

Lesson Plan (WINTER-2023)

Discipline: Architectural Assistantship Branch		Semester: 3RD , Name of Faculty : IPSITA DASH
Subject: HISTORY OF ARCHITECTURE	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1ST	1.0 European Architecture
	2nd	1.1 Egyptian Architecture
	3rd	1.1.1 Architectural characteristics and details of features.
	4th	1.1.1 Architectural characteristics and details of features.
2nd	1ST	1.1.2 Sketch of Mastaba, Great Pyramid of Giza, Temple of Khons at Karnak, The Great Sphinx of Chepheren.
	2nd	1.1.2 Sketch of Mastaba, Great Pyramid of Giza, Temple of Khons at Karnak, The Great Sphinx of Chepheren.
	3rd	1.1.2 Sketch of Mastaba, Great Pyramid of Giza, Temple of Khons at Karnak, The Great Sphinx of Chepheren.
	4th	1.2 Greek Architecture
3rd	1ST	1.2.1 Architectural characteristics and details of features
	2nd	1.2.1 Architectural characteristics and details of features
	3rd	1.2.1 Architectural characteristics and details of features
	4th	1.2.2 Sketch of Greek classical orders of Doric, Ionic, and Corinthian. Temple of Parthenon at Athens.
4th	1ST	1.2.2 Sketch of Greek classical orders of Doric, Ionic, and Corinthian. Temple of Parthenon at Athens.
	2nd	1.2.2 Sketch of Greek classical orders of Doric, Ionic, and Corinthian. Temple of Parthenon at Athens.
	3rd	1.3 Roman Architecture
	4th	1.3.1 Architectural characteristics and details of features

5th	1ST	1.3.1 Architectural characteristics and details of features
	2nd	1.3.2 Sketch of Roman orders: Doric, Ionic, Corinthian, Composite, Tuscan order. Temple of Saturn at Rome
	3rd	1.3.2 Sketch of Roman orders: Doric, Ionic, Corinthian, Composite, Tuscan order. Temple of Saturn at Rome
	4th	1.3.2 Sketch of Roman orders: Doric, Ionic, Corinthian, Composite, Tuscan order. Temple of Saturn at Rome
6th	1ST	2.0 Indian Architecture
	2nd	2.1 Buddhist Architecture 2.1.1 Architectural characteristics and detail features
	3rd	2.1.1 Architectural characteristics and detail features
	4th	2.1.1 Architectural characteristics and detail features
7th	1ST	2.1.1 Architectural characteristics and detail features
	2nd	2.1.2 Sketch of the Great Stupa of Sanchi, Chaitya Hall and Vihara.
	3rd	2.1.2 Sketch of the Great Stupa of Sanchi, Chaitya Hall and Vihara.
	4th	2.1.2 Sketch of the Great Stupa of Sanchi, Chaitya Hall and Vihara.
8th	1ST	2.1.2 Sketch of the Great Stupa of Sanchi, Chaitya Hall and Vihara.
	2nd	2.2 Temple Architecture (Indo Aryan Style) 2.2.1 Architectural characteristics and detail features of Odishan Temple
	3rd	2.2.1 Architectural characteristics and detail features of Odishan Temple
	4th	2.2.1 Architectural characteristics and detail features of Odishan Temple
9th	1ST	2.2.1 Architectural characteristics and detail features of Odishan Temple
	2nd	2.2.2 Sketch of the Sun Temple at Konark, the Lingaraj Temple at Bhubaneswar
	3rd	2.2.2 Sketch of the Sun Temple at Konark, the Lingaraj Temple at Bhubaneswar
	4th	2.2.2 Sketch of the Sun Temple at Konark, the Lingaraj Temple at Bhubaneswar
10th	1ST	2.2.2 Sketch of the Sun Temple at Konark, the Lingaraj Temple at Bhubaneswar
	2nd	2.3 Muslim Architecture 2.3.1 Architectural characteristics and detail features
	3rd	2.3.1 Architectural characteristics and detail features

	4th	2.3.1 Architectural characteristics and detail features
11th	1ST	2.3.1 Architectural characteristics and detail features
	2nd	2.3.2 Sketch of Juma Masjid, Tajmahal and the Qutab Minar
	3rd	2.3.2 Sketch of Juma Masjid, Tajmahal and the Qutab Minar
	4th	2.3.2 Sketch of Juma Masjid, Tajmahal and the Qutab Minar
12th	1ST	2.3.2 Sketch of Juma Masjid, Tajmahal and the Qutab Minar
	2nd	3.0 Contemporary Architecture
	3rd	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
	4th	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
13th	1ST	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
	2nd	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
	3rd	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
	4th	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
14th	1ST	3.1 Contemporary structures: Eiffel Tower, Bahai Temple and Burz -al-Khalifa
	2nd	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
	3rd	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
	4th	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
15th	1ST	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
	2nd	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
	3rd	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa

	4th	3.2 Works of famous architects: Frank Lloyd Wright, Le Corbusier, B.V.Doshi and Charles Correa
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BOOK REFERENCE:

1	History of world architecture, Sir Banister Fleture, Oxford.
2	Indian History of architecture, Percy Brown, Kiran Book Agency
3	History of world architecture, G. K. Hiraskar, Dhanpat Rai & Co

Concerned faculty:
IPSITA DASH

Lesson Plan

Discipline: Architectural		Semester: 3RD , Name of Faculty : LOPAMUDRA DASH
Subject: BUILDING MATERIALS	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1ST	1.0 Stone:
	2nd	1.1 Classification of stones
	3rd	1.1 Classification of stones
	4th	1.1 Classification of stones
2nd	1ST	1.2 Properties of good quality building stone
	2nd	1.2 Properties of good quality building stone
	3rd	1.2 Properties of good quality building stone
	4th	1.3 Uses of building stone
3rd	1ST	1.3 Uses of building stone
	2nd	1.3 Uses of building stone
	3rd	2.0 Brick: 2.1 Classification of bricks
	4th	2.1 Classification of bricks
4th	1ST	2.1 Classification of bricks
	2nd	2.1 Classification of bricks
	3rd	2.1 Classification of bricks
	4th	2.2 Properties of good quality of bricks
5th	1ST	2.2 Properties of good quality of bricks
	2nd	2.2 Properties of good quality of bricks
	3rd	2.2 Properties of good quality of bricks
	4th	2.2 Properties of good quality of bricks
6th	1ST	3.0 Cement:
	2nd	3.1 Ingredients of cement
	3rd	3.2 Types of cement
	4th	3.3 Properties of good cement
	1ST	3.4 Uses of cement

7th	2nd	4.0 Concrete and R.C.C.
	3rd	4.1 Components of concrete.
	4th	4.2 Characteristics of concrete.
8th	1ST	4.3 Use of concrete and R.C.C.
	2nd	4.4 Distinguish between plain cement concrete and R.C.C
	3rd	5.0 Timber:
	4th	5.1 Constitution and properties of timber (showing cross section)
9th	1ST	5.1 Constitution and properties of timber (showing cross section)
	2nd	5.2 Use of woods for different engineering purpose
	3rd	5.3 Characteristics of a good timber
	4th	6.0 Paints, Varnish, Distemper:
10th	1ST	6.1 Composition of paints varnishes and distempers.
	2nd	6.2 Qualities of good paints, varnishes and distempers.
	3rd	6.2 Qualities of good paints, varnishes and distempers.
	4th	6.3 Uses of paints, varnishes and distemper.
11th	1ST	7.0 Ferrous and non-ferrous metals:
	2nd	7.1 Type ferrous and non-ferrous metals
	3rd	7.1 Type ferrous and non-ferrous metals
	4th	7.2 Properties of good ferrous non-ferrous metals
12th	1ST	7.3 Uses of steel in engineering applications
	2nd	8.0 Plastics/PVC.
	3rd	8.1 Types of plastic.
	4th	8.1 Types of plastic.
13th	1ST	8.2 Uses and advantages of plastic
	2nd	8.2 Uses and advantages of plastic
	3rd	9.0 Glass:
	4th	9.1 Types of glass
14th	1ST	9.1 Types of glass
	2nd	9.2 Properties of glass
	3rd	9.2 Properties of glass
	4th	10.0 Aluminum:
15th	1ST	10.1 Commercially available channels and sections
	2nd	10.1 Commercially available channels and sections

