

C-5714

Sub. Code

97911

DIPLOMA EXAMINATION, APRIL 2025

First Semester

Interior Design

PRINCIPLES AND ELEMENTS OF INTERIOR DESIGN

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. — the term used to describe the repetitive and organized patterns in design or composition that create a sense of movement and continuity.
(a) Harmony (b) Unity
(c) Variety (d) Rhythm
2. Anthropometry is the study of _____.
(a) The proportions of the human body
(b) The measurement of geological formation
(c) The chemical composition of rocks
(d) The movement of celestial bodies
3. — the ratio of the length to the width of a rectangle that has dimensions of 10 inches by 5 inches.
(a) 2:1 (b) 3:2
(c) 1:2 (d) 5:10

4. _____ effect is achieved by tilting the vertical axis of wall planes, creating a sense of movement and fluidity in architectural design.
- (a) Stability (b) Symmetry
(c) Asymmetry (d) Harmony
5. The articulation of doors, windows, and ventilators involves _____.
- (a) Sealing them completely for weather proofing
(b) Adding decorative trim around them
(c) Incorporating them seamlessly into the wall planes
(d) Orienting them randomly for aesthetic effect
6. _____ type of window is designed to maximize natural light and ventilation while minimizing rain penetration.
- (a) Awning window (b) Fixed window
(c) Casement window (d) Skylight window
7. _____ material is commonly used for false ceilings due to its lightweight nature and ease of installation.
- (a) Marble (b) Steel
(c) Gypsum (d) Concrete
8. _____ type of lighting fixture is typically recessed into the ceiling and provides ambient illumination throughout a room.
- (a) Chandelier (b) Recessed light
(c) Pendant light (d) Wall sconce
9. _____ flooring material is known for its durability and natural beauty, often high-traffic areas.
- (a) Stone (b) Tile
(c) Mosaic (d) Vinyl

10. Floor coverings such as rugs and carpets are often used to _____.
- (a) Expose the underlying flooring material for visual appeal
 - (b) Enhance slip resistance
 - (c) Increase maintenance costs
 - (d) Provide insulation

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the role of balance in design, and occult balance.

Or

- (b) Outline the relationship between scale and proportion in design.

12. (a) Describe the role of cornices and mouldings in architectural designing.

Or

- (b) Outline the innovative materials that are being used in contemporary architectural projects.

13. (a) Describe the role of false ceilings in architectural design.

Or

- (b) Outline the importance of articulating roof apertures.

14. (a) Discuss about the construction details involved in installing flooring materials.

Or

- (b) Outline the importance of selecting appropriate flooring materials.

15. (a) Outline the effect of tilting the vertical axis of wall planes on architectural design.

Or

- (b) Describe the concept of emphasis in design and its importance.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain how the principle of rhythm contributes to the coherence and flow in design compositions.

Or

- (b) Describe the principles of ergonomics and their relevance in design for human-centered products and environments.

17. (a) Compare and contrast different types of doors, and ventilators commonly used in architectural design.

Or

- (b) Explain the design considerations associated with niches and alcoves in architectural design.

18. (a) Explain the importance of articulating skylights and roof apertures in architectural design.

Or

- (b) Analyze the relationship between lighting design and energy efficiency in architectural applications.

19. (a) Describe the characteristics and visual effects of graphic patterns commonly used in flooring design.

Or

- (b) Compare and contrast different types of floor coverings in terms of their aesthetic qualities.

20. (a) Elaborate on various types of lighting commonly used in architectural design.

Or

- (b) Explain the concept of emphasis in design and its importance in directing the -viewer's attention.

C-5715

Sub. Code

97912

DIPLOMA EXAMINATION, APRIL 2025

First Semester

Interior Design

INTERIOR MATERIALS AND FINISHES

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** the questions.

1. Jute is primarily used in the production of _____.
 - (a) Heavy-duty sacks and bags
 - (b) Fine clothing and linens
 - (c) Upholstery and curtains
 - (d) Industrial belts and hoses
2. _____ the following being not a common manufacturing method for plastics.
 - (a) Compression molding
 - (b) Rotational molding
 - (c) Electrospinning
 - (d) Forging
3. _____ of flooring is most suitable for providing a smooth surface for wheelchair users.
 - (a) Terrazzo
 - (b) Asphalt tile
 - (c) Cork tiles
 - (d) Rubber flooring

4. Ceramic glazed tiles are popular due to their _____.
(a) Natural stone appearance
(b) Easy maintenance and cleaning
(c) Low cost compared to other tile types
(d) Resistance to impact damage
5. Vaults in ceilings are characterized by their _____.
(a) Arched shape
(b) Flat design
(c) Lack of support beams
(d) Angular construction
6. Metal sheet false ceilings are often preferred for _____.
(a) Soundproofing (b) Thermal insulation
(c) Aesthetic appeal (d) Fire resistance
7. Fiber glass wool is preferred for sound insulation due to _____.
(a) Lightweight nature
(b) High thermal conductivity
(c) Porous structure
(d) High density
8. _____ materials are not commonly used for wall panelling.
(a) Metal sheets (b) Plastic tiles
(c) Ceramic Bricks (d) Bamboo panels
9. Bituminous paints are primarily used for _____.
(a) Waterproofing and corrosion protection
(b) Fireproofing steel structures
(c) Providing decorative finish
(d) Insulating electrical components
10. Plastic emulsions are preferred for interior wall painting due to their _____.
(a) Low cost (b) Breathability
(c) Quick drying time (d) Washability

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Compare the uses of softwood and hardwood.

