

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



PROGRESS REGISTER Session-2022-2023

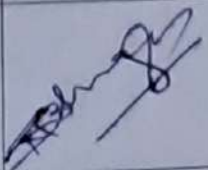
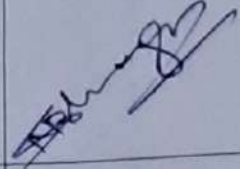
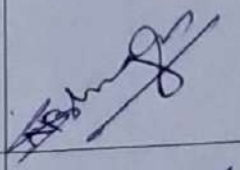

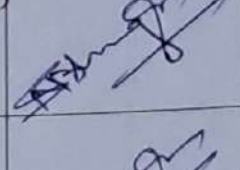

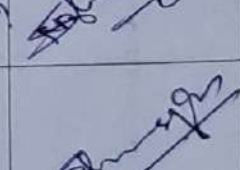
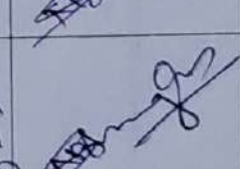
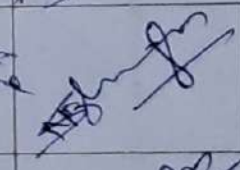
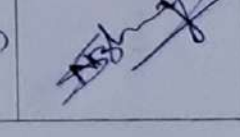

Discipline: Civil Engg.

Semester: 4th Subject: Land Survey - I

Name of the Teaching Faculty: Satjanarayan Bhusagar

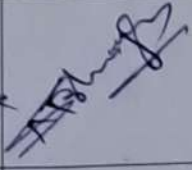
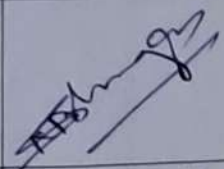
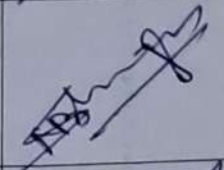
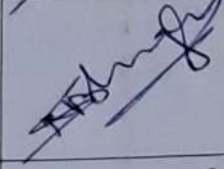
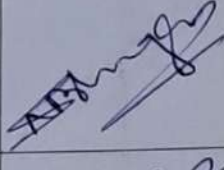
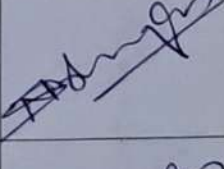
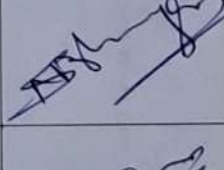

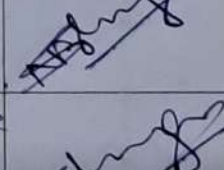
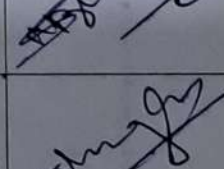
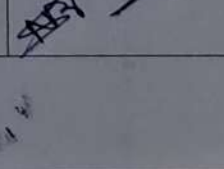
Subject: Land Surveying - I No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 9/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
14/2/23	Surveying: Definitions Aims & objective	Surveying Definitions Aims & objective	Aim, principles, Defn objectives.	
15/2/23	Principle of Survey plane Surveying	Principle of Survey plane Surveying	Plane Surveying principles.	
16/2/23	Geodetic Surveying instrumental Surveying	Geodetic Surveying instrumental Surveying	Instrumental Geodetic Surveying	
20/2/23	precision & accuracy of measurement	Precision & accuracy of measurement.	Instrument used for measurement distance tape & chain.	
21/2/23	Errors & mistakes in linear measurement	Errors & mistakes in linear measurement.	Classification sources of error remedies.	
22/2/23	correction to measured length due to incorrect length	correction to measured length due to incorrect length	incorrect length temp correction.	
23/2/23	Numerical problems applying corrections.	Numerical problems applying corrections	pull correction sag correction temp correction.	
25/2/23	Equipment & accessories for chaining & ranging	Equipment & accessories for chaining & ranging.	purpose signalling error.	
27/2/23	Methods of chaining	Methods of chaining	chaining on flat ground sloping ground stepping round slope correction.	
28/2/23	Setting perpendicular with chain & tape	Setting perpendicular with chain & tape	chaining types, subtangles, Numerical problems.	
1/3/23	purpose of chain Surveying	purpose of chain Surveying	concept field book Survey station base line tie lines.	

