RGPV (Diploma Wing) Bhopal				SEMESTER TEACHING LEARNING & ASSESSMENT PLAN													FORMAT- 6
NAME OF PROGRAMME		THREE YEARS DIPLOMA		SCHEME		OBE		IMPLEMENTING YEAR									2024-25
BRANCH CODE		NAME OF BRANCH	INTERIOR DESIGN												SEMESTER		THIRD

S. No	COURSE DETAILS						T-L PLAN		ASSESSMENT PLAN									Grand Total of Marks
									Internal Assessment		External Assessment (University Exam)							
											Theory Paper			Practical Exam *				
	COURSE CODE	COURSE NAME	CREDITS	PAPER CODE	No. of COs	No. of LOs	Total T-L Hrs.	T-L Hrs. /Week	No. of LOs	Total Marks	No. of LOs	Total Marks	Duration	No. of LOs	Total Marks	Duration		
1	301	INTERIOR DESIGN -II	4+2		02	-	-	08	-	40	-	-	-	-	60	3Hrs		100
2	302	CONSTRUCTION TECHNIQUE-II	2+2	7659	05	-	-	02 + 04	-	30+ 20	-	70	3Hrs	-	30	3Hrs		150
3	303	MATHEMATICS	2+1	6804	02	-	-	02 + 02	-	30+ 20	-	70	3Hrs	-	30	3Hrs		150
4	304	INTERIOR SERVICES-II	2	7660	05	-	-	02	-	30	-	70	3Hrs	-	-	-		100
5	305	HISTORY OF FURNITURE	2	7661	02	-	-	2	-	30	-	70	3Hrs	-	-	-		100
6	306	COMPUTER STUDIO-I	2		02	-	-	4	-	40	-	-	-	-	60	3Hrs		100
								36		275		280			120			675
No. of Theory Papers													04	No. of Practical Exams				04

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	INTERIOR DESIGN –II
PAPER CODE	:	7357
SUBJECT CODE	:	301
TREORY CREDITS	:	00
PRACTICAL CREDITS	:	04

COURSE OUTCOME:

The subject intends to enhance the skills of planning of medium sized commercial spaces with clear understanding and application of functionality, space, usage and concept, use of contemporary materials, construction techniques and advanced services required for the design project.

After completion of this course student will be able to-

1. Understand and analyze various activities and functions of commercial interior spaces such as branch office of banks, Multi-national Corporation, etc.
2. Learn to design multi user spaces with due importance to differently abled user
3. Understand the basics of Universal Design and standards and anthropometrics
4. Design interior spaces of complex nature of medium scale commercial interiors, shop fronts, brand store (carpet area not less than 150 sq.mt)

UNIT-1 COMMERCIAL INTERIOR DESIGN

Instructions regarding **Design Brief**; relevant aspects of materials, construction techniques, design and services; special emphasis towards **case studies ,observations ,analysis** and towards achieving individual interpretations manifested through **client profile** and **requirement framing**.

Prepare and present-scaled plan, sectional elevations and proportionate3-Dvisuals all drawn and rendered manually that depict case studies, manifestations, concepts, schematics, presentation and technical drawings.

Assignment–Technical representation and mood boards, furniture layout, flooring layout, reflected false ceiling layout with completely rendered drawings. Also detail layouts, dimensional layout, all the four sectional elevations, views for individual rooms on the enlarged scale.

