

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT- 3	Sheet No.1
Branch	ARCHITECTURE AND INTERIOR DESIGN		Semester	FOURTH	
Course Code	402	Course Name	BUILDING SERVICES		
Course Outcome1	The student will be able to suggest water supply system for a residential building.			Teach . Hrs	Marks
Learning Outcome1	The student will be able to calculate water requirement and storage capacity for a residence.			5	10
Contents	Characteristics of potable water, per capita water consumption. Water storage tank dimensions and capacity, cast in situ and factory made plastic tanks				
Method of Assessment	Internal (Progressive)				
Learning Outcome 2	The student will be able to select appropriate water supply pipes, fittings and fixtures for a given building.			15	20
Contents	Internal pipes for water supply (materials- GI,CPVC, sizes and pipe fittings) taps, showers, valves (Gate valve, Float valve, Ball valve), water meter; pressure pumps, their types, materials and brands				
Method of Assessment	External (Theory)				
Learning Outcome 3	The student will be able to prepare water supply pipe layout drawings for a given case.			15	5
Contents	Preparation of water supply layout drawings in the form of plans and elevations. Direct and Indirect water supply systems; Hot and cold-water supply within a building, Solar water heating				
Method of Assessment	Internal (Term Work)				
Course Outcome2	The student will be able to suggest drainage system for a given case			Teach Hrs	Marks
Learning Outcome 1	The student will be able to select appropriate drainage pipes, fittings and fixtures for a given building.			20	30
Contents	Principles of sanitation, Principles of house drainage system Type of Traps according to their shapes and functions; Inspection chamber Internal waste disposal pipes, types and materials-PVC, fittings and joints. Sanitary fixtures: Types, materials and sizes of water closet, wash basin, bathtub, sink, urinals Systems of plumbing in house drainage: One pipe system, two pipe system. Septic tank: Utility, working of septic tank. Plan and Section of septic tank				
Method of Assessment	External (Theory)				

Learning Outcome 2	The student will be able to Prepare house drainage plan for a given residential building.	15	10
Contents	Preparation of layout plans for toilets and drainage layout drawings in the form of plans for a single story one BHK residence		
Method of Assessment	Internal (Progressive)		
Course Outcome 3	The student will be able to suggest rain water harvesting for a residence.	Teach Hrs	Marks
Learning Outcome 1	The student will be able to identify components of rain water harvesting system	10	8
Contents	Importance of rain water harvesting, Various considerations for designing a rain water harvesting system for a residence. Sketches showing rain water harvesting system for a residence		
Method of Assessment	External (Theory)		
Course Outcome 4	The student will be able to select mechanical services provisions in buildings	Teach Hrs	Marks
Learning Outcome 1	The student will be able to list out provisions of air conditioning in buildings	15	12
Contents	Introduction to Air Conditioning, Principles of artificial Ventilation Classification of Air Conditioning According to assembly of unit (Unitary-Split A/C, Window A/C, Floor mounted and ceiling mounted A/C Central (Plant room, circulation and Ducting)		
Method of Assessment	External (Theory)		
Learning Outcome 2	The student will be able to identify features of mechanical means of vertical circulation	10	5
Contents	Introduction to Lifts and Escalators- Types, their features and utility; Collection of photographs and drawings of different types of Lifts and Escalators.		
Method of Assessment	Internal (Term Work)		