

THIAGARAJAR POLYTECHNIC COLLEGE, SALEM

(Autonomous)

Reg. No.

October/November 2018 Examinations

DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Theory of Architecture

Year/Sem: II / III (ODD-II)

Max. Marks : 75

Time : 3 hr.

PART-A**(5 x 2 = 10 Marks)****Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.****(ii) All questions carry equal marks.**

- 1 What is architectural design?
- 2 Write any two design characteristics of point.
- 3 Mention any two forms that are derived from sphere.
- 4 Mention any two horizontal elements that define space.
- 5 Write any two building examples where symmetry is used as an ordering principle.
- 6 Define adjacent space.
- 7 What is organic architecture?
- 8 Write the types of articulation of form.

PART-B**(5 x 3 = 15 Marks)****Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.****(ii) All questions carry equal marks.**

- 9 Briefly explain the difference between architecture and civil engineering.
- 10 Differentiate subtractive and additive forms.
- 11 Briefly explain the concept of unity of opposites.
- 12 Define punctuating effect with sketch.
- 13 What are the specific qualities of design?
- 14 Write any three characters of the centralized type of spatial organization.
- 15 Write the themes and philosophies of F.L. Wright.
- 16 Define surface articulation with building example.

PART-C**(5 x 10 = 50 Marks)****Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.****(ii) All divisions carry equal marks.**

- 17 A Explain any two elements of architecture with suitable building examples for each. 10
(OR)
B Briefly explain the integration of aesthetics and function with building examples. 10
- 18 A Explain linear, radial, cluster and grid form with suitable building example. 10
(OR)
B Explain the visual and emotional effects of pyramid with its derivatives with suitable building examples. 10
- 19 A Explain the following with suitable building sketches. 10
(i) Dramatic effect
(ii) Texture
(iii) Climax
(OR)
B Explain the following with building sketches. 10
(i) Symmetry (ii) Hierarchy (iii) Axis
- 20 A Explain with suitable examples 5
(i) The space within a space 5
(ii) Space linked by a common space
(OR)
B Explain in detail the ideologies of Le-corbusier with suitable examples. 10
- 21 A Explain the two types of articulation forms with building examples for each. 10
(OR)
B Explain the works of Louis Khan with neat sketches. 10

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DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

History of Architecture-I

Year/Sem: II / III (Odd-II)

Max. Marks : 75

Time : 3 hr.

PART-A**(5 x 2 = 10 Marks)****Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.****(ii) All questions carry equal marks.**

- 1 Name the chambers in Pyramid of Cheops.
- 2 What is Ziggurat? Explain with a sketch.
- 3 Name the types of masonry used by the Greek.
- 4 Name the types of building constructed by Romans.
- 5 Name the types of truss provided for Nave in Early Christian Architecture
- 6 Name the institutions that are responsible for Church construction in Early Christian Architecture
- 7 How twin windows were treated in Romanesque Architecture?
- 8 Write any two Architects name of St.Peter's at Rome

PART-B**(5 x 3 = 15 Marks)****Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.****(ii) All questions carry equal marks.**

- 9 What are Sphinxes? Sketch it neatly.
- 10 Write any three architectural character of West Asiatic architecture
- 11 What is Creps or Crepidoma? Explain with a sketch.
- 12 Sketch Ionic order.
- 13 Draw the plan of St.Vitale.
- 14 Mention the different periods of construction of St. Sophia.
- 15 Write any three architectural character of Romanesque architecture in Italy.
- 16 Draw the plan of White hall palace.

PART-C**(5 x 10 = 50 Marks)****Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.****(ii) All divisions carry equal marks.**

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|----|---|---|----|
| 17 | A | Write the architectural character of Egyptian Architecture. | 10 |
| | | (OR) | |
| | B | Sketch and explain the Palace at Persepolis. | 10 |
| 18 | A | Write the architectural character of Greek Architecture. | 10 |
| | | (OR) | |
| | B | Sketch and explain Temple of Pantheon at Rome. | 10 |
| 19 | A | Write down the architectural character of Early Christian architecture. | 10 |
| | | (OR) | |
| | B | Sketch and explain St.Vitale, Ravenna. | 10 |
| 20 | A | Write down the architectural character of Romanesque architecture in Italy, France and England. | 10 |
| | | (OR) | |
| | B | Sketch and explain Notre Dame, Paris. | 10 |
| 21 | A | Write down the architectural character of Renaissance architecture. | 10 |
| | | (OR) | |
| | B | Sketch and explain St.Peter's, Rome. | 10 |

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October/November 2018 Examinations
DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP
BUILDING MATERIALS

Year/Sem: II / III (ODD-II)

Max. Marks : 75

Time : 3 hr.

PART-A**(5 x 2 = 10 Marks)****Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.****(ii) All questions carry equal marks.**

- 1 Mention any four natural stones used for flooring.
- 2 What is Mortar? Write its types.
- 3 What is meant by seasoning of wood?
- 4 Define the term varnish.
- 5 What is meant by Anti-Skid?
- 6 Expand FRP and UPVC.
- 7 Write any two types of water proofing materials.
- 8 How does water cement ratio affect the strength of concrete?

PART-B**(5 x 3 = 15 Marks)****Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.****(ii) All questions carry equal marks.**

- 9 Write short notes on various types of clay tiles.
- 10 Write any three characteristics of good bricks.
- 11 What are the points to be considered for storage of cement?
- 12 Write short notes on any three timber products.
- 13 Define (i) Curtain wall (ii) Structural glazing (iii) GFRG panels
- 14 Define (i) Ready mix paint (ii) Distemper (iii) Epoxy Resin.
- 15 Write short notes on Geo-synthetic materials.
- 16 Write short notes on Types of cement.

PART-C**(5 x 10 = 50 Marks)****Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.****(ii) All divisions carry equal marks.**

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|----|--|----|
| 17 | A (i) Write any five characteristics of good stone. | 5 |
| | (ii) What are the uses of clay tiles? | 5 |
| | (OR) | |
| | B Explain briefly the step by step process of manufacturing of bricks by kiln. | 10 |
| 18 | A (i) What are the ingredients of cement and their functions? | 5 |
| | (ii) What are the characteristics of Mortar? | 5 |
| | (OR) | |
| | B Explain in detail about different types of concrete. | 10 |
| 19 | A Explain the defects in timber with neat sketch. | 10 |
| | (OR) | |
| | B Explain the types of glasses and their uses. | 10 |
| 20 | A What are the defects in painting? Explain them. | 10 |
| | (OR) | |
| | B (i) Explain briefly the finishes for granite and mosaic. | 5 |
| | (ii) Explain briefly the Anti-termite treatment. | 5 |
| 21 | A Write short notes on (i) Thermal Insulating materials | 5 |
| | (ii) Types of metals used in buildings. | 5 |
| | (OR) | |
| | B Write short notes on (i) Nano materials | 5 |
| | (ii) Functions of water proofing materials | 5 |