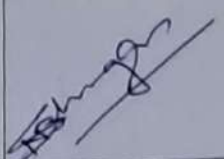
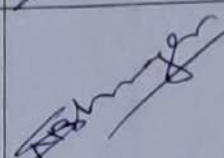
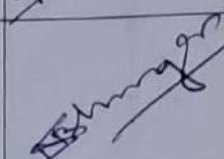
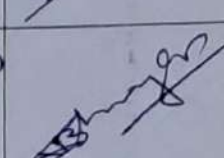
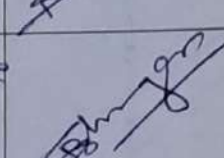
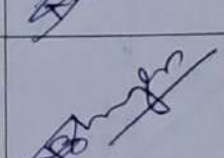
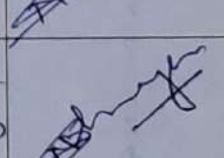
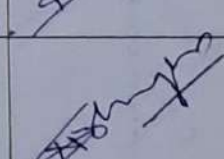
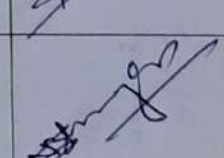
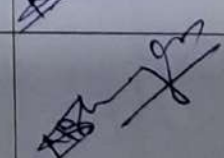
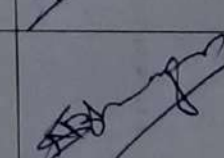
Subject: Land Surveying - I No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 9/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
2/3/23	offsets	offsets	Necessity cross staff optical square oblique	
4/3/23	Errors in chain surveying	Errors in chain surveying	compensating accumulative causes remedies.	
6/3/23	precautions to be taken during chain surveying	precautions to be taken during chain surveying	obstacles Trespassing frequent.	
9/3/23	Measurement of angles with chain, tape & compass.	Measurement of angles with chain, tape & compass.	chain uses tape uses compass uses.	
11/3/23	compass uses	compass uses	types, parts features, merits, demerits. testing.	
13/3/23	Designation of angle with compass	Designation of angle with compass	concept of meridian magnetic true arbitrary.	
14/3/23	compass uses applications	compass uses applications	WCB, QB, RB, conversion of bearings.	
15/3/23	uses of compass	uses of compass	Setting in field centering levelling taking reading.	
16/3/23	concepts of fore bearing back bearing	concepts of fore bearing back bearing	fore bearing back bearing computed interior & exterior angle.	
18/3/23	Effects of earth magnetism	Effects of earth magnetism	dep of needle magnetic declination variation in declination	
20/3/23	Errors in angle measurement with compass	Errors in angle measurement with compass	sources remedies.	

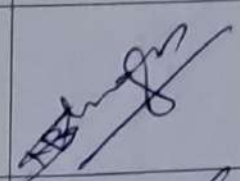
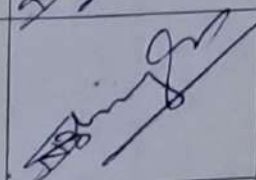
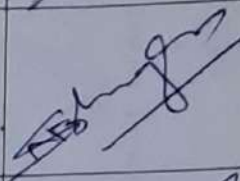
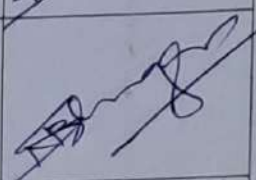
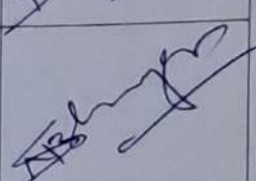
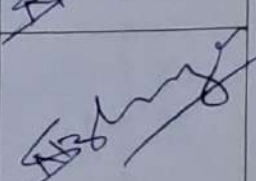
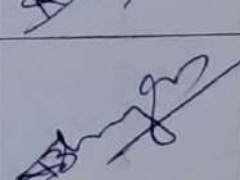
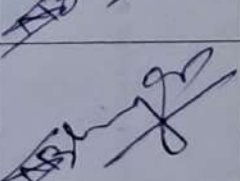
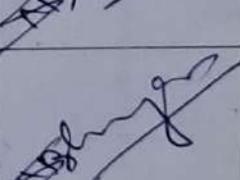
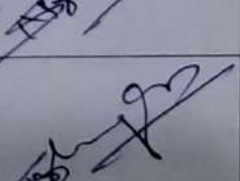
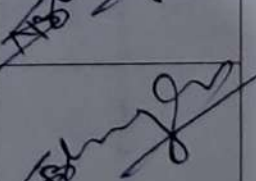
Subject: Land Survey - 1 No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 7/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
21/8/23	Principles of traversing	Principles of traversing	open & closed traverse method of traverse	
22/8/23	Local attraction	Local attraction	cause, errors, detection, correction, Application, correction.	
23/8/23	Errors in compass surveying	Errors in compass surveying	sources, remedies, plotting of traverse.	
25/8/23	check of closing error	check of closing error	closed & open traverse Bowditch correction, Gale's table.	
27/8/23	Study of detection of scale	Study of detection of scale	Grid reference, Grid square.	
28/8/23	Study of sign & symbol of map	Study of sign & symbol of map	sign, symbol.	
29/8/23	cadastrial map preparation methodology	cadastrial map preparation methodology	Ground based Survey, Total station, Aerial photographs.	
3/9/23	unique identification number of parcel	unique identification of number of parcel	ULPIN, 4 digit alphanumeric ID.	
4/9/23	positions of existing control points & its types	positions of existing control point & its types	control point types.	
5/9/23	cadastrial map boundaries	cadastrial map boundaries	features, Topology, verification.	
6/9/23	Revision about map reading cadastrial maps	Revised about map reading cadastrial maps	ULPIN, feature, control point, topology.	

