1255

Code : 15AR51T

Register Number | | | | | | | | | | |

V Semester Diploma Examination, April/May-2019

APPRECIATION OF ARCHITECTURE

Time : 3 Hours] [Max. Marks : 100

Instructions : (i) Answer any **six** questions from Part – A.
(ii) Answer any **seven** questions from Part – B.

PART – A

1. Sketch 'Casa Mila' apartment. 5

2. Describe glasgow school of art. 5

3. Explain Bauhas building. 5

4. Sketch Villa Savoye, Poissy. 5

5. Explain Jonas Salk Institute, La Jolla, California. 5

6. Sketch transworth house, Plano Illinois. 5

7. Describe Indian Institute of Management, Bangalore, designed by B.V. Doshi. 5

8. Sketch Gandhi Smarak, Ahmedabad. 5

9. Explain 'The Hamlet', Baker's home in Trivandram. 5

15AR51T

PART – B

10. Analyze the development of architecture with Reitveld – Schroder house as an example. 16

11. Summarize the influence of industrial materials like steel, reinforced concrete, sheet glass on modern architecture with an example. 16

12. Summarize Notre-dame-du-haut, Ronchamp. 16

13. Sketch and explain Vitra Fire station, Weil am Rhein, Germany. 16

14. Interpret Organic Architecture by Frank Lloyd Wright with falling Water as an example. 16

15. Explain 'Skin & bone' concept of Mies Van der Rohe with Seagram building as an example. 16

16. Explain briefly Assembly building Chandigarh. 16

17. Describe Kanchanjunga Apartment, Mumbai.

18. Sketch and explain Sangath, Ahmedabad.

19. Explain with help of sketch, Raj Rewal's Asiad Village, Delhi.

1257 **Code : 15AR53T**

Register Number | | | | | | | | | | |

V Semester Diploma Examination, April/May-2019

TOWN PLANNING

Time : 3 Hours | **| Max. Marks : 100**

Instructions : (i) Answer any **six** questions from Part – A.
(ii) Answer any **seven** questions from Part – B.

PART – A $6 \times 5 = 30$

1. Write a brief note on Ribbon Development with a neat sketch. 5

2. What are the advantages of zoning ? 5

3. Discus the importance of set-back with a neat sketch. 5

4. What are the factors to be considered while selecting a building site ? 5

5. Write a brief note on skyscrapers. 5

6. Discuss the effects of slums. 5

7. State the various advantages of concentration of Industries in a town. 5

8. Discuss the essential features of a neighbourhood unit. 5

9. What are the requirements of a good city road ? 5

PART B

$7 \times 10 = 70$

10. Briefly explain the principles of Town planning. 10

11. Discuss the important features of a satellite town. 10

12. Enumerate the importance of 'Light Plane' with a neat sketch. 10

13. Explain briefly the 3 aspects of zoning. 10

14. Discuss the classification of Residential buildings. 10

15. Explain briefly the classification of public buildings. 10

16. Write a brief note on manufacturing Industries. 10

17. What are the various cause of slums ? 10

18. What are the salient features of a Bouleyard ? 10

19. How are urban roads classified based on their importance and use ? 10

1258

Code : 15AR54D

Register Number

V Semester Diploma Examination, April/May-2019

BUILDING CONSTRUCTION & DRAWING - III

Time : 4 Hours] [Max. Marks : 100

Instructions : (i) Answer any **eight** questions from Part – A.
(ii) Answer any **three** questions from Part – B.

PART – A

$8 \times 5 = 40$

1. Define plastering. Discuss the purpose of plastering. 5
2. List the different methods of pointing. Explain any one. 5
3. Discuss the sources of dampness. 5
4. What are the requirements of good partition wall ? 5
5. Explain brick partition wall with a neat sketch. 5
6. Discuss the advantages of steel scaffolding. 5
7. Define formwork. Sketch formwork of column and label the parts. 5
8. Write a short note on dead shore with neat sketch. 5
9. What is suspended ceiling ? Discuss its advantages. 5
10. Explain the construction method of exposed grid false ceiling with neat sketch. 5
11. Discuss the purpose of prefabricated structures. 5
12. Write ... wall

[Turn over

PART – B

$3 \times 20 = 60$

13. Design false ceiling for an architect's office measuring 4.0 m × 5.0 m using G.I sections & gypsum board to a suitable scale. Assume necessary data :

Draw the following :

(a) Reflected ceiling plan 8

(b) Section 8

(c) Any one enlarged fixing detail 4

14. Draw aluminium partition wall measuring 4.0 m wide and 3.0 m height for an office to a suitable scale. Assume necessary data.

