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Following Paper ID and Roll No. to be filled in your Answer Book.

PAPER ID : 10133 Roll No.

B. Arch. Examination 2021-22

(Even Semester)

BUILDING CONSTRUCTION & MATERIALS - VI

Time : Three Hours] *[Maximum Marks : 60*

Note :– (i) Read instructions carefully, attmept accordingly.

(ii) All sections are compulsory.

(iii) Be precise in your answers.

(iv) Use appropriate scales.

(v) Properly label the drawing.

SECTION–A

1. Attempt all parts of the following : $8 \times 1 = 8$

(a) Chemial formula of Gypsum is ..... .

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(b) Name any two asbestos cement products available for application in building industry.

(c) Hinges provided in fully glazed aluminium door .....

(d) What are floor and ceiling channels in dry wall construction?

(e) What are furring section?

(f) ..... are added to cement during manufacturing to get new properties for cement.

(g) What is centering?

(h) Write short note on isolated foundation.

SECTION – B

2. Attempt any three parts of the following : 4×3=12

(a) Write short notes on any two duly supported by neat sketches :

(i) Centering

(ii) Shuttering

(iii) Scaffolding

(b) Differentiate between grillage and raft foundation.

(c) Write down properties of gypsum plaster and gypsum board.

(d) Draw folded plate R. C. C. staircase with the help of sketches.

SECTION – C

3. Attempt any two parts of the following : $20 \times 2 = 40$

(a) Design a gypsum false ceiling for a conference hall measuring 6000 × 9000 mm in plan showing all relevant details and provisions required for a good acoustically sound conference hall.

Draw the following :

(i) Reflected ceiling plan (scale 1:50)

(ii) Any typical cross section (scale 1:50)

(iii) Any one important detail (scale 1:10)

(b) A shop having frontage 3.5 meter and height 3.0 meter. Design its entrance door cum window in aluminium and glass. Provide details with plan, elevation, section and any two construction details.

(c) A five storeyed RCC framed building has to be constructed on an old tank bed with loose soil over 12 mt. deep and water logged up to 1.2 mt from ground level. What type of foundation would you adopt? Explain in detail the process of costructing out such a foundation on suitable scale.

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