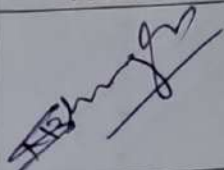
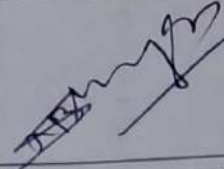
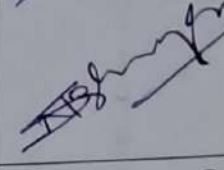
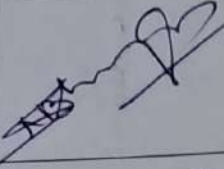
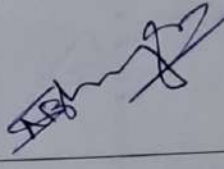
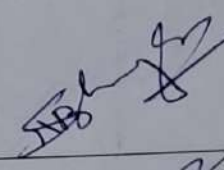
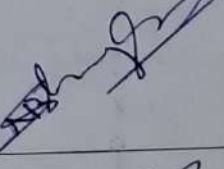
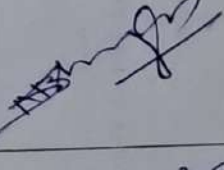
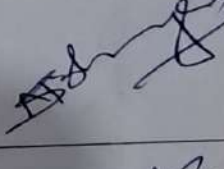
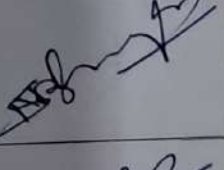
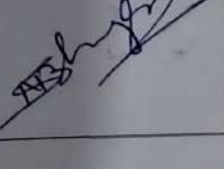
Subject: Land Survey - I No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 2/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
8/4/23	Plane table Surveying	plane table Surveying	objectives principles use	
10/4/23	Instrument & accessories used in plane table Surveying	Instrument & accessories used in plane table Surveying	alidade compass plumb-bob U-frame	
11/4/23	methods of plane table Surveying	method of plane table Surveying	Radiation intersection	
12/4/23	methods of plane table Surveying	method of plane table Surveying	Traversing Resection	
13/4/23	methods of plane table statements	method of plane table statement	Two point problem three point problem	
15/4/23	Errors in plane table Surveying	Errors in plane table Surveying	corrections precautions in plane table	
17/4/23	Revision about plane table Surveying	Revision about plane table Surveying	Radiation intersection Resection traversing	
18/4/23	theodolite Surveying	theodolite Surveying	purpose definition	
19/4/23	transit theodolite	Transit theodolite	Description features components fundamental axis	
20/4/23	Temporary adjustment of theodolite	Temporary adjustment of theodolite	concept of vernier reading vernier scale	
24/4/23	concept of transiting	concept of transiting	measurement of horizontal & vertical angle	