Or

- (b) Outline the environmental impact of plastic materials in architectural design.

12. (a) Discuss about advantages and uses of resilient flooring materials.

Or

- (b) Explore the historical significance of different types of floor coverings.

13. (a) Discuss the importance of ceiling material such as gypboard and metal sheets.

Or

- (b) Outline the structural techniques involved in creating domes.

14. (a) Discuss the benefits and challenges of using laminated plywood.

Or

- (b) Outline the emerging trends such as bio-based materials and textiles for wall panelling.

15. (a) Discuss the properties, and applications of different types of plastic emulsions.

Or

- (b) Analyze the applications of special purpose fire retardant paints.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the composition, manufacturing techniques, and applications of particle boards in architectural design.

Or

- (b) Compare and contrast the properties and uses of various types of fabrics in architectural applications.

17. (a) Summarize the technological advancements in floor covering materials, installation methods.

Or

- (b) Analyze the properties, uses, and laying details of different types of floor tiles.

18. (a) Discuss in detail about role of false ceilings in architectural design and aesthetic contributions to interior spaces.

Or

- (b) Explore the innovative technologies into the construction of false ceilings and special ceilings.

19. (a) Describe the importance of sound and thermal insulation in wall panelling.

Or

- (b) Explain the principles and techniques of sound insulation in architectural design.

20. (a) Explain the techniques involved in painting on different surfaces such as plaster, and metal.

Or

- (b) Describe common defects that may occur in painted surfaces and discuss their causes and remedies.

C-5716

Sub. Code

97913

DIPLOMA EXAMINATION, APRIL 2025.

First Semester

Interior Design

BUILDING SERVICES AND INTEGRATION

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. The piping system uses separate pipes for supply and return is _____
 - (a) One-pipe system
 - (b) Two-pipe system
 - (c) Three-pipe system
 - (d) Four-pipe system

2. _____ is a component of a domestic hot water system that utilizes solar energy.
 - (a) Geothermal heat pump
 - (b) Electric water heater
 - (c) Solar panel
 - (d) Gas boiler

3. The primary function of an automatic water sprinkler system in fire protection is _____
- (a) To suppress or extinguish fires
 - (b) To alert occupants of a fire
 - (c) To release foam for extinguishing fires
 - (d) To provide ventilation in case of fire
4. The primary purpose of heat-sensitive detectors in fire protection systems is _____
- (a) To detect smoke
 - (b) To activate water sprinklers
 - (c) To detect changes in temperature
 - (d) To extinguish fires
5. _____ formula is commonly used to calculate the reverberation time in a room.
- (a) Ohm's Law
 - (b) Kepler's Law
 - (c) Sabine's Formula
 - (d) Newton's Law of Cooling
6. What is the primary purpose of sound absorption materials in room acoustics?
- (a) To absorb sound energy
 - (b) To reflect sound
 - (c) To amplify sound
 - (d) To generate echoes

7. The purpose of main and distribution boards in electrical wiring systems
- (a) To generate electricity
 - (b) To regulate voltage fluctuations
 - (c) To distribute electrical power to various circuits
 - (d) To store electrical energy
8. The type of electrical supply is commonly used in residential buildings is _____
- (a) Single-phase supply
 - (b) Three-phase supply
 - (c) Biphasic supply
 - (d) Alternating supply
9. The primary purpose of daylighting in architectural design is _____
- (a) To reduce energy consumption
 - (b) To provide natural illumination
 - (c) To enhance aesthetic appeal
 - (d) To control temperature
10. The primary factor considered when selecting luminaires and fixtures for a particular space is _____
- (a) Cost
 - (b) Brand reputation
 - (c) Aesthetic design
 - (d) Lighting requirements and functionality

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the importance of proper ventilation in sewer systems within buildings.

Or

- (b) Outline the factors influencing the size selection of drainpipes in building drainage systems.

12. (a) Design a duct layout for a commercial office building.

Or

- (b) Outline the factors affect for efficient cooling distribution.

13. (a) Summarize how is reverberation time calculated, and what are the factors that affect it.

Or

- (b) Outline the factors influence the choice of absorbing materials for a particular space.

14. (a) Summarize the advantages and disadvantages of single-phase electrical supply systems.

Or

- (b) Outline the factors that influence the choice of wire type in different scenarios.

15. (a) Discuss the various types of artificial lighting sources commonly used in architectural applications.

Or

- (b) Discuss the psychological and physiological effects of color in lighting design.

Part C

(5 × 8 = 40)

Answer **all** questions, choosing either (a) or (b).

16. (a) Explain the working principle of solar water heating systems in domestic settings.

Or

- (b) Evaluate the role of flushing cisterns, manholes, and septic tanks in relation to building sanitation.

17. (a) Discuss the advantages of chilled water systems over direct expansion systems in commercial buildings.

Or

- (b) Discuss the importance of fire safety standards and regulations in ensuring building occupant safety.

18. (a) Discuss in detail about the concepts of reverberation and echo in room acoustics.

Or

- (b) Organize commonly used materials for sound absorption and their suitability for different applications.

19. (a) Discuss the planning considerations for electrical wiring in building interiors.

Or

- (b) Explain the functions and features of Main Distribution Boards (MDB) and Sub Distribution Boards (SDB) in electrical installations.
20. (a) Explain the principles of artificial lighting and its role in complementing daylighting in indoor environments.

Or

- (b) Explain the concept of task lighting and its importance in providing adequate illumination for specific activities or work areas.
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