Unit	3rd	10.2 Application in buildings
	4th	10.2 Application in buildings

BOOK REFERENCE:

1	Building Material (S. C. Rangwala)
2	Building Materials(B.C. Punmia)
3	Building Materials (S.K. Duggal)

Concerned faculty:
LOPAMUDRA DASH

Lesson Plan

Discipline: Architectural		Semester: 3RD , Name of Faculty : LOPAMUDRA DASH
Subject: BUILDING CONSTRUCTION	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1ST	1.0 Stone masonry
	2nd	1.1 Types of stones used in building construction.
	3rd	1.1 Types of stones used in building construction.
	4th	1.2 Types of stone masonry.
2nd	1ST	1.3 Types of stone dressing.
	2nd	1.4 Principles of stone masonry
	3rd	2.0 Brick masonry
	4th	2.1 Types of bricks used in masonry.
3rd	1ST	2.1 Types of bricks used in masonry.
	2nd	2.2 Principles of brick masonry
	3rd	2.3 Types of bonds in brick masonry
	4th	2.3 Types of bonds in brick masonry
4th	1ST	3.0 Cement concrete construction 3.1 Materials used in cement concrete construction.
	2nd	3.2 Mixing, placing and compacting of cement concrete.
	3rd	3.3 Curing of cement concrete work
	4th	3.4 Types of cement concrete construction - Caste-in-situ and precast.
5th	1ST	3.5 Advantages of cement concrete. 3.6 Use of reinforcement in cement concrete work.
	2nd	3.7 Defects in cement concrete construction and their removal
	3rd	4.0 Foundation
	4th	4.1 Foundations for load bearing walls and piers.
6th	1ST	4.2 Isolated & combined foundation in R.C.C.
	2nd	4.2 Isolated & combined foundation in R.C.C.

6th	3rd	4.3 Raft foundation
	4th	4.4 Pile foundation
7th	1ST	5.0 Carpentry & Joinery
	2nd	5.1 Tools used in carpentry works
	3rd	5.1 Tools used in carpentry works
	4th	5.1 Tools used in carpentry works
8th	1ST	5.2 Joineries used in timber works
	2nd	5.2 Joineries used in timber works
	3rd	6.0 Doors & Windows 6.1 Ledged and braced door
	4th	6.2 Ledged and framed door
9th	1ST	6.3 Ledged, framed and braced door
	2nd	6.4 Framed and paneled door and flush doors.
	3rd	6.5 Types of windows
	4th	7.0 Roofs
10th	1ST	7.1 Classification of roofs
	2nd	7.1 Classification of roofs
	3rd	7.2 Construction method and details of pitch roofs.
	4th	7.2 Construction method and details of pitch roofs.
11th	1ST	8.0 Stairs
	2nd	8.1 Definitions
	3rd	8.2 Types of staircase
	4th	8.3 Wooden staircase
12th	1ST	8.4 RCC Staircase
	2nd	9.0 Floors
	3rd	9.1 Types of floors
	4th	9.2 Methods of laying floors
13th	1ST	9.3 Finishing of floors with different floor finishes like cement, mosaic, terrazzo, tiles, marble and PVC/Linoleum
	2nd	9.3 Finishing of floors with different floor finishes like cement, mosaic, terrazzo, tiles, marble and PVC/Linoleum
	3rd	10.0 Form work
	4th	10.1 Function of formwork

14th	1ST	10.2 Materials used in form work.
	2nd	10.3 Formwork for columns, floors, walls& stairs
	3rd	10.3 Formwork for columns, floors, walls& stairs
	4th	11.0 Pointing& plastering
15th	1ST	11.1 Methods and types of pointing
	2nd	11.1 Methods and types of pointing
	3rd	11.2 Plastering: Material and methods
	4th	11.3 External finishes

BOOK REFERENCE:

1	Building construction (S. C. Rangwala)
2	Building construction (W.B.Mackey)
3	Building construction (Bindra Aurora and Sushil Kumar.)

Concerned faculty:
LOPAMUDRA DASH

Lesson Plan

Discipline: Architectural		Semester: 3RD , Name of Faculty : Kalyani Mohanty
Subject: SURVEYING	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1ST	1. Chain Survey
	2nd	1.1 State and explain the principles of chain surveying .Instruments used their description and checking their correctness.
	3rd	1.1 State and explain the principles of chain surveying .Instruments used their description and checking their correctness.
	4th	1.1 State and explain the principles of chain surveying .Instruments used their description and checking their correctness.
2nd	1ST	1.2 State and explain the ranging and chaining of a line.
	2nd	1.2 State and explain the ranging and chaining of a line.
	3rd	1.3 State and explain the errors in chaining and solve problem.
	4th	1.3 State and explain the errors in chaining and solve problem.
3rd	1ST	1.4 State and explain the offsets.
	2nd	1.4.1 State and explain the average ordinate method.
	3rd	1.4.2 State and explain the Trapezoidal rule.
	4th	1.4.3 State and explain the Simpson's Rule.
4th	1ST	2. Compass Survey:
	2nd	2.1 Describe and explain the prismatic compass, and its use.
	3rd	2.1 Describe and explain the prismatic compass, and its use.
	4th	2.1 Describe and explain the prismatic compass, and its use.
5th	1ST	2.1 Describe and explain the prismatic compass, and its use.
	2nd	2.1 Describe and explain the prismatic compass, and its use.
	3rd	2.1 Describe and explain the prismatic compass, and its use.
	4th	2.1 Describe and explain the prismatic compass, and its use.

6th	1ST	2.1 Describe and explain the prismatic compass, and its use.
	2nd	2.1 Describe and explain the prismatic compass, and its use.
	3rd	3. Bearings:
	4th	3.1 Explain W.C.B and R.B and conversion from one to another.
7th	1ST	3.1 Explain W.C.B and R.B and conversion from one to another.
	2nd	3.2 Explain fore and back bearings and their conversion.
	3rd	3.2 Explain fore and back bearings and their conversion.
	4th	3.3 Explain computation of angles from bearings and bearing from angles.
8th	1ST	3.3 Explain computation of angles from bearings and bearing from angles.
	2nd	3.4 Explain Local attractions, its determination and necessary correction to the bearings.
	3rd	3.4 Explain Local attractions, its determination and necessary correction to the bearings.
	4th	3.4 Explain Local attractions, its determination and necessary correction to the bearings.
9th	1ST	4. Leveling:
	2nd	4.1 Conduct the study of levels (Dumpy level).
	3rd	4.1 Conduct the study of levels (Dumpy level).
	4th	4.2 Explain the principles of leveling.
10th	1ST	4.2 Explain the principles of leveling.
	2nd	4.3 Describe the temporary adjustment of dumpy level.
	3rd	4.3 Describe the temporary adjustment of dumpy level.
	4th	4.4 Describe the leveling by H.I method and rise and fall method.
11th	1ST	4.4 Describe the leveling by H.I method and rise and fall method.
	2nd	4.4 Describe the leveling by H.I method and rise and fall method.
	3rd	5 Contouring.
	4th	5.2 Explain the contour line, contour interval, horizontal equivalent.
12th	1ST	5.2 Explain the contour line, contour interval, horizontal equivalent.
	2nd	5.2 Explain the contour line, contour interval, horizontal equivalent.
	3rd	5.2 Explain the contour line, contour interval, horizontal equivalent.
	4th	5.2 Explain the contour line, contour interval, horizontal equivalent.
13th	1ST	5.3 Explain the various characteristics of contouring.
	2nd	5.3 Explain the various characteristics of contouring.