REFERENCES-

1. Time saver standard for interior design and space planning**,** Joseph De Chaira Jullius Panero Martin Zelnik ,published by-McgrawHill NewYork.
2. Interior Design, John Pile, Published By-HarryN. Adry Publishers.
3. HumanDimensionsandInteriorSpaces,JulliusPaneroMartinZelnik,PublishedBy-Whitney Library New York.
4. Interior DesignI llustrated, Francis DKChing,Published by–Van Norstrund, New Delhi.
5. Sanskruti–AManualofInteriorDesignVol-1,Sudhir Diwan, Published By-Interior

Affairs, Mumbai.
6. Making the most of small spaces, Stephen Crafti, ImagesPubGroup,Pvt.Ltd
7. Livinglarge insmallspaces,Thames&Hudson
8. Newsmallhomes,AuroraCuito, LoftPublications.S.L.
9. Design02ResidentialspaceI,IIand III,JuzhuKongjan

10. Time saver standard for interior design and space planning**,** Joseph De ChairaJulliusPaneroMartinZelnik,publishedby-McgrawHillNewYork.
11. InteriorDesign, JohnPile, PublishedBy-HarryN. AdryPublishers.
12. HumanDimensionsandInteriorSpaces,JulliusPaneroMartinZelnik,PublishedBy-Whitney Library New York.
13. InteriorDesignIllustrated,FrancisDKChing,Publishedby–VanNorstrund,New Delhi.
14. Sanskruti–AManualofInteriorDesignVol-1,SudhirDiwan,PublishedBy-Interior Affairs, Mumbai.
15. Makingthe mostofsmallspaces,StephenCrafti,ImagesPubGroup,Pvt.Ltd
16. Livinglarge insmallspaces,Thames&Hudson
17. Newsmallhomes,AuroraCuito, LoftPublications.S.L.
18. Design02ResidentialspaceI,IIand III,JuzhuKongjan

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	CONSTRUCTION TECHNIQUE -III
PAPER CODE	:	7659
SUBJECT CODE	:	302
TREORY CREDITS	:	02
PRACTICAL CREDITS	:	02

COURSE OUTCOME:

The subject intends to equip the students with knowledge and understanding of construction of various structural systems, Floor systems, Roofing systems and the means of construction, assembly and joinery through detailed working drawings.

After completion of this course student will be able to-

1. Understand and define-Construction of various structural systems Floor systems, Roofing systems and their application.
2. Select or design their assembly and joinery through detailed working drawings.
3. Explore material properties and their impact on structural performance.

UNIT-1 STRUCTURAL SYSTEMS

Introduction to Structural Systems

Importance of structural integrity in buildings, Basic structural concepts: loads, forces, and stability. Load bearing brick/stone masonry- its application in interior field. RCC frame structure with column, beam, slab, cantilevers etc – its application in interior field.

Steel framed construction with different rolled sections- its application in interior field.

Case Studies and Applications

Analysis of real-world structural systems. Innovative structural designs in modern interior design.

UNIT-2FLOOR SYSTEMS

Single floor in wood and steel with different floor finishes. Introduction to double floor in steel.

Types of floor systems: Wooden joist floors, Concrete slab floors, Steel frame floors

Material selection and properties, Construction methods and best practices

UNIT-3STAIRS

Single flight wooden staircase and dog legged RCC, metal staircase. Principles of steel spiral stairs.

UNIT-4 ROOFING SYSTEMS

Pitch/lean to roof in steel with coated metal sheets, color clay tiles and water proofing of flat terrace and toilet.

Types of roofs: Flat roofs, Pitchedroofs, Hip and gable roofs

Roof framing techniques: Wooden trusses, Steel trusses

Roofing materials and their applications

Weatherproofing and insulation strategies

REFERENCES:

1. W.B. MCKAY, “Building Construction Vol.1, Orient Longman.
2. R. CHUDLEY, Building Construction Handbook Vol. 1 to 4 “British Library Catalouging in Publication Data 1990

3. InteriorDesign, JohnPile, HarryN. AndryPublishers
4. Timesaver standardfor interiordesign andspaceplanning.
5. InteriorDesign,AhmedKasu,TWAINPub.Bombay
6. HaroldB.Olin,JohnL.Schmidt–Constructionprinciples,MaterialsandMethods– John Wiley & Sons, Inc.
7. HumanDimensionsandInteriorspaces,JulliusPanero,MartinZelnik,WhitneyLibraryNey York
8. Beginningof Interior EnvironmentPhillisSleenAllen,NeyYork
9. BasicDesignofAnthropometry, ShirishBapat,Belabooks Publishers
10. InteriorDesign Illustrated,FrancisD.K.Ching, VanNorstund,New Delhi
11. DesignFundamentalin1st architecture,V.S. Parmar,SomaiyaPubPvt. Ltd.
12. Techniquesofinteriorconstruction–part1,VasudeoChannapattan,MrsVidyaChannapattanPune

