## 1. SALIENT FEATURES OF THE DIPLOMA PROGRAMME IN ARCHITECTURAL ASSISTANTSHIP

1.	Name of the Programme	:	Diploma programme in Architectural Assistantship
2.	Duration of the Programme	:	Three years
3.	Entry Qualifications	:	Matriculation or equivalent as prescribed by State Board of Technical Education, Haryana
4.	Intake	:	30 (or as prescribed by the Board)
5)	Pattern of the Programme	:	Semester Pattern
6)	Ratio between theory and Practice	:	30 : 70 (Approx.)

## 7) Ecology and Environment:

As per Govt. of India directives, a subject on Environmental Education has been incorporated in the scheme.

## 8) Entrepreneurship Development:

A subject on Entrepreneurship Development and Management has been incorporated in the scheme.

### 9) Student Centred Activities:

A provision of 3-4 hrs per week in each semester has been made for organizing Student Centred Activities for overall personality development of students. Such activities will comprise of co-curricular activities such as expert lectures, games, hobby classes like photography, painting, singing etc. seminars, declamation contests, educational field visits, NCC, NSS and cultural activities etc.

10) A personality development camp has been included in the 5<sup>th</sup> semester.

# 2. EMPLOYMENT OPPORTUNITIES FOR DIPLOMA HOLDERS IN ARCHITECTURAL ASSISTANTSHIP

From the feedback received from polytechnics and field organizations, diploma holders in Architectural Assistantship find employment in service sector such as: Architectural Assistant/ Draftsman/Junior Architectural Draftsman/ Junior Planning Assistant in the following organizations:

- The private enterprises consisting of firms of Architects or engineers
- Builders, contractors, interior designers, web-page designers and survey companies
- Government departments namely:
  - a) State Department of Architecture
  - b) State Department of Town and Country Planning
  - c) Central Public Works Department
  - d) State Housing Boards and Corporations
  - e) State Urban Development Agency
  - f) Railways
  - g) Military Engineering Services
  - h) Local Bodies
  - i) Survey of India
  - j) State Electricity Department/Boards
  - k) Telecommunication Department
  - 1) Teaching profession

It has been experienced that about 10 per cent of diploma holders start their own practice in the field of Architecture

### Self Employment

- Private Practice with local bodies
- Own unit/enterprise for
  - a) Model Making
    - b) Perspective making
    - c) Landscaping
    - d) Drawings and CAD
- Service to Private Architects
- Sub Contracts of Construction, renovation, repair and interior design
- Site Supervision
- Site Surveying
- Estimation and Billing
- Site/marketing of building components
- Liaison work

# 3. COMPETENCY PROFILE OF DIPLOMA HOLDERS IN ARCHITECTURAL ASSISTANTSHIP

Keeping in view the employment opportunities given above, following are the important activities (priority-wise) of diploma holders in Architectural Assistantship:

- i) Preparation and Interpretation of drawings:
  - Preliminary drawings (Line plans, sketching, tracing)
  - Presentation drawings (Rendering in black and white, colour, perspective drawings)
  - Submission drawings
  - Structural drawings
  - Working drawings and detailing
  - Preparation of prints and plots and their upkeep
  - Maintenance of drawing records and files
  - Services drawings
- ii) Preparation of small building designs, master plans and layouts
- iii) Site supervision/management i.e. measuring, surveying and inspection
- iv) Preparation of models:
  - Study models
  - Detailed Model
  - Block models
- v) Assistance in preparation of tender documents and cost estimates, including valuation
- vi) Preparation of submission documents for approval
- vii) Interior designing, execution and layout
- viii) Management of Architecture office
- ix) Market survey of construction materials

Keeping in view the employment opportunities and job profile of diploma holders of Architectural Assistantship, following competencies are required to be developed in the students:

- i) Development of skills in free-hand sketching, lettering and preparation of presentation, submission, structural and working drawings and detailed thereof
- ii) Development of basic knowledge and skills for preparing small building designs and layouts
- iii) Development of skills in model making using different materials
- iv) Development of skills in preparation of municipal drawings/submission drawings, corporation drawings and related documents
- v) Development of knowledge and skills in site management comprising of measurement, surveying and inspection
- vi) Development of basic knowledge and skills in preparing rough estimates, preparation of detailed estimates and tender documents for small buildings
- vii) Development of skills in taking out prints/plots, cloth mounting, colouring and folding of prints and their up keep
- viii) Appreciation of basic knowledge regarding various building materials and construction techniques
- ix) Development of basic knowledge about elements & principles of theory of design
- x) Development of basic knowledge of history of architecture, town planning and building bye-laws, with emphasis on construction techniques
- xi) Development of knowledge and skills in applications of computers in architecture
- xii) Development of basic understanding of resource systems helping in the financing of small enterprises
- xiii) Development of basic knowledge of climatology, environment and ecology
- xiv) Understanding the behaviour of structural elements of building
- xv) Development of basic understanding of building services
- xvi) Development of communication and managerial skills
- xvii) Development of basic drawing skills by hand