Draw the following :

(a) Plan 5

(b) Elevation 6

(c) Section 5

(d) Any one enlarged detail 4

15. Draw wall panelling using Industrial timber for a wall of size of 3.0 m wide and 3.0 m height to a suitable scale. Assume necessary data. Draw the following :

(a) Sectional plan 5

(b) Elevation 6

(c) Longitudinal section 5

(d) One enlarged detail 4

16. Design a entrance canopy for a residence of size 4.0 m × 3.0 m with pergolas to a suitable scale :

Draw the following :

(a) Plan 8

(b) Sectional elevation 8

(c) Enlarged detail 4

17. (a) Prepare sketch of Raking shore and Lable the parts. 10

(b) Prepare sketch of damp proofing in foundation. 10

Register Number

Code : 15AR52T

V Semester Diploma Examination, April/May-2019

ESTIMATING & COSTING - II

Time : 3 Hours] [Max. Marks : 100

Instruction : Answer **all** parts.

PART – A

Prepare the detailed estimate of quantities and abstract estimate of cost along with specifications for the following items of works for residential building whose plan and sectional detail are given in Fig. No. 1 of the accompanying sketch. 3 × 10 = 30

(a) RCC roof slab using CC 1:2:4. 10

(b) BBM in superstructure in CM 1:6. 10

OR

Foundation concrete in CC 1:4:8. 10

(c) Dadoing of walls for a height of 2.1 mt in bath and w/c using glazed ceramic tiles. 10

PART – B

Analyze from first principle the rate for any **two** of the following items : 2 × 10 = 20

(a) Double cot with mattress using ply wood are decorative laminates. 10

(b) Wardrobe using 19 mm block board prelaminated both sides. 10

(c) Aluminium partitions using glass and prelaminated particle board. 10

Prepare the cost estimate for interior furniture and furnishing for any **two** of the following residential units : 2 × 10 = 20

(a) Living : Single and three seater sofa with teapoy made of teak wood, door and window curtains with pelmet box. 10

(b) Bedroom : Double cot with mattress using ply wood and decorative laminates, Dressing unit with stool made of ply wood and decorative laminate. 10

(c) Kitchen : Low level and high level storage cabinets, cooking range and exhaust chimney. 10

[Turn over

4 Estimate the quality of wood for a fully glazed shutter with mullion window with the following component details. 16

Size of window	1500 mm × 1900 mm
Frame & Mullion	100 mm × 80 mm
Top rail & bottom rail	85 mm × 30 mm
Styles	85 mm × 30 mm
Sash bar	30 mm × 30 mm
Glass panel	6 mm thick
Rebate	15 mm

5 Prepare cost estimation of repair and renovation works for the following items of a residential building. Whose plan and sectional details are given in fig No. 1 of the accompanying sketch. 2 × 10 20

(a) Chipping and removing of existing exterior wall plastering and plastering the same with 1:6 cement mortar. 10

(b) Scraping and removing of interior wall paint and providing the same with oil bond distemper paint. 10

OR

Chipping and removing of existing flooring and providing the same with vitrified tile flooring. 10

1104

Code : 15AR53T

Register Number | | | | | | | |

V Semester Diploma Examination, April/May-2018

TOWN PLANNING

Time : 3 Hours] [Max. Marks : 100

Note : (i) Answer any **six** questions from Part – A.
(ii) Answer any **seven** questions from Part – B.

