DIPLOMA EXAMINATION, APRIL 2024

First Semester

Interior Design

PRINCIPLES OF ELEMENTS AND INTERIOR DESIGN

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the questions.

- 1. Which ancient Greek mathematician and philosopher is credited with the first recorded description of the golden section?
 - (a) Euclid (b) Pythagoras
 - (c) Archimedes (d) Aristotle
- 2. What does anthropometry primarily study?
 - (a) Animal behaviour
 - (b) Human body measurements and proportions
 - (c) Geological formations
 - (d) Plant growth patterns
- 3. What is the term for the technique of arranging bricks or stones in a pattern that resembles the scales of a fish?
 - (a) Herringbone (b) Stretcher bond
 - (c) Flemish bond (d) Running bond

- 4. Which of the following materials is commonly used for cladding in modern architectural designs?
 - (a) Straw (b) Marble
 - (c) Bamboo (d) Adobe
- 5. Which type of roof aperture is designed to allow for the natural ventilation of a building while preventing rain from entering?
 - (a) Dormer window (b) Roof hatch
 - (c) Roof vent (d) Roof light
- 6. Which lighting technology uses semiconductors to produce light and is often found in modern LED bulbs?
 - (a) Incandescent lighting
 - (b) Fluorescent lighting
 - (c) Halogen lighting
 - (d) Solid-state lighting (LED)
- 7. Which type of flooring is known for its ability to replicate the look of natural stone, wood, or tile while offering easy maintenance?
 - (a) Laminate flooring
 - (b) Marble flooring
 - (c) Cork flooring
 - (d) Terracotta flooring
- 8. Which type of floor covering is made from natural or synthetic fibers and is known for its soft texture and warmth underfoot?
 - (a) Tile flooring (b) Laminate flooring
 - (c) Carpet flooring (d) Vinyl flooring
 - $\mathbf{2}$

- 9. Which element of design relates to the use of light and shadow in a space to create depth and dimension?
 - (a) Space (b) Line
 - (c) Color (d) Form
- 10. What principle of design encourages the repetition of similar elements, shapes, or colors throughout a space to create unity and cohesiveness?

(a)	Contrast	(b)	Rhythm
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(c) Variety (d) Harmony

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Distinguish between rhythm and emphasis.

Or

- (b) What are proportions? Brief out.
- 12. (a) What are cornices and mouldings? Brief out.

Or

- (b) Write about the types of materials used in doors.
- 13. (a) What is meant by roof apertures? Brief out.

Or

- (b) Write about the visual impact of roof planes.
- 14. (a) List the significance of tile flooring.

Or

(b) What is embossing? Brief out.

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15. (a) What is the role of lighting in interior design?

Or

(b) How do you use patterns in interior design?

Part C $(5 \times 8 = 40)$

Answer **all** questions.

16. (a) What is Anthropometry? Explain.

Or

- (b) Describe the human standard dimensions for ergonomics.
- 17. (a) Highlight the effect of tilting the vertical axis of wall planes.

Or

- (b) Illustrate the use of wall planes to create architecture effects.
- 18. (a) Write a detailed note on various types of lighting.

Or

- (b) Explain the types of false ceiling.
- 19. (a) Write about the aesthetic effects created by flooring materials.

Or

- (b) Illustrate the importance of floor coverings.
- 20. (a) Describe the seven elements of interior design.

Or

(b) Highlight the importance of texture in interior design.

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DIPLOMA DEGREE EXAMINATION, APRIL 2024

First Semester

Interior Design

INTERIOR MATERIALS AND FINISHES

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the questions.

- 1. What is the standard thickness of a plywood sheet typically used for interior wall panelling?
 - (a) 1/4 inch (6.35 mm)
 - (b) 1 inch (25.4 mm)
 - (c) 3/4 inch (19.05 mm)
 - (d) 2 inches (50.8 mm)
- 2. What is the main advantage of injection moulding over other manufacturing processes?
 - (a) Low tooling costs
 - (b) Limited design flexibility
 - (c) Slow production speed
 - (d) High material waste

- 3. What is one advantage of using ceramic tile as a floor covering?
 - (a) It requires frequent refinishing
 - (b) It is not resistant to moisture
 - (c) It offers a wide range of design options
 - (d) It is easily damaged by heavy furniture
- 4. What is the typical shape of mosaic floor tiles that come pre-arranged on a mesh backing for easy installation?
 - (a) Square (b) Hexagonal
 - (c) Rectangular (d) Irregular
- 5. Which material is commonly used to construct the panels or tiles for false ceilings?
 - (a) Concrete (b) Plywood
 - (c) Gypsum (d) Steel
- 6. Which material is commonly used to create a "starry night" effect on a stretch ceiling, simulating a night sky with stars?
 - (a) Fibreboard (b) Stucco
 - (c) Polystyrene (d) Fibre optics
 - $\mathbf{2}$

- 7. What is the advantage of using wooden planks for sound insulation compared to other materials?
 - (a) Lower cost
 - (b) Higher reflectivity of sound
 - (c) Lightweight and easy installation
 - (d) Greater fire resistance
- 8. In addition to thermal insulation, what other property makes cork an attractive choice for sustainable building materials?
 - (a) High cost
 - (b) Low availability
 - (c) Biodegradability and renewability
 - (d) Poor fire resistance
- 9. Which type of paint is suitable for creating detailed artwork on canvas?
 - (a) Spray paint (b) Enamel paint
 - (c) Oil paint (d) Epoxy paint
- 10. Which type of paint is used to mark traffic lanes, parking lots, and roadways?
 - (a) Primer paint
 - (b) Epoxy paint
 - (c) Stain paint
 - (d) Watercolour paint

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Part B (5 × 5 = 25)

Answer all questions.

