



Daffodil Polytechnic Institute, Institute Code: 50238

Subject Teacher : [Shariful Islam Shishir](#)
Subject Name : **Basic Construction Process**
Subject Code : **26434**
Technology : **Architecture Technology**
Semester : **4th**
Reference Book : **Basic Construction Process (Publisher: Haque Publication)**

Marks	Grade Point	Letter Grade	Marks	Grade Point	Letter Grade	Time Distribution (90min)			
							Particular	Time	
80>	4.00	A+	55-59	2.75	B-	Greeting with students		5 Min	
75-79	3.75	A	50-54	2.50	C+	Previous class review		10 Min	
70-74	3.50	A-	45-49	2.25	C	Present class lecture		60 Min	
65-69	3.25	B+	40-44	2.00	D	Feedback		10 Min	
60-64	3.00	B	0-39	0.00	F	Attendance		5 Min	

Mark Distribution for 150 Marks			
Theory Marks		Practical Marks	
Midterm	20	PC	25
Class Test	10	PF	25
Quiz Test	10		
Final	60		
Total	100	Total	50

THEORY LESSON PLAN

Chapter	Topics with contents	Learning Outcome	Supporting Equipments
1	CONSTRUCTION HEALTH AND SAFETY 1.1 Define personal health and safety. 1.2 Define Personal Protective Equipment (PPE). 1.3 List the PPE for Construction Work. 1.4 List the color code practice of Helmet in construction Project. 1.5 List the color code practice of High visible vest in construction Project. 1.6 State the safety procedure in work place.	1. Define personal health and safety.	
QUIZ TEST 1 (Date:30/07/2023)		Evaluation of Chapter-1	Questions & answers script
2	CONSTRUCTION TOOLS AND EQUIPMENT'S 2.1 Define tools and Equipment. 2.2 List the hand tools used in construction work. 2.3 List the Equipment for Construction work. 2.4 State the procedure to use hand tools and Power tools. 2.5 Mention the procedure to use Equipment. 2.6 Describe the maintaining procedure of Tools and Equipment. 2.7 Explain the Re-store procedure of Tools and Equipment.	2. Define tools and Equipment.	
3	FEATURES AND PROPERTIES OF CONCRETE 3.1 Define concrete. 3.2 Mention the different Types of concrete. 3.3 List the function of ingredients for concrete. 3.4 Define strength, durability, workability,	3. Define concrete.	

	laitance and segregation. 3.5 List the affecting factors on strength, durability and workability of concrete. 3.6 Define water-cement ratio, mixing, curing of concrete 3.8 Describe the ready-mix concrete. 3.9 Mention the methods of curing.		
CLASS TEST 1 (Date: 20/08/23)		Evaluation of Chapter-2 & 3	Questions & answers script
4	CONCRETE CONSTRUCTION AND FORM WORK. 4.1 Mention the precaution and supervision process of concrete onstruction. 4.2 List the special precautions for under water Concrete. 4.3 List the factors to be considered while supervising good quality concrete production. 4.4 Explain the function of fare face Concrete, pre-stressed concrete and Ferro-cement concrete. 4.5 State form works. 4.6 Define centering and shuttering. 4.7 Mention the essential requirements of a good form work.	4.Mention the precaution and supervision process of concrete onstruction.	
5	BRICK MASONRY. BLOCK MASONRY AND COMPOSITE MASONRY 5.1 Define brick, hollow block and composite masonry. 5.2 Define header, stretcher, course, closer and bond. 5.3 Mention the functions of good bonding. 5.4 Explain the procedure of brick laying. 5.5 Mention the advantages and limitations of	5. Mention different types of doors, windows, floors and stairs cases in the building.	

	hollow and sloid block. 5.6 Describe the construction procedure of hollow and sloid block. 5.7 List the defects in brick masonry.		
QUIZ TEST 2 (Date:)		Evaluation of Chapter-4 & 5	Questions & answers script
6	BUILDING COMPONENT 6.1 Define building component. 6.2 List the main component of a building. 6.3 Define foundation, lintel, arch, column, beam, stair, floor, roof, parapet, sun shed, Cornish. 6.4 Describe the classification of foundation. 6.5 Define the technical terms used in stairs. 6.6 Mention the components of a floor and roof. 6.7 Name the suitable materials used for the construction of floor and roof. 6.8 Describe the construction procedures of floor tile. 6.9 Describe the construction procedures of RCC roof.	6. Define building component.	
7	PARTITION WALL. 7.1 Define partition wall. 7.2 Mention the common requirement of partition walls. 7.3 Mention the functions of partition wall. 7.4 List different types of partition walls. 7.5 Mention the functions of Brick partition, Drywall partition, Glass partition, Aluminum partition and Light weight partition (timber stud work, board) wall.	7. Define partition wall.	
	CLASS TEST 2 (Date:)	Evaluation of Chapter-6 & 7	Questions & answers script