PART – A

$6 \times 5 = 30$

1. Define Town planning and explain its objects. 5

2. What is meant by Building By-laws ? Explain its objects. 5

3. Discuss the importance of use zoning. 5

4. What are the advantages of skyscrapers ? 5

5. Distinguish between dependent and independent public buildings. 5

6. What are the causes of slums ? 5

7. **List the essential** requirements of an Industry. 5

8. **Enumerate the salient** features of a neighbourhood unit. 5

9. **Write a brief note on by pass roads.** 5

[Turn over

15AR53T

PART – B

$7 \times 10 = 70$

10. Explain briefly the salient features of a satellite town with a neat sketch. 10

11. What are the advantages and disadvantages of Ribbon development ? 10

12. Analyse the principles of zoning. 10

13. Explain briefly 'Light Plane' with a neat sketch. 10

14. How are residential buildings classified ? 10

15. Discuss the principles of design of public buildings. 10

16. Analyse the serious effects of slums in a Town. 10

17. Explain the classification of Industries according to the nature of dependence on circumstances. 10

18. Explain briefly the three systems of park with a neat sketch. 10

19. Explain the classification of urban roads. 10

1102

Code : 15AR51T

Register Number | | | | | | | |

V Semester Diploma Examination, April/May-2018

APPRECIATION OF ARCHITECTURE

Time : 3 Hours] [Max. Marks : 100

Note : Answer any six from Part – A and any seven from Part – B

PART – A

1. Write a note on Arts and Crafts movement. 5

2. Draw the elevation of 'Glasgow School of art. 5

3. Give brief note on Eiffel Tower, Paris with the help of sketch. 5

4. Discuss the contribution of Bauhaus to modern architecture. 5

5. Write a note on Johnson Wax factory building by F.L. Wright. 5

6. Sketch Jonas Salk institute La Jolla, California. 5

7. Sketch the elevation of Gandhi Smarak Sangrahalay. 5

8. Explain the architectural features of Asiad village. 5

9. Sketch "The Hamlet" Baker's home in Trivandrum. 5

[Turn over

15AR51T

PART – B

10. Explain Le Corbusier's theory on architecture taking Villa Savoye, Poissy as an example.

11. Explain with the help of sketch Crystal Palace. London.

12. Explain design concept and principles of Architect Frank Lloyd Wright with respect to Falling Water.

13. Explain with help of sketch 'Skin and Bone' concept of Mies Van dare Rohe taking Seagram Building as an example.

14. Illustrate with sketches architectural features of Notre Dame Du Haut, Ronchamp

15. Outline the design concept of Architect Zaha Hadid taking London aquatic centre as an example.

16. Summarize architectural features of Indian Institute of Management. Bengal... sketches.

17. Explain with the help of neat sketch Kanchanjunga Apartment at Mumbai designed by Charles Correa.

18. Explain the design principles of Architect Raj Rewal taking Asiad village as an example with sketches.

19. Discuss the cost effective construction technique adopted by Laurie Baker with the help of neat sketches.

Register Number | | | | | | | |

V Semester Diploma Examination, April/May-2018

BUILDING CONSTRUCTION AND DRAWING-III

Time : 4 Hours] [Max. Marks : 100

Note : (i) Answer any **eight** questions from Part – **A**.
(ii) Answer any **three** questions from Part – **B**.

PART – A

1. Define plastering & discuss the purpose of plastering. 5
2. Distinguish between two coat and three coat plastering. 5
3. List the different sources of dampness. Explain any two. 5
4. What are the requirements of good partition wall ? 5
5. Explain aluminium partition wall with neat sketch. 5
6. List the requirement of good form work. 5
7. What is shoring ? Explain briefly any two types of shoring with sketch. 5
8. Sketch form work for column and label the parts. 5
9. Explain the construction method of exposed grid false ceiling with neat sketch. 5
10. What is suspended ceiling ? Discuss its advantages. 5
11. What is wall paneling ? Discuss its advantages. 5
12. Write note on curtain wall. 5

1105

Code : 15AR54D

Register Number | | | | | | | |

V Semester Diploma Examination, April/May-2018

BUILDING CONSTRUCTION AND DRAWING-III

Time : 4 Hours] **[Max. Marks : 100**

Note : (i) Answer any **eight** questions from Part – **A**.
(ii) Answer any **three** questions from Part – **B**.

PART – A

1. Define plastering & discuss the purpose of plastering. 5
2. Distinguish between two coat and three coat plastering. 5
3. List the different sources of dampness. Explain any two. 5
4. What are the requirements of good partition wall ? 5
5. Explain aluminium partition wall with neat sketch. 5
6. List the requirement of good form work. 5
7. What is shoring ? Explain briefly any two types of shoring with sketch. 5
8. Sketch form work for column and label the parts. 5
9. Explain the construction method of exposed grid false ceiling with neat sketch. 5
10. What is suspended ceiling ? Discuss its advantages. 5
11. What is wall paneling ? Discuss its advantages. 5
12. Write note on curtain wall. 5

[Turn over

15AR54D

PART – B

13. Draw aluminium partition wall measuring 5m × 3m for an office to a scale : Assume all necessary data suitably. Prepare the following views :

(a) Plan

(b) Elevation

(c) Sectional elevation

(d) Any one fixing details to an enlarged scale.