13th	3rd	5.3 Explain the various characteristics of contouring.
	4th	5.3 Explain the various characteristics of contouring.
14th	1ST	Concept of GPS& DGPS.
	2nd	Concept of GPS& DGPS.
	3rd	Concept of GPS& DGPS.
	4th	Concept of GPS& DGPS.
15th	1ST	Concept of GPS& DGPS.
	2nd	Concept of GPS& DGPS.
	3rd	Concept of GPS& DGPS.
	4th	Concept of GPS& DGPS.

BOOK REFERENCE:

1	Surveying and Levelling
2	Text Book of Surveying
3	Surveying

Concerned faculty:
Kalyani Mohanty

Lesson Plan

Discipline: Architectural		Semester: 3RD , Name of Faculty : LOPAMUDRA DASH
Subject: ENVIRONMENTAL STUDIES	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1ST	1. The Multidisciplinary nature of environmental studies
	2nd	Definition, scope and importance, Need for public awareness.
	3rd	Definition, scope and importance, Need for public awareness.
	4th	Definition, scope and importance, Need for public awareness.
2nd	1ST	2. Natural Resources Renewable and non-renewable resources:
	2nd	a) Natural resources and associated problems.
	3rd	☐ Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	4th	☐ Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
3rd	1ST	☐ Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	2nd	☐ Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity, .
	3rd	☐ Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	4th	☐ Land Resources: Land as a resource, land degradation, man induces land slides, soil erosion, and desertification.
4th	1ST	b) Role of individual in conservation of natural resources.
	2nd	c) Equitable use of resources for sustainable life styles.
	3rd	3. Systems

	4th	☐ Concept of an eco system.
5th	1ST	☐ Structure and function of an eco system.
	2nd	☐ Producers, consumers, decomposers.
	3rd	☐ Energy flow in the eco system
	4th	☐ Ecological succession.
6th	1ST	☐ Food chains, food webs and ecological pyramids.
	2nd	☐ Introduction, types, characteristic features, structure and function of the following eco system:
	3rd	☐ Forest ecosystem:
	4th	☐ Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).
7th	1ST	4. Biodiversity and it's Conservation
	2nd	☐ Introduction-Definition: genetics, species and ecosystem diversity.
	3rd	☐ Biogeographically classification of India.
	4th	☐ Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
8th	1ST	☐ Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
	2nd	☐ Biodiversity at global, national and local level.
	3rd	☐ Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
	4th	☐ Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
9th	1ST	5. Environmental Pollution.
	2nd	a) Air pollution.
	3rd	b) Water pollution.
	4th	c) Soil pollution
10th	1ST	d) Marine pollution
	2nd	e) Noise pollution.
	3rd	f) Thermal pollution
	4th	g) Nuclear hazards.
11th	1ST	6. Social issues and the Environment
	2nd	☐ Urban problems related to energy.
	3rd	☐ Water conservation, rain water harvesting, water shed management.

	4th	☐ Resettlement and rehabilitation of people; its problems and concern.
12th	1ST	☐ Environmental ethics: issue and possible solutions.
	2nd	☐ Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	3rd	☐ Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	4th	☐ Air (prevention and control of pollution) Act.
13th	1ST	☐ Air (prevention and control of pollution) Act.
	2nd	☐ Water (prevention and control of pollution) Act.
	3rd	☐ Water (prevention and control of pollution) Act.
	4th	☐ Public awareness.
14th	1ST	7. Human population and the environment
	2nd	☐ Population growth and variation among nations.
	3rd	☐ Population explosion- family welfare program.
	4th	☐ Environment and human health.
15th	1ST	☐ SDF Human rights.
	2nd	☐ Value education
	3rd	☐ Role of information technology in environment and human health.
	4th	☐ Role of information technology in environment and human health.

BOOK REFERENCE:

1	Textbook of Environmental studies
2	Fundamental concepts in Environmental Studies
3	Environmental Engineering & Safety

Concerned faculty:
LOPAMUDRA DASH

Lesson Plan

Discipline: Architectural		Semester: 3RD , Name of Faculty : NILAY JYOTI BEHERA
Subject: BASIC DESIGN AND MODEL MAKING	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	2nd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	3rd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	4th	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
2nd	1st	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	2nd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	3rd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	4th	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.

3rd	1st	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	2nd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	3rd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	4rd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
4th	1st	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	2nd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	3rd	1. Geometrical solids/ Form oriented objects and composition using different types of materials like ivory sheets, balsa wood, acrylic, or any other suitable materials.
	4th	2. Design of small spaces and Preparation of base board and landscape elements
5th	1st	2.1. Preparation of base board using wood and ply or thermocol
	2nd	2.2. Preparation of lawn and earth mounds
	3rd	
	4th	2.3. Preparation of trees and shrubs.
6th	1st	2.4. Paving and roads.
	2nd	
	3rd	2.5. Preparation of water bodies.
	4th	
7th	1st	3. Measured Drawing
	2nd	

	3rd	Measured drawing of residential building
	4th	Measured drawing of residential building
8th	1st	Measured drawing of residential building
	2nd	Measured drawing of residential building
	3rd	Measured drawing of residential building
	4th	Measured drawing of residential building
9th	1st	Measured drawing of residential building
	2nd	Measured drawing of residential building
	3rd	Measured drawing of residential building
	4th	Measured drawing of residential building
10th	1st	Measured drawing of residential building
	2nd	Measured drawing of residential building
	3rd	Measured drawing of residential building
	4th	Measured drawing of residential building
11th	1st	4. Design of small spaces
	2nd	One bedroom residential building
	3rd	One bedroom residential building
	4th	One bedroom residential building
12th	1st	One bedroom residential building
	2nd	One bedroom residential building
	3rd	One bedroom residential building
	4th	One bedroom residential building
13th	1st	One bedroom residential building
	2nd	One bedroom residential building
	3rd	One bedroom residential building
	4th	One bedroom residential building
14th	1st	One bedroom residential building
	2nd	One bedroom residential building
	3rd	One bedroom residential building
	4th	One bedroom residential building
15th	1st	One bedroom residential building
	2nd	One bedroom residential building
	3rd	One bedroom residential building

	4th	One bedroom residential building
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BOOK REFERENCE:

1	Architecture : Form, Space, and Order
2	Understanding Architecture
3	The Ten Books on Architecture

Concerned faculty:
NILAY JYOTI BEHERA

Lesson Plan

Discipline: Architectural Assistantship Branch		Semester: 3RD , Name of Faculty : Ipsita Dash & Basanti Panigrahi
Subject: GRAPHIC DESIGN	No. of days per week Class allotted: 3	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	1. Free hand drawing study
	2nd	1.1 Basic Architectural Graphics.
	3rd	1.1.1 Line
2nd	1st	1.1.2 Plane
	2nd	1.1.3 Texture
	3rd	1.1.4 Tone
3rd	1st	1.1.5 Colour
	2nd	1.2 Geometrical forms
	3rd	1.2.1 Geometrical solid composition
4th	1st	1.2.1 Geometrical solid composition
	2nd	1.2.2 Abstract three dimensional composition
	3rd	1.2.2 Abstract three dimensional composition
5th	1st	1.3 Anthropometrics and furniture sketches.
	2nd	1.3.1 Human dimensions and proportions
	3rd	1.3.1 Human dimensions and proportions
6th	1st	1.3.2 Residential furniture drawing with dimensions as per anthropometric
	2nd	1.3.2 Residential furniture drawing with dimensions as per anthropometric
	3rd	1.4 Parts of building
7th	1st	1.4.1 Sketches of door and window openings, columns, parapet, boundary wall of residential building.
	2nd	1.4.1 Sketches of door and window openings, columns, parapet, boundary wall of residential building.
	3rd	1.4.1 Sketches of door and window openings, columns, parapet, boundary wall of residential building.
	1st	1.4.2 Entrance door of restaurant and office

8th	2nd	1.4.2 Entrance door of restaurant and office
	3rd	1.4.3 Entrance gate
9th	1st	1.4.3 Entrance gate
	2nd	2. Scaled drawing
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
10th	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
11th	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
12th	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
13th	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)

14th	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
15th	1st	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	2nd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)
	3rd	1.5 Measured drawing of simple objects drawn in appropriate scale. (Furniture, watchman cabin, garden shelter etc.)

BOOK REFERENCE:

1	Architecture : Form, Space, and Order
2	Graphic Design for Architects: A manual for visual communication
3	Element of Graphic Design

Concerned faculty:
Ipsita Dash & Basanti Panigrahi

Lesson Plan

Discipline: Architectural	Semester: 3RD , Name of Faculty : Lopamudra Dash
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Subject: BUILDING CONSTRUCTION	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	1.1. Types of stone masonry (plan, elevation, section).
	2nd	1.1. Types of stone masonry (plan, elevation, section).
	3rd	1.1. Types of stone masonry (plan, elevation, section).
	4th	1.1. Types of stone masonry (plan, elevation, section).
2nd	1st	1.1. Types of stone masonry (plan, elevation, section).
	2nd	1.2. Different shapes and types of bricks
	3rd	1.2. Different shapes and types of bricks
	4th	1.2. Different shapes and types of bricks
3rd	1st	1.2. Different shapes and types of bricks
	2nd	1.2. Different shapes and types of bricks
	3rd	1.3. English bonds & wall junctions.
	4rd	1.3. English bonds & wall junctions.
4th	1st	1.3. English bonds & wall junctions.
	2nd	1.3. English bonds & wall junctions.
	3rd	1.3. English bonds & wall junctions.
	4th	1.4. Flemish bond & wall junctions.
5th	1st	1.4. Flemish bond & wall junctions.
	2nd	1.4. Flemish bond & wall junctions.
	3rd	1.4. Flemish bond & wall junctions.
	4th	1.4. Flemish bond & wall junctions.
6th	1st	1.5. Rat-trap bond.
	2nd	1.5. Rat-trap bond.
	3rd	1.5. Rat-trap bond.
	4th	1.5. Rat-trap bond.
7th	1st	1.5. Rat-trap bond.
	2nd	1.6. Foundations in bricks.
	3rd	1.6. Foundations in bricks.

	4th	1.6. Foundations in bricks.
8th	1st	1.6. Foundations in bricks.
	2nd	1.6. Foundations in bricks.
	3rd	1.7. RCC foundations.
	4th	1.7. RCC foundations.
9th	1st	1.7. RCC foundations.
	2nd	1.7. RCC foundations.
	3rd	1.7. RCC foundations.
	4th	1.8. Arches and its details.
10th	1st	1.8. Arches and its details.
	2nd	1.8. Arches and its details.
	3rd	1.8. Arches and its details.
	4th	1.8. Arches and its details.
11th	1st	1.9. Details of different types of doors and windows
	2nd	1.9. Details of different types of doors and windows
	3rd	1.9. Details of different types of doors and windows
	4th	1.9. Details of different types of doors and windows
12th	1st	1.9. Details of different types of doors and windows
	2nd	1.10. Details of RCC Staircase
	3rd	1.10. Details of RCC Staircase
	4th	1.10. Details of RCC Staircase
13th	1st	1.10. Details of RCC Staircase
	2nd	1.10. Details of RCC Staircase
	3rd	1.11. Details of Pitched roof
	4th	1.11. Details of Pitched roof
14th	1st	1.11. Details of Pitched roof
	2nd	1.11. Details of Pitched roof
	3rd	1.11. Details of Pitched roof
	4th	1.12. Details of A.S, terrazzo, marble and tile flooring.
15th	1st	1.12. Details of A.S, terrazzo, marble and tile flooring.
	2nd	1.12. Details of A.S, terrazzo, marble and tile flooring.
	3rd	1.12. Details of A.S, terrazzo, marble and tile flooring.
	4th	1.12. Details of A.S, terrazzo, marble and tile flooring.

BOOK REFERNCE:

1	Building construction (W.B.Mackey)
2	Building construction (Rangawala)
3	

Concerned faculty:
Lopamudra Dash

Lesson Plan

Discipline: Architectural Assistantship Branch		Semester: 3RD , Name of Faculty : Kalyani Mohanty CIVIL
Subject: SURVEYING PRATICAL	No. of days per week Class allotted: 3	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	1. Chain survey 1.1 Do the Ranging of a line more than 100 Mt. Length and measuring its correct length applying chain corrections.
	2nd	1.1 Do the Ranging of a line more than 100 Mt. Length and measuring its correct length applying chain corrections.
	3rd	1.1 Do the Ranging of a line more than 100 Mt. Length and measuring its correct length applying chain corrections.
2nd	1st	1.2 Take offsets of objects on both sides of line plotting the above details.
	2nd	1.2 Take offsets of objects on both sides of line plotting the above details.
	3rd	1.2 Take offsets of objects on both sides of line plotting the above details.
3rd	1st	1.3 Explain how to overcome the obstructions in chaining in the following cases.
	2nd	1.3 Explain how to overcome the obstructions in chaining in the following cases.
	3rd	1.3 Explain how to overcome the obstructions in chaining in the following cases.
4th	1st	1.3.1 Vision free, but chaining obstructed (pond, river etc.).
	2nd	1.3.1 Vision free, but chaining obstructed (pond, river etc.).
	3rd	1.3.1 Vision free, but chaining obstructed (pond, river etc.).
5th	1st	1.3.2 Chaining free, vision obstructed (Raised ground, hills etc.).
	2nd	1.3.2 Chaining free, vision obstructed (Raised ground, hills etc.).
	3rd	1.3.2 Chaining free, vision obstructed (Raised ground, hills etc.).
6th	1st	2. Compass Survey
	2nd	2. Compass Survey
	3rd	2.1 Set the instrument and how to take readings.

7th	1st	2.1 Set the instrument and how to take readings.
	2nd	2.2 Find the bearings of line and applying check.
	3rd	2.2 Find the bearings of line and applying check.
8th	1st	2.3 Find the angles.
	2nd	2.3 Find the angles.
	3rd	2.4 Demonstrate the closed traversing of a small plot. (Without interior details).
9th	1st	2.4 Demonstrate the closed traversing of a small plot. (Without interior details).
	2nd	3. Leveling
	3rd	3.1 Demonstrate the temporary adjustments of a dumpy level and reading the staff.
10th	1st	3.1 Demonstrate the temporary adjustments of a dumpy level and reading the staff.
	2nd	3.1 Demonstrate the temporary adjustments of a dumpy level and reading the staff.
	3rd	3.2 Find the exact level different between two stations visible from the centre of instrument station.
11th	1st	3.2 Find the exact level different between two stations visible from the centre of instrument station.
	2nd	3.2 Find the exact level different between two stations visible from the centre of instrument station.
	3rd	3.3 Demonstrate the fly leveling between two stations with three setting.
12th	1st	3.3 Demonstrate the fly leveling between two stations with three setting.
	2nd	3.3 Demonstrate the fly leveling between two stations with three setting.
	3rd	4. Contouring Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect). Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
13th	1st	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
	2nd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).