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	MATHEMATICS
PAPER CODE	:	6804
SUBJECT CODE	:	303
TREORY CREDITS	:	04
PRACTICAL CREDITS	:	00

Course Content:

Unit	Topics and Sub-topics	Hours	Marks
Unit-I Algebra	1.1 Meaning of factorial n 1.2 Permutation of 'n' dissimilar thing taken 'r'at a time,(only value of ${}^{n}P_{r}$) 1.3 Combination of n dissimilar things taken'r' at a time,(only value of ${}^{n}C_{r}$) 1.4 BinomialTheorem-statement of the theorem for positive integer.General Term,Middle term. 1.5 Algebraic Fractions 1.6 Define a proper-improper fraction 1.7 Break a fraction into partial fraction whose denominator contains Linear factor.	16	20
Unit-II Trigonometry	2.1 Allied angles. 2.2 Trigonometrical ratios and relations between them. 2.3 Trigonometrical identities. 2.4 Trigonometrical ratios of sum and difference of angles. (Only statement) 2.5 Multiple angles(Only double angle).	16	20
Unit-III Coordinate Geometry and Vector.	3.1 Co-ordinate System: Cartesian and Polar. 3.2 Distance formula. 3.3 Section formula. 3.4 Area of a triangle. 3.5 Concept of Vector and Scalar Quantities. 3.6 Different types of vectors. 3.7 Addition and subtraction of vectors. 3.8 Components of a vector 3.9 Multiplication of two vectors • Scalar Product • Vector Product	16	20

Unit-IV Function, Limit and Differentiation.	4.1 Define constant,variable,function. 4.2 Value of the function at any point. 4.3 Concept of limit of a function and limit o ffunction at any point. 4.4 Definition and concept of differential coefficient as a limit. 4.5 Standard results. 4.6 Derivatives of sum,difference,product,quotient of two functions. 4.7 Maxima/Minima of a function at any point. 4.8 Slope of tangent and Normal at any given point on a curve.	16	20
Unit-V Integration and concept of differential equation.	5.1 Definition as a inverse process of differentiation. 5.2 Standard Results. Simple problems. 5.3 Order and Degree of a given differential equation. 5.4 Solution of differential equation of first order and first degree by method of separation of variable only.	16	20

BLUE PRINT OF QUESTION PAPER

TIME: THREE HOURS **MAXIMUM MARKS: 70**

Unit	Question-1	Question-2	Question-3 to 7
	2 MARKS	2 MARKS	50 MARKS TOTAL
1-Algebra **2-Trigonometry** **3- Coordinate Geometry and Vector.** **4- Function, Limit and Differentiation.** **5- Integration and concept of differential equation.**	**Pattern:** Objective type 5 questions. (1 from each unit.)	**Pattern:** Match the column. 5 parts (1 from each unit.)	**Pattern:** **1.Q-3 to 7 (from unit-1 to 5) 10 marks each** **1.**Each question will contain 2 parts a(4 marks)and b (6 marks). 2.Internal choice in every part a and b must be given
TOTAL MARKS	**10**	**10**	**50**

Guidelines for Question Paper Design:

1. The question paper should be prepared on the basis of the blueprint.
2. The question paper should carry 70 marks and be of 3 hours duration.
3. There should be a total seven questions. All are compulsory for students to attempt.
4. Question no. 1 will be objective type. (5 each of 2 marks)
5. Question no. 2 will be Match the Column (5 each of 2 ma

6. Internal choice in Question number 3 to 7. (subpart a- 4 marks and b-6marks in each question. Each question will be of 10 marks.