8	<p>DAMPNESS OF BUILDING.</p> <p>8.1 Mention the causes of dampness in building.</p> <p>8.2 Mention the ill effects of dampness in building.</p> <p>8.3 Describe remedial measures against efflorescence.</p> <p>8.4 Identify different type of termites.</p> <p>8.5 Name the chemicals used for anti-termite treatment.</p>	8. Mention the causes of dampness in building.	
MID TERM EXAM-(Exam starts from September 07)		Syllabus: Chapter 01-08	Questions & answers script
9	<p>PLASTERING AND POINTING.</p> <p>9.1 Define plastering and pointing.</p> <p>9.2 Mention the various types of plastering and pointing .</p> <p>9.3 Mention the common tools used for plastering and pointing works.</p> <p>9.4 Describe the process of applying plaster on a wall surface.</p> <p>9.5 Mention the common defects in plastering and pointing.</p>	9. Define plastering and pointing.	
	QUIZ TEST - 3 (Date:)	Evaluation of Chapter- 9	Questions & answers script
10	<p>PAINTING & VARNISHING.</p> <p>10.1 State the purpose of painting & varnishing.</p> <p>10.2 Describe the characteristics of good paints & varnishes.</p> <p>10.3 State the various defects in painting & varnishing.</p> <p>10.4 Describe the application procedure of specific surfaces: distemper, weather coat, snow cem (Cement-based paint), plastic emulsion paint, Synthetic enamel paint, Polish</p>	10. State the purpose of painting & varnishing.	Text book, Marker & Link:

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11	CONCEPT OF DOORS AND WINDOWS. 11.1 List different type of doors. 11.2 Identify the technical terms used in doors. 11.3 List the aluminum section to required for aluminum sliding windows. 11.4 Mention the aluminum section required for aluminum fixed windows.	11. List different type of doors.	Text book, Marker & Link:
CLASS TEST 4 (Date:)		Evaluation of Chapter- 10 & 11	Questions & answers script
Total Class/ Quiz Test: 4		Total Class: 30	

PRACTICAL LESSON PLAN

Exp. No.	Experiment Names	Submission date
1	PERFORM CONSTRUCTION HEALTH AND SAFETY 1.1 Perform color code practice of Helmet and High visible vest in construction Project. 1.2 Follow procedure to maintain safety in work place. 1.3 Maintain the record of performed job.	Within next 7 days
2	IDENTIFY CONSTRUCTION TOOLS AND EQUIPMENT 2.1 2.1 Identify hand tools, Power tools and Equipment in construction Project. 2.2 Perform Re-store procedure of Tools and Equipment.	Within next 7 days

	2.3 Maintain the record of performed job.	
3	PERFORM AGGREGATE GRADING OF CONCRETE 3.1 Collet various size of aggregate. 3.2 Mix different aggregate. 3.3 Perform aggregate grading. 3.3 Perform to draw the grading curves for various samples of aggregates and find out the FM value. 3.4 Maintain the record of performed job.	Within next 7 days
4	PERFORM SLUMP TEST OF CONCRETE 4.1 Collet required tools, equipment and materials. 4.2 Mixing concrete for required Proportion. 4.3 Perform slump test of different concrete works. 4.4 Maintain the record of performed job.	Within next 7 days
5	PERFORM STRENGTH TEST OF CONCRETE 4.1 Collet required tools, equipment and materials. 4.2 Mixing concrete for required Proportion. 4.3 Perform compressive strength test for concrete (cube and cylinder). 4.5 Perform compressive strength test for concrete using different type curing. 4.5 Maintain the record of performed job.	Within next 7 days
6	OBSERVE CONCRETE CONSTRUCTION AND SUPERVISION 6.1 Field visit. 6.2 Maintain the record of field visit.	Within next 7 days
7	PERFORM BRICK MASONRY. 7.1 Select and collect required tools and materials. 7.2 Conduct brick masonry work to erect pillars of sizes 25 cm x 25 cm to	Within next 7 days

	50 cm x 50 cm with English bond up to 5 layers. 7.3 Construct sample corner (L) joints of 25 cm width English bond brick wall up to 5 layers. 7.4 Observe curing. 7.5 Checked quality 7.6 Maintain the record of performed job.	
8	CONSTRUCT HOLLOW AND SOLID BLOCK MASONRY 8.1 Select and collect required tools and materials. 8.2 Prepare hollow and solid block wall up to 3 layers. 8.3 Perform precautions to be taken while construction of hollow and solid block. 8.4 Observe proper curing. 8.5 Checked quality 8.6 Maintain the record of performed job.	Within next 7 days
9	MAKE A MODEL FOR COLUMN FOOTING 9.1 Select and collect the required tools and materials. 9.2 Sketch a column footing. 9.3 Perform to make a model for column footing. 9.4 Observe proper process. 9.5 Checked quality 9.6 Maintain the record of performed job.	Within next 7 days
10	PERFORM TILES WORK ON FLOOR CONSTRUCTION. 10.1 Select and collect required tools and materials. 10.2 Perform tiles on floor. 10.3 Filled the tiles joint. 10.4 Checked quality 10.5 Maintain the record of performed job.	Within next 7 days

11	PERFORM PARTITION WALL. 11.1 Select and collect required tools and materials. 11.2 Perform Aluminum partition wall 11.3 Perform Drywall partition in a Model Room. 11.4 Checked quality 11.5 Maintain the record of performed job.	Within next 7 days
12	PERFORM DAMP PROOF COURSE (DPC). 12.1 Select and collect required tools and materials. 12.2 Perform damp proof chemical select and mix with mortar. 12.4 Perform laying of DPC. 12.5 Checked quality 12.5 Maintain the record of performed job.	Within next 7 days
Last submission date: 02/10/23		Total Classes: 15