Subject: Land Surveying - 1 No. of Days/per week class allotted 05

Semester From Date: 14/1/23 To Date: 7/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
25/4/23	concept of transiting	concept of transiting	measurement of magnetic bearings, deflection angle, direct angle	
26/4/23	Straight line work with theodolite	straight line work with theodolite	Errors in theodolite observations	
27/4/23	methods of theodolite	methods of theodolite	inclined angle, direct angle, bearing method	
29/4/23	plotting the traverse	plotting the traverse	co-ordinate method, open and closed traverse	
1/5/23	Traverse computation	Traverse computation	consecutive co-ordinate, latitude, departure, Gales table	
2/5/23	Numerical problems on omitted measurement of length	Numerical problems on omitted measurement of length & bearing	Numericals.	
3/5/23	closing error	closing error	adjustment of angular error.	
4/5/23	closing error	closing error	adjustment of bearings, numerical problems.	
6/5/23	Balancing the traverse	Balancing the traverse	Bowditch method, transit method, graphical method.	
8/5/23	Balancing of traverse	Balancing of traverse	and method, calculator, area of closed traverse	
9/5/23	Revision about theodolite surveying & traverse	Revision about theodolite surveying & traverse	numerical, and method, Gales table, Bowditch method.	

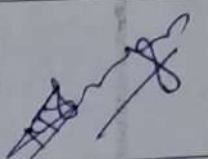
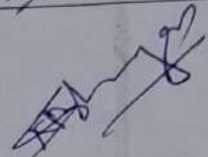
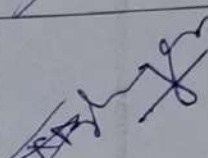
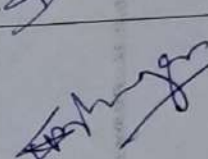
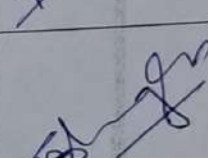
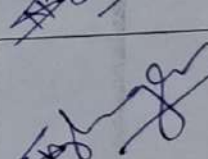
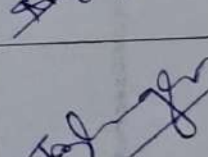
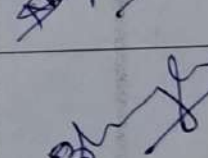
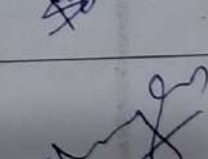
Subject: Land Survey - 1 No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 9/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
10/5/23	Levelling	Levelling	Definition purpose types concept	
11/5/23	Levelling	Levelling	horizontal surface vertical surface datum, B.M	
13/5/23	Instrument used for levelling concepts of line of collimation	Instrument used for levelling concept of line of collimation	axis of bubble tube, telescope vertical axis	
15/5/23	Levelling staff	Levelling staff	Temporary adjustment reading with level.	
16/5/23	concept of bench mark	concept of benchmark	BI, IS, FS CP, HI	
17/5/23	field data entry	field data entry	level book height of collimation method rise fall method	
18/5/23	Numerical Problems on reduction of levels	Numerical problems on reduction of levels.	rise fall method height of collimation method Arithmetic method	
20/5/23	Effects of curvature & refraction numericals	Effects of curvature & refraction numericals.	numerical problems on application of correction	
22/5/23	Reciprocal levelling	Reciprocal Levelling	Principles methods precise levelling numerical	
23/5/23	Errors in levelling & precautions	Errors in levelling & precautions	permanent & temporary adjustment types of levels	
24/5/23	contouring method	contouring method	Definitions methods of contouring plotting contour map.	

Subject: Land Surveying - I No. of Days/per week class allotted 05

Semester From Date: 14/2/23 To Date: 7/6/23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
25/5/23	Use of contour maps in civil Engg. projects drawing C/S	Use of contour maps on civil Engg.	drawing cross section. Locating proper rd.	
27/5/23	Uses of contour map	Use of contour map	Contour on contour map, computation of volume of earthwork map for structure	
29/5/23	Map interpretation	Map interpretation	Interpretation & economic activities settlements communication	
30/5/23	Map interpretation	Map interpretation	Physical land form, problem solving & decision making	
31/5/23	Determination of areas	Determination of areas	computation of areas from plan.	
1/6/23	Determination of areas	Determination of areas	calculation of area by using ordinates rule	
3/6/23	calculation of area	calculation of area	trapezoidal rule Simpson's rule	
5/6/23	calculation of volumes	calculation of volumes	prismoidal formula trapezoidal formula.	
6/6/23	curvature correction prismoidal correction	curvature & prismoidal correction Revision	correction Revision of computation area & volume.	
7/6/23	Revision of curvature	curvature correction Revised	curvature are, computation	