	3rd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
14th	1st	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
	2nd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
	3rd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
15th	1st	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
	2nd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).
	3rd	Demonstrate the contouring of a small plot and plotting the contour by various methods (Direct & Indirect).

BOOK REFERENCE:

1	Surveying and Levelling
2	Text Book of Surveying
3	Surveying

Concerned faculty:
Kalyani Mohanty

Lesson Plan

Discipline: Architectural Assistantship Branch	Semester: 3RD , Name of Faculty : Lopamudra Dash & Basanti Panigrahi
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Subject: AutoCAD-I	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	1.0 Introduction 1.1 State and compare AutoCAD with manual drafting
	2nd	
	3rd	
	4th	
2nd	1st	2.0 Getting started. 2.1 AutoCAD screen 2.2 Working platform 2.3 Methods of command entry 2.4 Coordinate system 2.5 Selection of Units 2.6 Selection of working area 2.7 Types of commands
	2nd	
	3rd	
	4th	
3rd	1st	3.0 Draw commands 3.1 Arc 3.2 Circle 3.3 Ellipse 3.4 Donut 3.5 Polygon 3.6 Line 3.7 Pline
	2nd	
	3rd	
	4th	
4th	1st	4.0 EDIT COMMAND ERASE,OOPS,TIRM,COPY,MOVE,OFFSET,ARRAY,BEAK,STRETCH,EXPLODE, MIRROR,FILLET,CHAMFER,PEDIT,EDIT,HATCH,U, SCALE.
	2nd	
	3rd	
	4th	
5th	1st	5.0 DISPLAY COMMANDS 5.1 PAN 5.2 REDRAW 5.3 REGEN 5.4 ZOOM
	2nd	
	3rd	
	4th	
6th	1st	6.0 UTILITY COMMANDS 6.1 End
	2nd	
	3rd	

	4th	6.1 END
8th	1st	6.2 LIMITS 6.3 QUIT
	2nd	6.4 SAVE 6.5 UNITS
	3rd	7.0 LABEL COMMANDS
	4th	
9th	1st	7.1 DIMENSION
	2nd	7.2 HATCH
	3rd	7.3 TEXT
	4th	8.0 INQUIRY COMMAND
10th	1st	8.1 AREA
	2nd	8.2 DIST
	3rd	8.3 HELP
	4th	8.4 ID 8.5 LIST
11th	1st	9.0 DRAWING AIDS
	2nd	9.1 OSNAP
	3rd	9.2 TRACKING
	4th	9.3 SNAP
12th	1st	10.0 SPECIAL COMMANDS
	2nd	
	3rd	
	4th	
13th	1st	10.1 BLOCK
	2nd	10.2 INSERT 10.3 LAYER
	3rd	10.4 LINE TYPE
	4th	10.5 LT SCALE 10.6 WB BLOCK
14th	1st	HANDS ON
	2nd	HANDS ON
	3rd	HANDS ON
	4th	HANDS ON
15th	1st	HANDS ON
	2nd	HANDS ON
	3rd	HANDS ON
	4th	HANDS ON

BOOK REFERNCE:

1	Mastering AutoCAD 2016 and AutoCAD LT 2016
2	AutoCAD 2016® and AutoCAD LT® 2016: ESSENTIALS
3	AutoCAD

Concerned faculty:
Lopamudra Dash & Basanti Panigrahi

Lesson Plan

Discipline: Architectural		Semester: 5TH , Name of Faculty : DR. MUKUNDA SAHOO
Subject: ENTREPRENEURSHIP & MANAGEMENT	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Introduction to the Subject, Syllabus and Course Outcomes
	2nd	Entrepreneurship : Concept /Meaning of Entrepreneurship
	3rd	Need of Entrepreneurship
	4th	Characteristics, Qualities and Types of entrepreneur, Functions
2nd	1st	Barriers in entrepreneurship
	2nd	Entrepreneurs vrs. Manager
	3rd	Forms of Business Ownership: Sole proprietorship, partnership forms and others
	4th	Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
3rd	1st	Market Survey and Opportunity Identification (Business Planning) : Business Planning
	2nd	
	3rd	
	4th	
4th	1st	Time schedule Plan, Agencies to be contacted for Project Implementation
	2nd	
	3rd	Assessment of Demand and supply and Potential areas of Growth
	4th	
5th	1st	Identifying Business Opportunity
	2nd	Final Product selection
	3rd	Project report Preparation : Introduction
	4th	Preliminary project report
	1st	Detailed project report, Techno economic Feasibility

6th	2nd	Project Viability
	3rd	Management Principles : Introduction
	4th	Definitions of management
7th	1st	Principles of management
	2nd	Functions of management (planning, organising, staffing, directing and controlling etc.)
	3rd	Level of Management in an Organisation
	4th	Functional Areas of Management: a) Production management
8th	1st	
	2nd	b) Inventory Management
	3rd	
	4th	c) Financial Management
9th	1st	
	2nd	d) Marketing Management
	3rd	
	4th	e) Human Resource Management
10th	1st	
	2nd	Leadership and Motivation : Leadership - Definition and Need/Importance,
	3rd	Qualities and functions of a leader, Manager Vs Leader, Style of Leadership
	4th	Motivation- Definition and characteristics, Importance of motivation, Factors affecting motivation, Theories of motivation (Maslow), Methods of Improving
11th	1st	Motivation, Importance of Communication in Business, Types and Barriers of
	2nd	Communication
	3rd	
	4th	Work Culture, TQM & Safety- Human relationship and Performance in Organization
12th	1st	Relations with Peers, Superiors and Subordinates
	2nd	TQM concepts: Quality Policy, Quality Management, Quality system
	3rd	Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal
	4th	Protection Equipment(PPE)
13th	1st	Legislation: a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights
	2nd	
	3rd	b) Features of Factories Act 1948 with Amendment (only salient points)
	4th	

14th	1st	c) Features of Payment of Wages Act 1936 (only salient points)
	2nd	
	3rd	
	4th	
15th	1st	Smart Technology : Concept of IOT, How IOT works
	2nd	
	3rd	Components of IOT, Characteristics of IOT, Categories of IOT
	4th	
		Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.