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	INTERIOR SERVICES–II
PAPER CODE	:	7660
SUBJECT CODE	:	304
TREORY CREDITS	:	02
PRACTICAL CREDITS	:	00

COURSE OUTCOME:

The subject intends to equip students with the concept and principles of basic electrical services. It will develop their skills in understandingthe function of services and help optimizethe resources such as electric supply, fixtures and appliances. It will also develop the analytical skill in designing appropriate services layout and schemes.

After completion of course the students will be able to:
1. Apply concepts of electrical services such as wiring, fixtures and appliances.
2. Use appropriate resources including optimization of energy and resource efficiency
3. Design electrical layout and draw with specifications for interior spaces and materials and fixtures
4. Types of lightings, fittings and switches in interior spaces with respect to the function such as commercial, institute, residential or recreational.

UNIT-1 FUNDAMENTALS OF ELECTRICAL SERVICES

Fundamentals of Electrical Systems:
Basic electrical concepts such as current, voltage, resistance, and power.
Understanding single-phase and three-phase AC circuits.
Overview of electrical distribution systems, including transformers and service panels.

UNIT-2 ARTIFICIAL LIGHTING SYSTEM

Artificial Lighting Systems: Types of lighting, direct, diffuse, accent light.
Principles of illumination and laws governing lighting.
Different types of lamps and lighting fixtures.
Design considerations for lighting schemes in various occupancies, including methods of lighting calculation.

UNIT-3 LIGHTING DESIGN PRINCIPLES

Layered lighting approach: Task lighting, accent lighting, Ambient lighting, Decorative lighting
Natural day lighting design, Color temperature and quality,
Lighting control and flexibility, smart lighting systems
Energy efficiency in lighting design

UNIT4 TYPES OF WIRING AND ELECTRICAL INSTALLATION

Electrical Installation Practices:
Types of wiring systems and general rules for wiring installations.
Determining load requirements and sizing conductors.

Electrical installations for systems like heating, air conditioning, lift, escalators, and pumps.

REFERENCES:

1. "Design of Electrical Services for Buildings" by Barrie RigbyS.K.Garg, WaterSupplyEngineering:EnvironmentalEngineeringv.Khannapublishers 2010
2. "Handbook of Electrical Design Details, 2nd Edition" by Neil SclaterKamala&DLKanthRao,EnvironmentalEngineering,TataMcGraw–Hillpublishing company Limited.
3. NationalBuildingCode2005.

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	HISTORY OF FURNITURE
PAPER CODE	:	7661
SUBJECT CODE	:	305
TREORY CREDITS	:	02
PRACTICAL CREDITS	:	*00*

COURSEOUTCOME:

To understand various point of view of furniture design, their relations into material and needs.
To create awareness of History as an aid to design process

UNIT-1 INTRODUCTION

Introduction to furniture history. Evolution of furniture over a period based on climate, social factors, life style, technical and stylistic development availability of materials and various movements in design.
Introduction to furniture terminology based on methods of joinery techniques such as parquetry, marquetry gilding, turning, pierced and chip carving, or molu mounts.

UNIT-2 ANCIENT HISTORY OF FURNITURE

Ancient civilization, art, architecture ofEgypt. Furniture preserved in ancient pyramids.Ancient classical orders developed by them and various methods to overcome optical illusion.
Furniture developed by Greeks and Romans by 3rd century A.D.
Medieval era in Europe, utilitarian furniture developed from Romanesque til lGothic times.

UNIT-3 PREINDUSTRIAL REVOLUTION-FURNITURE DESIGN

Beginning of Renaissance-second golden era in Europe,age of discovery.Renaissance furniture of Italy and France. Baroque and Rococo furniture of 17th century Europe. Neoclassical and Regency period in history of furniture-18th century
Prominent names in the field of Architecture, sculptures, paintings international and Indian
English furniture from16thto18thcentury.Tudor,Stuart,Jacobean,Restoration period,Queen Ann period, Gregorian period, Chippendale, Sheraton.