14. Draw false ceiling for an Architect's office of size 6m × 5m with 4.0m ceiling to Assume necessary data. Prepare the following views to a scale 1 : 20.

(a) Reflected ceiling plan with artificial lighting.

(b) Sectional elevation.

(c) Any one joint details to an enlarged scale.

15. Draw wall panelling using teak wood panels for a wall of size 4.0 m wide and height to 1 : 20 scale. Assume necessary data required.

Draw the following views.

(a) Sectional plan

(b) Elevation

(c) Sectional elevation

(d) Any one joint details to an enlarged scale.

16. (a) Draw sectional elevation of damp proofing at roof level to a suitable scale.

(b) Prepare a sketch of Raking shore to a suitable scale.

17. Design and draw structural glazing for a commercial building wall of size 5.0 m × 6.0 m to a suitable scale. Assume necessary data and prepare the following views :

(a) Plan

(b) Elevation

(c) Sectional elevation

1103

Code : 15AR52

Register Number | | | | | | | |

V Semester Diploma Examination, April/May-2018

ESTIMATING AND COSTING – II

Time : 3 Hours] **[Max. Marks : 100**

Note : (i) Answer **all** parts.

(ii) Missing Data may suitably be assumed and clearly stated.

PART – A

1. Prepare the detailed estimate of quantities and abstract estimate of the cost for the following items of work for a residential building whose plan and sectional details are given in Fig. No. 1 of the accompanying sketch. $3 \times 10 = 30$

   (a) AC sheet roofing (Excluding Truss Supports) 10

   (b) Plastering using 1 : 6 cement mortar for Interior Wall surfaces. 10

   OR

   Burnt Brick Masonry in CM 1 : 6 for super structure.

   (c) Mosaic flooring over a bare concrete of 1 : 4 : 8. 10

   OR

   Wood work in Doors, Windows and Ventilators.

PART – B

2. Analyse from first principle the rate for the following items of work. $2 \times 10 = 20$

   (a) **Wooden single seater** sofa using teak wood with cushions for seat and back rest. 10

   (b) **Aluminium partition** using Glass and Prelaminated particle Board. 10

   OR

   (c) **Double cot with mattress** using plywood and decorative laminate. 10

3 Prepare the detailed estimate of quantities and abstract estimate of the cost for interior furniture and furnishings for any two of the following units of a Residential Building whose plan with interior layout are given in Fig. No. 2 of the accompanying sketch. $2 \times 10 = 20$

(a) Living : Single seater and three seater Sofa, Teapoy 10

(b) Bed Room : Double cot with mattress using plywood and decorative laminate. Dressing unit 10

(c) Dining : Teak wood dining table of Glass Top with chairs crockery cabinet. 10