BOOK REFERENCE:

1	Entrepreneurship Development and Management by R.K Singhal, Katson Books., New Delhi
2	Entrepreneurship Development and Management by U Saroj and V Mahendiratta, Abhishek Publications,
3	Entrepreneurship Development and Management by Vasant Desai, Himalaya Pub.House
4	Industrial Engineering and Management by O.P Khanna ,Dhanpat Rai and Sons
5	Industrial Engineering and Management by Banga and Sharma, Khanna Publications
6	Internet of Things by Jeeva Jose, Khanna Publications, New Delhi
7	Online Resource on Startups and other concepts
8	https://www.fundable.com/learn/resources/guides/startup

Concerned faculty:
DR. MUKUNDA SAHOO

<u>Lesson Plan</u>	
Discipline: Architectural	Semester: 5TH , Name of Faculty : KALYANI MOHANTY

Subject: DESIGN OF RCC STRUCTURE	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Introduction : Aim, objectives and scope of the subject
	2nd	
	3rd	Analyze the single reinforced section : Define the terms related to single RCC section.
	4th	State and explain the properties of reinforced concrete, grades of concrete and steel.
2nd	1st	Discuss the basic assumptions, Discuss the Modular ratio.
	2nd	Discuss the distribution of stress in steel and concrete.
	3rd	Discuss the Equivalent concrete area, Discuss the stress and strain diagrams.
	4th	Discuss the Neutral axis and its location.
3rd	1st	Discuss the balance, under reinforced and over reinforced.
	2nd	State with examples of problems - Moment of resistance calculation.
	3rd	Analysis of double reinforced section a) Discuss the necessary of double reinforced section
	4th	
4th	1st	
	2nd	
	3rd	
	4th	b) State and explain the Moment of resistance calculation
5th	1st	b) State and explain the Moment of resistance calculation
	2nd	b) State and explain the Moment of resistance calculation
	3rd	b) State and explain the Moment of resistance calculation
	4th	b) State and explain the Moment of resistance calculation
6th	1st	Share stress in beams: Introduction
	2nd	Share stress in beams: Introduction
	3rd	Discuss the effect of shear in R.C beams.
	4th	Discuss the effect of shear in R.C beams.
	1st	Discuss shear failure of beams.

7th	2nd	Discuss shear failure of beams.
	3rd	Discuss shear resistance of concrete without shear reinforcement.
	4th	Discuss shear resistance of concrete without shear reinforcement.
8th	1st	Discuss shear reinforcement
	2nd	Discuss shear reinforcement
	3rd	Design of slabs: Explain the design of one way slabs.
	4th	Design of slabs: Explain the design of one way slabs.
9th	1st	Design of slabs: Explain the design of one way slabs.
	2nd	Design of slabs: Explain the design of one way slabs.
	3rd	Design of slabs: Explain the design of one way slabs.
	4th	Explain the design of two way slabs (I.S code method only).
10th	1st	Explain the design of two way slabs (I.S code method only).
	2nd	Explain the design of two way slabs (I.S code method only).
	3rd	Explain the design of two way slabs (I.S code method only).
	4th	Explain the design of two way slabs (I.S code method only).
11th	1st	Design of axially loaded columnned: Find out the effective length of a column.
	2nd	Design of axially loaded columnned: Find out the effective length of a column.
	3rd	Design of axially loaded columnned: Find out the effective length of a column.
	4th	Design of axially loaded columnned: Find out the effective length of a column.
12th	1st	Design of axially loaded columnned: Find out the effective length of a column.
	2nd	Find out the long and short column.
	3rd	Find out the long and short column.
	4th	Find out the long and short column.
13th	1st	Find out the long and short column.
	2nd	Find out the long and short column.
	3rd	Find out the safe load on column.
	4th	Find out the safe load on column.
	1st	Find out the safe load on column.

14th	2nd	Find out the safe load on column.
	3rd	Find out the safe load on column.
	4th	State and explain the design of square and rectangular column.
15th	1st	State and explain the design of square and rectangular column.
	2nd	State and explain the design of square and rectangular column.
	3rd	State and explain the design of square and rectangular column.
	4th	State and explain the design of square and rectangular column.

BOOK REFERENCE:

1	Reinforced Concrete Vol-1: Elementary Reinforced Concrete
2	R.C.C design
3	R.C.C
4	Reinforced Concrete- Mechanics and Design
5	IS 456: Plain and Reinforced Concrete-Code Of practice.

Concerned faculty:
KALYANI MOHANTY

Lesson Plan

Discipline: Architectural		Semester: 5TH , Name of Faculty : NILAY JYOTI BEHERA
Subject: PROFESSIONAL PRACTICE	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Contracts: Types of contracts: lump-sum contract, labour contract, item rate contract, Negotiable contract and plinth area rate contract.
	2nd	
	3rd	
	4th	
2nd	1st	The contract document, administrative approval, Technical sanction, contingency budget, tender earning money, security deposit, Advance payment, Intermediate payment, on account payment, final payment, running bill and final bill.
	2nd	
	3rd	
	4th	
3rd	1st	The drafting notice inviting tender, preparing quotation, and tender documents comparative statement, and procedure and allotting contracts term and form of agreement, termination of contract, penalty for damage.
	2nd	
	3rd	
	4th	
4th	1st	Contract work Classification of work-original, major, minor, petty, annual quadrennial, and special, repair method of execution, setting out of works, work order and related paper, work organization of work preparation a general program, forecast of requirements, in terms of information, plant, transport, labor and materials
	2nd	
	3rd	
	4th	
5th	1st	Supervision: Duties and responsibility of Jr. Engineers.
	2nd	The architect's role in a construction project.

5th	3rd	The duties and responsibility of Architect and Architects' instructions.
	4th	
6th	1st	Certificate of virtual completion of work.
	2nd	Measurement book and methods of making entries and checking.
	3rd	
	4th	Maintaining material inventory at the site.
7th	1st	Recording and checking common irregularities.
	2nd	
	3rd	Heads of Accounts.
	4th	
8th	1st	Survey report, Estimate of expenditure in disposal of surplus unusable materials.
	2nd	
	3rd	Valuation: Meaning of valuation
	4th	Valuation: Meaning of valuation
9th	1st	Valuation: Meaning of valuation
	2nd	Purpose of valuation.
	3rd	Purpose of valuation.
	4th	Purpose of valuation.
10th	1st	Different terms related to valuation:
	2nd	
	3rd	Gross increase and Net increase, Repairs, taxes, sinking fund, scrap value,
	4th	Depreciation and valuation of building
11th	1st	Depreciation and valuation of building
	2nd	Depreciation and valuation of building
	3rd	Rent fixation for building.
	4th	Rent fixation for building.
12th	1st	Rent fixation for building.
	2nd	Building Byelaws: Application of prevailing building byelaws for residential and commercial buildings as per the provision of Local Development Authority.
	3rd	
	4th	
13th	1st	
	2nd	
	3rd	

	4th	
14th	1st	NB: Students have to work out a sample valuation of a small building under the guidance of the teacher.
	2nd	
	3rd	
	4th	
15th	1st	
	2nd	
	3rd	
	4th	

BOOK REFERENCE:

1	Professional Practice : With Elements of Estimating, Valuation, Contract and Arbitration
2	Professional Practice
3	Estimation and Costing in Civil Engineering

Concerned faculty:
NILAY JYOTI BEHERA

Lesson Plan

Discipline: Architectural		Semester: 5TH , Name of Faculty : IPSITA DASH
Subject: HUMAN SETTLEMENT PLANNING	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Introduction to Urban and Rural Planning
	2nd	Scopes and Objectives of Urban and Rural Planning
	3rd	Scopes and Objectives of Urban and Rural Planning
	4th	Scopes and Objectives of Urban and Rural Planning
2nd	1st	Physical Characteristics
	2nd	Physical Characteristics
	3rd	Physical Characteristics
	4th	Urban and Rural Inter relationship
3rd	1st	Urban and Rural Inter relationship
	2nd	Urban and Rural Inter relationship
	3rd	City Master Plan
	4th	State and explain the Master Plan
4th	1st	State and explain the Master Plan
	2nd	State and explain the Master Plan

