CAMP SITE
	REPEAT
3 rd	

4 th	THEODOLITE TRAVERSING
4"	

5 th	
	TEMPORARY BENCH MARK
	FROM THE PERMANENT

	CONTOURING
6 th	

7 th	MARKING THE ROAD ALIGNMENT BETWEEN THE TWO STATION AND ESTIMATION OF EARTHWORK
8 th	OFFICE WORK
9 th	OFFICE WORK

10 th	PREPRATION OF TECHNICAL REPORT

NBA has defined the following seven POs for an Engineering diploma graduate:

i) **Basic and Discipline specific knowledge**: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

ii) **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

iii) **Design/ development of solutions**: Design solutions for welldefined technical problems and assist with the design of systems components or processes to meet specified needs.

iv) **Engineering Tools, Experimentation and Testing**: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

v) Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices. vi) **Project Management**: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

vii) **Life-long learning**: Ability to analyze individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes (PSOs)

PSOs are a statement that describes what students are expected to know and be able to do in a specialized area of discipline upon graduation from a program. Program may specify 2-4 program specific outcomes, if required.

These are the statements, which are specific to the particular 11 program. They are beyond POs. Program Curriculum and other activities during the program must help in the achievement of PSOs along with POs.