# 4. DERIVING CURRICULUM AREAS FROM COMPETENCY PROFILE

Sr.	Competency Profile	Curriculum Areas			
1.	Development of skills in free-hand sketching, lettering and preparation of presentation, submission, structural and working drawings and detailed thereof	<ul> <li>Free hand sketching</li> <li>Architectural Drawing</li> <li>Building Construction</li> <li>Building Services</li> <li>Building bye-laws</li> <li>Reinforce Cement Concrete (RCC)</li> </ul>			
2.	Development of basic knowledge and skills for preparing small building designs and layouts	<ul> <li>Architectural Design</li> <li>Climatology</li> <li>Theory of Design</li> <li>Construction Materials</li> <li>Landscape Design</li> </ul>			
3.	Development of skills in model making using different materials	Model Making			
4.	Development of skills in preparation of municipal drawings/submission drawings/ corporation drawings	<ul> <li>Building Bye-Laws and</li> <li>Municipal Drawing</li> </ul>			
5.	Development of knowledge and skills in site management comprising of measurement, surveying and inspection	<ul> <li>Building Construction</li> <li>Surveying</li> <li>Construction Management</li> </ul>			
6.	Development of basic knowledge and skills in preparing tender documents, rough estimates and also preparation of detailed estimates for small buildings	Quantity Surveying and Valuation			
7.	Development of skills in taking out prints, cloth mounting, colouring and folding of prints/plots and their up keep	<ul> <li>Working Drawing</li> <li>Architectural Drawing</li> <li>Building bye-laws</li> <li>Workshop Practice</li> </ul>			
8.	Development of basic knowledge regarding various building materials and construction techniques	<ul> <li>Building Material</li> <li>Building Construction</li> <li>Entrepreneurship Development and Management</li> <li>Portfolio (Major Project and Professional Training)</li> </ul>			
9.	Appreciation of basic knowledge about elements and principles of theory of design	Theory of Architectural Design			
10.	Development of basic knowledge of history of architecture, town planning and building bye-laws with emphasis on computer techniques	<ul> <li>Building Bye-Laws</li> <li>Town Planning</li> <li>History of Architecture</li> </ul>			
11.	Development of basic knowledge and skills in applications of computers in architecture	Computer Applications in     Architecture			
12.	Development of basic understanding of resource systems helping in the financing of small enterprises	<ul> <li>Construction Management</li> <li>Entrepreneurship Development and Management</li> </ul>			
13.	Development of basic knowledge of climatology, environment and ecology	<ul><li>Climatology</li><li>Environmental Education</li></ul>			
14.	Understanding the behaviour of structural elements of building	Structural Mechanics			
15.	Development of basic understanding of building services	Building Services			
16.	Development of communication and managerial skills	Communication Skills			
17.	Development of basic hand skills	<ul><li>Workshop Practice</li><li>Model making</li></ul>			

### 5. ABSTRACT OF THE CURRICULUM AREAS

#### a) General Sciences

- 1. Communication Skills
- 2. Basics of Information Technology
- 3. Employability Skills
- 4. Environmental Education
- 5. Entrepreneurship Development and Management

#### b) Applied Sciences

6. Applied Sciences and Mathematics

#### c) Basic Courses in Engineering/Technology

7. History of Architecture

### d) Applied Courses in Engineering/Technology

- 8. Architectural Drawing
- 9. Free Hand Sketching
- 10. Theory of Design
- 11. Building Materials
- 12. Model Making
- 13. Building Construction
- 14. Architectural Design
- 15. Surveying
- 16. Climatology
- 17. Building Services
- 18. Structural Mechanics
- 19. Building Bye-Laws
- 20. Working Drawing
- 21. Computer Applications in Architecture
- 22. Reinforced Cement Concrete (RCC)
- 23. Quantity Surveying and Valuation
- 24. Portfolio (Major Project) and Professional Training

#### e) Specialized Courses (Electives)

- 25. Landscape Design
- 26. Advanced Computer Application
- 27. Interior Design
- 28. Building Maintenance
- 29. Town Planning
- 30. Site Management

# 6. HORIZONTAL AND VERTICAL ORGANISATION OF THE SUBJECTS

Sr. No.	Subject	Distribution of time in various semesters						
		Ι	II	III	IV	$\mathbf{V}$	VI	
1.	Communication Skills	5	5	-	-	-	-	
2.	Architectural Drawing	6	6	6	-	-	-	
3.	Free Hand Sketching	6	-	-	-	-	-	
4.	Theory of Design	3	-	-	-	-	-	
5.	Building Materials	5	3	-	-	-	-	
6.	Model Making	4	-	-	-	-	-	
7.	Applied Sciences and Mathematics	7	-	-	-	-	-	
8.	Basics of Information Technology	-	4	-	-	-	-	
9.	Building Construction	-	8	6	6	6	-	
10.	History of Architecture	-	3	3	3	-	-	
11.	Architectural Design	-	6	8	8	8	-	
12.	Surveying	-	-	5	-	-	-	
13.	Climatology	-	-	3	-	-	-	
14.	Building Services	-	-	4	-	-	-	
15.	Structural Mechanics	-	-	-	5	-	-	
16.	Building Bye-Laws	-	-	-	3	-	-	
17.	Working Drawing	-	-	-	6	6	-	
18.	Computer Applications in Architecture	-	-	-	4	4	-	
19.	Employability Skills	-	-	-	-	2	2	
20.	Entrepreneurship Development and Management	-	-	-	-	-	3	
21.	Reinforced Cement Concrete (RCC)	-	-	-	-	6	-	
22.	Environmental Education	-	-	-	-	3	-	
23.	Quantity Surveying and Valuation	-	-	-	-	-	5	
24.	Elective-I	-	-	-	-	-	3	
25.	Elective-II	-	-	-	-	-	3	
26.	Portfolio (Major Project) and Professional Training	-	-	-	-	-	19	
27.	Student Centered Activities	4	5	5	5	5	5	
	Total	40	40	40	40	40	40	