	3rd	Need of a Comprehensive Development Plan
	4th	Need of a Comprehensive Development Plan
5th	1st	Need of a Comprehensive Development Plan
	2nd	Objective, Process and Method of developing City Master Plan
	3rd	Objective, Process and Method of developing City Master Plan
	4th	Objective, Process and Method of developing City Master Plan
6th	1st	Survey
	2nd	Survey
	3rd	Purpose of surveying
	4th	Purpose of surveying
7th	1st	Purpose of surveying
	2nd	Purpose of surveying
	3rd	Surveying methods
	4th	Surveying methods
8th	1st	Surveying methods
	2nd	Surveying methods
	3rd	Zoning: Introduction
	4th	Zoning: Introduction
9th	1st	Zoning regulation
	2nd	Zoning regulation
	3rd	Zoning regulation
	4th	Housing: Housing and Neighborhood units
10th	1st	Housing: Housing and Neighborhood units
	2nd	Housing: Housing and Neighborhood units
	3rd	Housing: Housing and Neighborhood units
	4th	Housing: Housing and Neighborhood units
11th	1st	Commercial centers
	2nd	Commercial centers
	3rd	Commercial centers
	4th	Commercial centers
12th	1st	Commercial centers
	2nd	Traffic and transport system in towns and cities
	3rd	Traffic and transport system in towns and cities

	4th	Traffic and transport system in towns and cities
13th	1st	Traffic and transport system in towns and cities
	2nd	Traffic and transport system in towns and cities
	3rd	Traffic and transport system in towns and cities
	4th	Traffic and transport system in towns and cities
14th	1st	Traffic and transport system in towns and cities
	2nd	Traffic and transport system in towns and cities
	3rd	Traffic and transport system in towns and cities
	4th	Appraisal of Master Plan of Bhubaneswar
15th	1st	Appraisal of Master Plan of Bhubaneswar
	2nd	Appraisal of Master Plan of Bhubaneswar
	3rd	Appraisal of Master Plan of Bhubaneswar
	4th	Appraisal of Master Plan of Bhubaneswar

BOOK REFERENCE:

1	Town Planning
2	Urban Pattern City Planning And Design

Concerned faculty:
IPSITA DASH

Lesson Plan

Discipline: Architectural

Semester: 5TH , Name of Faculty : NILAY JYOTI BEHERA

**Subject:
ARCHITECTURAL
DESIGN**

**No. of days per
week Class
allotted: 4**

Semester From Date: 01-08-2023 To date : 30-11-2023

Week

Class Day

Theory

1st

1st

2nd

3rd

4th

5th

2nd

1st

2nd

3rd

4th

5th

3rd

1st

2nd

3rd

	4th
	5th
4th	1st
	2nd
	3rd
	4th
	5th
5th	1st
	2nd
	3rd
	4th
	5th
6th	1st
	2nd
	3rd
	4th
	5th
7th	1st
	2nd
	3rd
	4th
	5th
8th	1st
	2nd
	3rd
	4th
	5th
9th	1st
	2nd
	3rd
	4th
	5th
	1st

Design of a multi-storied building: Secondary school, students' hostel, tourist home, Kalyan Mandap, Office complex, commercial complex, hotel, apartment
(Any one of the above).

1.1 Background self- study- anthropometrics, activity analysis, bubble diagram, functional requirement, area analysis.

1.2 Case Study of any related building

1.3 Site analysis

1.4 Single line conceptual drawing.

1.5 Double line plan and elevations (preliminary drawings).

1.6 Presentation drawings.

- ☐ Site Plan
- ☐ Ground Floor Plan
- ☐ Other floor plans
- ☐ Two Elevations
- ☐ Two Sections
- ☐ Detail plan showing interior arrangement
- ☐ Terrace Plan
- ☐ Perspective view

Drawings have to be prepared manually and digitally.

10th	2nd	AutoCAD /3D VIEWS (for preparing perspective view)
	3rd	
	4th	
	5th	
11th	1st	
	2nd	
	3rd	
	4th	
	5th	
12th	1st	
	2nd	
	3rd	
	4th	
	5th	
13th	1st	
	2nd	
	3rd	
	4th	
	5th	
14th	1st	
	2nd	
	3rd	
	4th	
	5th	
15th	1st	
	2nd	
	3rd	
	4th	
	5th	

BOOK REFERENCE:

1	National Building Code - 2016
2	Time Saver Standard for Building Types

3	Architects' Data
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Concerned faculty:
NILAY JYOTI BEHERA

<u>Lesson Plan</u>		
Discipline: Architectural Assistantship Branch		Semester: 5TH , Name of Faculty : NILAY JYOTI BEHERA & BASANTI PANIGRAHI
Subject: WORKING DRAWING-II	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Measured of a G+2 storied building: Plan
	2nd	
	3rd	
	4th	
2nd	1st	Elevations
	2nd	Elevations
	3rd	Elevations
	4th	Sections
3rd	1st	Sections
	2nd	Sections
	3rd	Sections

	4th	Study of existing plumbing and sanitation system
4th	1st	Study of existing plumbing and sanitation system
	2nd	Study of existing electrical system
	3rd	Study of existing electrical system
	4th	Working drawing of the same building : Excavation plan and section.
5th	1st	Excavation plan and section.
	2nd	Excavation plan and section.
	3rd	Excavation plan and section.
	4th	Foundation plans and sections.
6th	1st	Foundation plans and sections.
	2nd	Foundation plans and sections.
	3rd	Foundation plans and sections.
	4th	Ground floor plan in detail.
7th	1st	Ground floor plan in detail.
	2nd	Ground floor plan in detail.
	3rd	Ground floor plan in detail.
	4th	First floor plan in detail
8th	1st	First floor plan in detail
	2nd	First floor plan in detail
	3rd	First floor plan in detail
	4th	Second and third floor plan in detail
9th	1st	Second and third floor plan in detail
	2nd	Second and third floor plan in detail
	3rd	Second and third floor plan in detail
	4th	Lintel level plan of all the floors (Showing details of lintel and chhajja)
10th	1st	Lintel level plan of all the floors (Showing details of lintel and chhajja)
	2nd	Lintel level plan of all the floors (Showing details of lintel and chhajja)
	3rd	Lintel level plan of all the floors (Showing details of lintel and chhajja)
	4th	Roof / Terrace plan.

11th	1st	Roof / Terrace plan.
	2nd	Roof / Terrace plan.
	3rd	Four sides working elevation
	4th	Four sides working elevation
12th	1st	Four sides working elevation
	2nd	Four sides working elevation
	3rd	Sections (through staircase and toilet)
	4th	Sections (through staircase and toilet)
13th	1st	Sections (through staircase and toilet)
	2nd	Sections (through staircase and toilet)
	3rd	Plumbing/sanitary lay out with specification
	4th	Plumbing/sanitary lay out with specification
14th	1st	Plumbing/sanitary lay out with specification
	2nd	Electrical layout
	3rd	Electrical layout
	4th	
15th	1st	Local authority approval drawing 5 as per the building Bye-Laws.
	2nd	
	3rd	
	4th	

BOOK REFERENCE:

1	
2	

Concerned faculty:
NILAY JYOTI BEHERA & BASANTI PANIGRAHI

Lesson Plan

Discipline: Architectural Assistantship Branch		Semester: 5TH , Name of Faculty : IPSITA DASH & BASANTI PANIGRAHI
Subject: INTERIOR DESIGN	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Interior design of a residence/ office/commercial space: Bungalow, Restaurant, small office space or shop (Any one of these)
	2nd	
	3rd	
	4th	
2nd	1st	Background self- study: anthropometrics, space organization with furniture, study of standard size of furniture as per functional requirement.
	2nd	
	3rd	
	4th	
3rd	1st	Study of interior finishes: walls, floors and ceiling, Study of interior finishes: walls, floors and ceiling, Study of interior finishes: walls, floors and ceiling,
	2nd	
	3rd	