4 Estimate the quantity of wood for a double leaf with following component details : $1 \times 10 = 10$

Size of the door : 1100 mm × 2100 mm

Frame : 100 mm × 750 mm

Styles : 100 mm × 35 mm

Top Rail : 200 mm × 35 mm

Bottom Rail : 250 mm × 35 mm

Lock Rail : 150 mm × 35 mm

Freeze rail : 150 mm × 35 mm

Panel : 25 mm thick

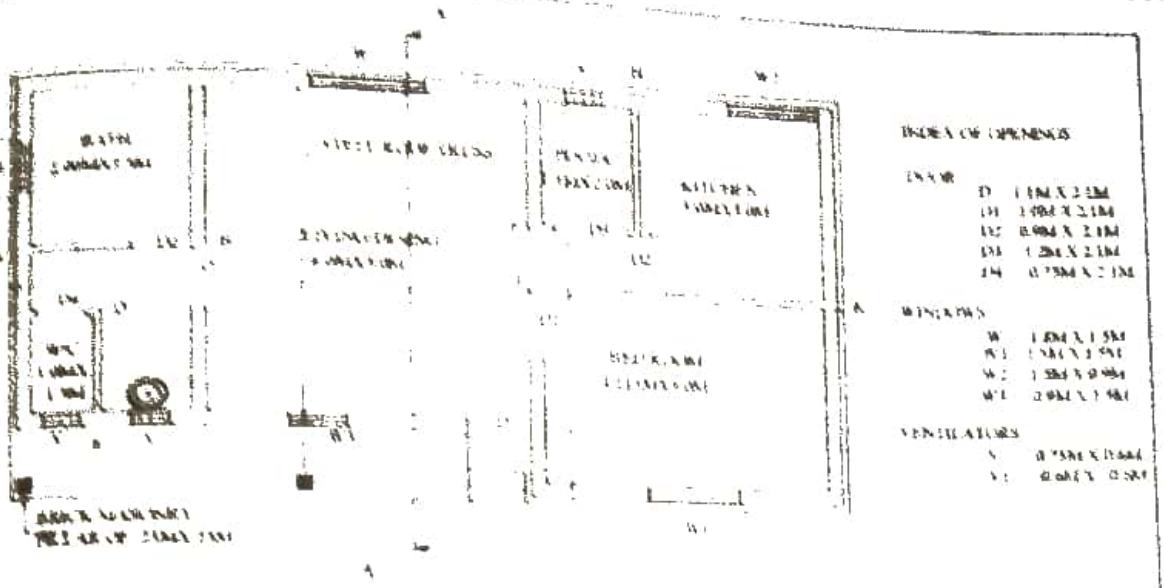
Rebet : 12 mm

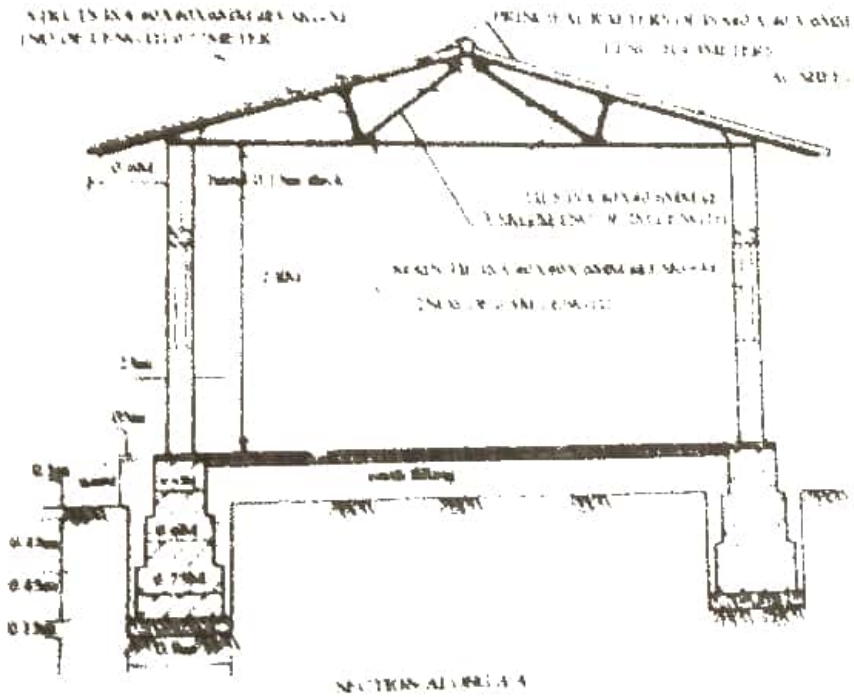
5. Prepare cost estimation of repair and renovation work for the following items of work of a residential building whose plan and other details are given in Fig. No. 2 of the accompanying sketch. $2 \times 10 = 20$

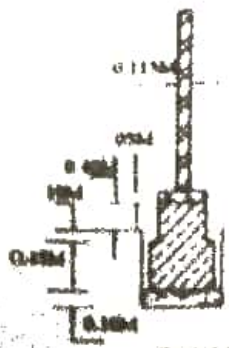
(a) Dismantling of existing Red oxide flooring and providing newly mosaic flooring. 10

(b) Scraping and removing of old paint for interior wall surfaces and providing plastic emulsion paint two coats over a coat of primer. 10

(c) Chipping and removing of external old plaster for walls and providing newly cement sand plaster of 1 : 6 proportion. 10







SECTIONAL DETAILS OF 0.11 M THICK WALL AND DWARF WALL

Figure – 1