UNIT–4 MODERN HISTORY OF FURNITURE

Beginningof19thcenturyindustrialization.VictorianErainEngland,Art and Craft movement in design. Art Nouveau movement in art and furniture.

Art movements before and after world wars. Cubism of Picasso,De-stijl movement.Bauhaus school of Design and its impact on modern design. Art Deco movement.

Works of prominent architects and designers and their famous works.

UNIT–5 ORIENTAL AND CONTEMPORARY FURNITURE DESIGN

Oriental furniture and how it is different from western counterparts. Furniture of Japan and China. Indian furniture, traditional and colonial.

Current trends in furniture design. Works of prominent designers and design style.

Contemporary art movements and their influence on furniture. Emergence of green technologies and advance materials in upcoming interior styles.

REFERENCES:

1. John F.Pile,Ahistoryofinteriordesign,2ndedition,LaurenceKingPublishing,2005.
2. JeannieIreland,HistoryofInteriorDesign,airchildpublications,illustrateded.,2009.
3. Elaine,MichaelDywer,ChristopherMackinnon,NormanA.J.BerisfordDenby,AHistoryof Interior Design, Rhodec International, 1983.
4. GiedionSigfried,Space,TimeandArchitecture:Thegrowthofanewtradition,4thed. Harvard
UniversityPress,Cambridge, 1962.
5. TadgellCristopher,TheHistoryofArchitectureinIndia: From the dawn of civilization to the End of
theRaj ,OmBookService,New Delhi, 1990.
6. Rowl Bejamin.Artand ArchitectureofIndia.

DIPLOMA WING

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

DIPLOMA IN INTERIOR DESIGN

SEMESTER III

COURSE TITLE	:	COMPUTER STUDIO -I
PAPER CODE	:	
SUBJECT CODE	:	306
TREORY CREDITS	:	
PRACTICAL CREDITS	:	01

COURSE OUTCOME: -After completion of this course student will be able to

1.Introduce the fundamental concepts of computer systems, hardware and software and to develop basic skills in programming, Application of Information Technology tools and technical in Architecture

2. Produce operation and critical parameters and presentations for large gatherings, corporate clients-using CAD drawings, pictures, 3D images, text etc.

UNIT-1

INTRODUCTION

Introduction of various software available for Architectural application, like Auto CAD, Architectural desktop, Revit, Micro station etc. Stress should be given on Auto CAD.

UNIT-2

BASIC COMMANDS FOR 2-D AUTOCAD

Learning basic 2D commands their function and application.
Working on layers and colors.
Understanding of Text, and dimension styles etc, supported with suitable exercise.
Understanding complex commands like Pline, spline, x-refs, Attributes, Model space & Paper space etc.
At least one working plan, elevation and section should be completed.

UNIT-3

BASIC COMMANDS FOR 3D

Introduction of basic 3D commands.
Different types of modeling in Auto CAD.
Exercise on wire mesh modeling.

UNIT-4

MEASUREMENT DRAWING WITH THE HELP OF CAD

Exercise will be a group activity; to measure and draw the floor plan along with the plot boundaries, four side elevations, four sections, block plan, site plan of a large building or a settlement with the help of CAD.
In addition to this drawing shall be prepared based on examples of buildings by giving a sketchdesign.
Drawings shall be detailed enough to explain thecomplete design.

Note: Exercises of measurement drawings may be clubbed with study tour.

LIST OF TEXT AND REFERENCE BOOKS:

1. Auto CAD reference manual – Autodesk UNC, 1998
2. Auto CAD architectural users guide – Autodesk Inc. 1998
3. Sham Tickoo, Advance Technique in Auto CAD Re.14 – 1977 6. Sham Tickoo, Understanding Auto CAD – 14 (windows) – 1977