17612

BRAINWARE UNIVERSITY

LIBRARY
Brainware University
Barasat, Kolkata -700125

Term End Examination 2025-2026
Programme – Dip.CE-2024
Course Name – Building Materials and Construction
Course Code - DCE30101
(Semester III)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Identify the component that supports the superstructure load.

a) Slab b) Beam
c) Foundation d) Parapet

(ii) Identify the function of a lintel.

a) Lighting b) Ventilation
c) Support wall over openings d) Water supply

(iii) Identify a load-bearing structure.

a) RCC Frame b) Steel Frame
c) Brick walls d) Glass curtain wall

(iv) Select the type of footing with columns close together.

a) Isolated b) Combined
c) Pile d) Step

(v) Select the depth at which pile foundations are generally placed.

a) Ground level b) Surface
c) Deep below surface d) Roof level

(vi) Select the function of a sill in a window.

a) Beautification b) Provide base support
c) Cover wall d) Drain water

(vii) Select the right differention between English and Flemish bond.

a) Flemish is stronger b) English alternates header and stretcher in different courses
c) Flemish has irregular bond d) English uses only stretchers

(viii) Select the purpose of chajja.

a) Roof support b) Rainwater protection

c) Beam extension
d) Decoration

(ix) Choose the right door type for shops.

a) Rolling shutter
b) Panelled door
c) Flush door
d) PVC door

LIBRARY
Brainware University
Barasat, Kolkata -700125

(x) Choose scaffold for 2-storey residential construction.

a) Cantilever
b) Single
c) Suspended
d) Trestle

(xi) Select the function of waterproofing in terraces.

a) Collect water
b) Prevent seepage
c) Create slope
d) Reduce wind effect

(xii) Select terrazzo flooring and concrete floor.

a) Both same
b) Terrazzo is for aesthetics
c) Concrete is better looking
d) Terrazzo has fewer ingredients

(xiii) Choose Recommend painting method for exterior wall.

a) Oil paint
b) Whitewash
c) Acrylic emulsion with roller
d) Metal paint

(xiv) Choose surface treatment before POP application.

a) Paint
b) Curing
c) Smooth plaster
d) Remove dust and prime

(xv) Choose correct painting sequence.

a) Finish > Primer > Paint
b) Primer > Finish > Paint
c) Primer > Paint > Finish
d) Cleaning > Primer > Paint

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Describe the functions of skirting and dado in wall finishes. (3)
3. Write the application steps for POP (Plaster of Paris) finishing. (3)

4. State the essential properties of good bricks. (3)
5. List the common tools used in brick masonry. (3)
6. Compare the effectiveness of Neeru finish vs POP finish. (3)

OR

Evaluate the defects caused by improper plastering. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Describe the functions of different components of a building. (5)
8. Compare and contrast natural timber with timber-based materials. (5)
9. Assess the advantages and limitations of brick masonry over stone masonry. (5)
10. Explain the differentiation between whitewash and colour wash. (5)

11. Evaluate the effectiveness of stucco plaster in exterior applications. (5)
12. Analyze the significance of bonding agents and resins in modern construction. (5)

OR

Explain how defects in mortar can compromise masonry performance. (5)

****

LIBRARY
Brainware University
Barasat, Kolkata -700125