11. (a) Differentiate between laminated wood and particle boards.

Or

- (b) Write the uses of different types of fabrics.
- 12. (a) Write a brief on cork tiles.

 \mathbf{Or}

- (b) List the properties of cement tiles.
- (a) Distinguish between the construction of false ceiling using metal sheets and wood.

Or

- (b) Outline the importance of construction of false ceiling using glass.
- 14. (a) Outline the various materials used for wall panelling.

Or

(b) How is laminated plywood is used for sound insulation?

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15. (a) What are fire retardant paints? Brief out.

 \mathbf{Or}

(b) Write the properties and uses of luminous paints.

Part C $(5 \times 8 = 40)$

Answer **all** questions.

16. (a) Outline the different types of glass and their properties.

Or

- (b) Discuss about the different manufacturing methods of plastics.
- 17. (a) Describe the properties of marble floor coverings and the process of laying.

Or

- (b) Elaborate on the properties and uses of ceramic glazed tiles.
- 18. (a) Describe process of construction of false ceiling using plaster of paris.

Or

- (b) Explain about construction of domes.
- 19. (a) Discuss about the usage of wooden planks for sound insulation.

Or

(b) What is fibre glass wool? How it is used as wall panel for thermal insulation?

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20. (a) Describe the properties and uses of plastic emulsions.

Or

(b) Write a detailed note on special purpose paints.

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DIPLOMA EXAMINATION, APRIL 2024

First Semester

Interior Design

BUILDING SERVICES AND INTEGRATION

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** the questions.

- 1. Which of the following is a primary source of freshwater for municipal water supply systems?
 - (a) Seawater (b) Groundwater
 - (c) Rainwater (d) Distilled water
- 2. Which mechanism is commonly used in modern flushing cisterns to control the amount of water used in each flush?
 - (a) Push-button dual flush
 - (b) Lever handle
 - (c) Chain pull
 - (d) Foot pedal
- 3. In what type of climate is a heat pump air conditioner most effective for both cooling and heating purposes?
 - (a) Extremely arid (b) Mild and temperate
 - (c) Hot and humid (d) Cold and dry

- 4. What is the recommended method of extinguishing a grease fire in the kitchen?
 - (a) Smothering it with a wet cloth
 - (b) Using a fire extinguisher
 - (c) Pouring water on it
 - (d) Blowing on the flames
- 5. What is the phenomenon where certain frequencies of sound are reinforced or cancelled out in a room due to interference patterns?
 - (a) Resonance (b) Absorption
 - (c) Diffraction (d) Standing waves
- 6. Which material is often used for soundproofing doors and windows to block outdoor noise?
 - (a) Rubber (b) Concrete
 - (c) Ceramic (d) Fabric
- 7. Which protective device is used to limit the voltage supplied to sensitive electronic equipment during voltage spikes or surges?
 - (a) Circuit breaker (b) Fuse
 - (c) Voltage stabilizer (d) Surge protector
- 8. In a residential electrical panel, which section typically contains circuit breakers or fuses for individual circuits, such as lighting or appliances?
 - (a) Service entrance (b) Main switch
 - (c) Distribution board (d) Subpanel
- 9. Which type of artificial lighting is often used to highlight artwork, architectural features, or decorative elements in a room?
 - (a) General lighting (b) Task lighting
 - (c) Accent lighting (d) Decorative lighting

 $[\]mathbf{2}$

- 10. In what type of environment is the use of cool white lighting often preferred for its ability to promote alertness and productivity?
 - (a) Bedrooms (b) Office spaces
 - (c) Restaurants (d) Art galleries

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) What is caulking compounds? Brief out.

Or

- (b) Outline the importance of ventilation of sewers.
- 12. (a) Write a brief note on fan coiled systems of air conditioners.

Or

- (b) List the concepts in fire protection.
- 13. (a) What is reverberation? Explain about reverberation time.

Or

- (b) Write about the absorbing materials used in reverberation.
- 14. (a) What is single phase supply? Highlight its importance.

Or

- (b) Write a brief note on ISI specifications.
- 15. (a) Write short note on day lighting.

Or

(b) Write about the effect of colour in lighting.

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Part C $(5 \times 8 = 40)$

Answer **all** questions.

16. (a) Elaborate on the piping system of domestic buildings.

Or

- (b) Describe about the size of drain pipes and materials.
- 17. (a) Outline the air conditioning system for different types of buildings.

Or

- (b) Write a detailed note on automatic water sprinkler system.
- 18. (a) Define Sabine's formula. Explain.

Or

- (b) Write a detailed note on sound insulation materials.
- 19. (a) Explain about the electrical wiring for building interiors.

Or

- (b) Describe about main and distribution boards.
- 20. (a) Elaborate on artificial lighting.

Or

(b) Write a detailed note on luminaries and fixtures.

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