	4th	Study of interior finishes: walls, floors and ceiling,
4th	1st	Study of interior finishes: walls, floors and ceiling,
	2nd	Study of interior finishes: walls, floors and ceiling,
	3rd	Study of interior finishes: walls, floors and ceiling,
	4th	Study of interior finishes: walls, floors and ceiling,
5th	1st	Study of types of materials available and their market rate
	2nd	Study of types of materials available and their market rate
	3rd	Study of types of materials available and their market rate
	4th	Study of types of materials available and their market rate
6th	1st	Study of types of materials available and their market rate
	2nd	Study of types of materials available and their market rate
	3rd	Study of types of materials available and their market rate
	4th	Study of types of materials available and their market rate
7th	1st	Single line plan showing interior layout
	2nd	Single line plan showing interior layout
	3rd	Single line plan showing interior layout
	4th	Single line plan showing interior layout
8th	1st	Single line plan showing interior layout
	2nd	Single line plan showing interior layout
	3rd	Single line plan showing interior layout
	4th	Single line plan showing interior layout
9th	1st	Conceptual design of furniture units
	2nd	Conceptual design of furniture units
	3rd	Conceptual design of furniture units
	4th	Conceptual design of furniture units
10th	1st	Conceptual design of furniture units
	2nd	Conceptual design of furniture units
	3rd	Conceptual design of furniture units
	4th	
11th	1st	
	2nd	
	3rd	Presentation Drawings
	4th	☐ Floor plans showing interior layout

12th	1st	☐ Sectional Elevations of each room showing interior space, furniture and walls ☐ Details of furniture units ☐ Electrical layout showing lighting system ☐ Brief report on materials and colour scheme to be used Estimate of the interior scheme Calculation of quantity of material and rate analysis Cost Estimate of the interior scheme (with specifications, quantity and market rate)
	2nd	
	3rd	
	4th	
13th	1st	
	2nd	
	3rd	
	4th	
14th	1st	
	2nd	
	3rd	
	4th	
15th	1st	
	2nd	
	3rd	
	4th	

BOOK REFERENCE:

1	Time Saver Standard for Building Types
2	Architects' Data

Concerned faculty:
IPSITA DASH & BASANTI PANIGRAHI

Lesson Plan

Discipline: Architectural Assistantship Branch		Semester: 5TH , Name of Faculty : LOPAMUDRA DASH & BASANTI PANIGRAHI
Subject: STRUCTURAL DETAILING	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	Layout plan for excavation for Foundation.
	2nd	Layout plan for excavation for Foundation.
	3rd	Layout plan for excavation for Foundation.
	4th	Layout plan for excavation for Foundation.
2nd	1st	Structural details of Foundation with plan and section.
	2nd	Structural details of Foundation with plan and section.
	3rd	Structural details of Foundation with plan and section.
	4th	Structural details of Foundation with plan and section.

3rd	1st	Structural details of Foundation with plan and section.
	2nd	Structural details of Foundation with plan and section.
	3rd	Structural details of Foundation with plan and section.
	4th	Structural details of Foundation with plan and section.
4th	1st	Structural details of Foundation with plan and section.
	2nd	Structural details of Foundation with plan and section.
	3rd	Structural details of Foundation with plan and section.
	4th	Structural details of Foundation with plan and section.
5th	1st	Structural details of Plinth Beam with plan and section.
	2nd	Structural details of Plinth Beam with plan and section.
	3rd	Structural details of Plinth Beam with plan and section.
	4th	Structural details of Plinth Beam with plan and section.
6th	1st	Structural details of Column with plan and section.
	2nd	Structural details of Column with plan and section.
	3rd	Structural details of Column with plan and section.
	4th	Structural details of Column with plan and section.
7th	1st	Structural details of Column with plan and section.
	2nd	Structural details of Column with plan and section.
	3rd	Structural details of Column with plan and section.
	4th	Structural details of Column with plan and section.
8th	1st	Structural details of Column with plan and section.
	2nd	Structural details of Column with plan and section.
	3rd	Structural details of Column with plan and section.
	4th	Structural details of Column with plan and section.
9th	1st	Structural details of Lintel Beam with plan and section.
	2nd	Structural details of Lintel Beam with plan and section.
	3rd	Structural details of Lintel Beam with plan and section.
	4th	Structural details of Lintel Beam with plan and section.
10th	1st	Structural details of Slab Beam with plan and section.
	2nd	Structural details of Slab Beam with plan and section.
	3rd	Structural details of Slab Beam with plan and section.
	4th	Structural details of Slab Beam with plan and section.
	1st	Structural details of Slab with plan and section.

11th	2nd	Structural details of Slab with plan and section.
	3rd	Structural details of Slab with plan and section.
	4th	Structural details of Slab with plan and section.
12th	1st	Structural details of Slab with plan and section.
	2nd	Structural details of Slab with plan and section.
	3rd	Structural details of Slab with plan and section.
	4th	Structural details of Slab with plan and section.
13th	1st	Structural details of Slab with plan and section.
	2nd	Structural details of Slab with plan and section.
	3rd	Structural details of Slab with plan and section.
	4th	Structural details of Slab with plan and section.
14th	1st	Structural details of Chhajja and staircase with plan and section.
	2nd	Structural details of Chhajja and staircase with plan and section.
	3rd	Structural details of Chhajja and staircase with plan and section.
	4th	Structural details of Chhajja and staircase with plan and section.
15th	1st	Structural details of Chhajja and staircase with plan and section.
	2nd	Structural details of Chhajja and staircase with plan and section.
	3rd	Structural details of Chhajja and staircase with plan and section.
	4th	Structural details of Chhajja and staircase with plan and section.

BOOK REFERENCE:

1	Reinforced Concrete Vol-1: Elementary Reinforced Concrete
2	IS 456: Plain and Reinforced Concrete-Code Of practice.

Concerned faculty:
LOPAMUDRA DASH & BASANTI PANIGRAHI

Lesson Plan

Discipline: Architectural Assistantship Branch		Semester: 5TH , Name of Faculty : NILAY JYOTI BEHERA & BASANTI PANIGRAHI
Subject: PROJECT WORK (Phase-I)	No. of days per week Class allotted: 4	Semester From Date: 01-08-2023 To date : 30-11-2023
Week	Class Day	Theory
1st	1st	
	2nd	
	3rd	
	4th	
	5th	
2nd	1st	

	2nd
	3rd
	4th
	5th
3rd	1st
	2nd
	3rd
	4th
	5th
4th	1st
	2nd
	3rd
	4th
	5th
5th	1st
	2nd
	3rd
	4th
	5th
6th	1st
	2nd
	3rd
	4th
	5th
7th	1st
	2nd
	3rd
	4th
	5th
8th	1st
	2nd
	3rd
	4th

Following are the broad suggestive areas of project work

- ☐ Residential Building
- ☐ Commercial Building
 - ☐ Office Building
- ☐ Institutional Building
 - ☐ Public Building

	5th
9th	1st
	2nd
	3rd
	4th
	5th
10th	1st
	2nd
	3rd
	4th
	5th
11th	1st
	2nd
	3rd
	4th
	5th
12th	1st
	2nd
	3rd
	4th
	5th
13th	1st
	2nd
	3rd
	4th
	5th
14th	1st
	2nd
	3rd
	4th
	5th
15th	1st
	2nd

- ☐ Public Building
- ☐ Large Interior projects
- ☐ Any other Building projects

	3rd	
	4th	
	5th	

BOOK REFERNCE:

1	National Building Code - 2016
2	Time Saver Standard for Building Types
3	Architects' Data

Concerned faculty:
NILAY JYOTI BEHERA & BASANTI PANIGRAHI