SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Cou	urse Co	de	CO Code	LO Code	4
С	0	3				1	1	Format No. 4

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Illustrate basics of estimating and costing
	I and the second

LO Description Describe the term estimating and costing and its purpose.

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Meaning of the terms estimating, costing. Purpose of estimating and costing, Administrative approval, Technical Sanction and Budget provision.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	04	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Describe the term estimating and costing and its purpose	03	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

В	Branch Code		Co	ourse Co	de	CO Code	LO Code	Format No.	
С	0	3				1	2	4	

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Illustrate basics of estimating and costing
LO Description	Describe different types of estimates, and different provisions in it

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teac h Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Types of estimate - Approximate and Detailed. Types of Approximate estimate - Plinth area rate method, Cubic Content method, Service Unit method, Typical bay method, Approximate Quantity method, Types of detailed estimate Detailed estimate for new work. Revised estimate. Supplementary estimate. Revised & Supplementary estimate. Maintenance & Repair estimate. Uses of detailed estimate. Provisions for contingencies, work charged establishment, provisional items, provisional Sum, Provision for water supply & sanitary works, Electrical wiring & installations, centage charges, tools & plants, prime cost, day work. Problems on Plinth area rate method & Service unit method.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	08	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to explain types of estimates and problems of plinth area rate method.	08	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

4	LO Code	CO Code	Course Code	le	ranch Cod	В
Format No. 4	3	1		3	0	С

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Illustrate basics of estimating and costing
LO Description	Describe rules and accuracy for measurements of various items of works, rules for deductions

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Items of work, General Rules for fixing units of Measurements for different items of work as per IS 1200 & As per PWD Hand Book Desired accuracy in taking measurements of various items of work & rules for deductions as per IS 1200 & P.W.D. handbook. Use of different Schedule of Rates like P.W.D.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	07	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Describe rules and accuracy for measurements of various items of works, rules for deductions	05	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of Internal Exam – Assignments/Seminars/Presentations

SCHEME FOR LEARNING OUTCOME

	LO Code	CO Code	de	ourse Co	Co	le	ranch Coc	В
Format	1	2				3	0	C

								I .
COURSE NAME	QUANTITY SURVEYING A	ND COSTING						
CO Description	Calculate quantities for d	ifferent civil engineering works applying di	ffere	nt meth	nods.			
LO Description	Explain terms used in Det	ailed estimate and its procedure of prepara	ation	•				

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Detailed Estimate- Definition and Purpose, Data required for detailed estimate, Factors affecting detailed estimate - Specification, Quantity availability of material, Location of site, Labour Component. Procedure for preparation of detailed estimate. Taking out quantities and Abstracting through contents of measurement Sheet, Abstract sheet, face sheet Methods of Detailed Estimate- Unit quantity method and total quantity method.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	07	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Explain terms used in Detailed estimate and its procedure of preparation.	05	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of Internal Exam – Assignments/Seminars/Presentations

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Course Co	ode	CO Code	LO Code	
C	0	3			2	2	Format N

COURSE NAME	QUANTITY SURVEYING A	ND COSTING						
CO Description	calculate quantities for d	ifferent civil engineering works applying di	fferer	nt meth	ods.			
LO Description	Prepare detailed estimate	e of building works applying different meth	ods.	as per l	IS			

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Detailed estimate –Long Wall and short wall method, Center line method, preparation of detailed and abstract estimates for various items of work of load bearing and framed structures from drawings (up to three room building). Thumb rule for reinforcement quantity.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	20	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Prepare detailed estimate of building works applying different methods. as per IS	15	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Co	ourse Co	de	CO Code	LO Code	
	0	3				2	3	Format N

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Calculate quantities for different civil engineering works applying different methods.
LO Description	Calculate quantities of earthwork of pavement surface.

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Roads, Railway embankments, methods of mean area, mid sectional area, trapezoidal, Prismoidal formula. Calculation of quantity of earth work. Estimation of pavement surface – WBM, Bitumen, Cement concrete road.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	15	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Calculate quantities of earthwork of pavement surface.	10	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

	LO Code	CO Code	Code	Cour	le	Branch Code		
Format N	1	3			3	0	C	

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Prepare estimate for R.C.C., Steel structures and culverts.
LO Description	Prepare estimate of R.C.C. structures.

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Estimate of slab, beam, T-beam. Estimate of R.C.C. column with its footing. Preparation of Abstract of above items. Preparation of Bar bending schedule, calculation of quantity of steel.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	12	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Prepare estimate of R.C.C. structures.	08	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Co	urse Co	de	CO Code	LO Code	A
C	0	3				3	2	Format No. 4

COURSE NAME QUANTITY SURVEYING AND COSTING

CO Description | Prepare estimate for R.C.C., Steel structures and culverts.

LO Description | Prepare estimate of Steel Structures

SCHEME OF STUDY

	SCHEWIE OF STODY										
S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks				
1.	Estimate of steel column (Stanchion) Estimate of steel Truss. Estimate of Roof covering materials, G.I. Roof, A.C. Roof. Estimate of steel frames for Doors & Windows.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	10	00	Text book, video lectures, chalk board	NIL				

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Practical Exam	Students will be asked to Prepare estimate of Steel Structures	10	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, videos,	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of internal theory exam: Mid Semester Test-I

SCHEME FOR LEARNING OUTCOME

Branch Code			Co	urse Code	е	CO Code	LO Code	
C	0	3				3	3	Format

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Prepare estimate for R.C.C., Steel structures and culverts.

LO Description | Prepare estimate of culverts

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Estimate of Hume pipe culvert with splayed type of wing wall, Turn wall, face wall. Estimate of R.C.C. slab culvert, straight type wing walls. Estimating and abstract with the help of different software for various civil engineering estimates eg. QE-PRO, ESTIMATOR. (Basic concept only)	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	10	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Prepare estimate of culverts	05	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of internal theory exam: Mid Semester Test-II

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Course Co	de CO	LO Code	
C	0	3		4	1	Format N

COURSE NAME	QUANTITY SURVEYING AND COSTING						
CO Description	Calculate the quantities for water supply and sanitary works and Analyze rates of various items of work.						
LO Description	Prepare estimate of Sanitary works.						

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Detailed Estimate of Sanitary works for building work. Estimate of Septic Tank and man hole.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	08	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment		Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Prepare estimate of Sanitary works.	08	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Course Co	de	CO Code	LO Code	
C	0	3			4	2	Format N

COURSE NAME	QUANTITY SURVEYING AND COSTING
CO Description	Calculate the quantities for water supply and sanitary works and Analyze rates of various items of work.
LO Description	Explain rate analysis and it's factors affecting

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Rate analysis –Definition, purpose and importance, Factors affecting rate analysis, lead, lift, task work, materials and labour component, Market Rate and labour rate.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	05	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Explain rate analysis and it's factors affecting	04	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

	LO Code	CO Code	urse Code	Co	le	ranch Cod	В
Format No	3	4			3	0	C

COURSE NAME	QUANTITY SURVEYING ANDCOSTING						
CO Description	Calculate the quantities for water supply and sanitary works and Analyze rates of various items of work.						
LO Description	Describe different terms used in rate analysis and preparation for different items of works.						

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Labour - Categories of labours, labour rates, overheads contractor's profit, water charges, taking out quantities of materials for different items of works. Prepare Rate analysis of following items: Building work — stone masonry, Brick work(masonry), P.C.C, D.P.C., R.C.C., Plastering, pointing, Flooring,	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	10	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Describe different terms used in rate analysis and preparation for different items of works.	06	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

Branch Code			Co	urse Coo	de	CO Code	LO Code	4
C	0	3				5	1	Format No. 4

COURSE NAME	QUANTITY SURVEYING ANDCOSTING					
CO Description	Valuation of structures and rent fixation.					
LO Description	Explain basics of Valuation and it's types.					

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Definition, Necessity of Valuation, Cost price, Value, Difference between them. Book value, scrap value, salvage value, Market value, Depreciation, obsolescence, Sinking fund (simple numerical problems).	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	05	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Explain basics of Valuation and it's types.	05	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	Internal

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

Part of internal theory exam: Mid Semester Test-II

SCHEME FOR LEARNING OUTCOME

В	ranch Cod	le	Course Co	de	CO Code	LO Code	
C	0	3			5	2	Format N

COURSE NAME	QUANTITY SURVEYING ANDCOSTING
CO Description	Valuation of structures and rent fixation.

LO Description | Explain methods of depreciation.

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Methods of calculation of depreciation, straight line method, sinking fund method constant percentage method and quantity survey method.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	06	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to Explain methods of depreciation.	04	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

SCHEME FOR LEARNING OUTCOME

	LO Code	CO Code	de	ourse Coo	Co	Branch Code		
Format	3	5				3	0	C

COURSE NAME	QUANTITY SURVEYING ANDCOSTING
CO Description	Valuation of structures and rent fixation.
LO Description	computation of capitalized value and valuation of lands & buildings and Rent Fixation.

SCHEME OF STUDY

S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
1.	Computation of capitalized value, Gross income, outgoing, net income, Years purchase. Types of outgoing and their percentages. Valuation of Lands & Buildings, factors affecting their valuation, Fixation of Rent as per PWD practice. Simple numerical problams on above.	Interactive classroom teaching, assignments, quiz, presentation.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	10	00	Text book, video lectures, chalk board	NIL

SCHEME OF ASSESSMENT

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	Resources Required	External / Internal
1	Theory exam	Students will be asked to computation of capitalized value and valuation of lands & buildings and Rent Fixation.	04	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, charts, video film.	External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)