

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – NOVEMBER - 2022**

BUILDING CONSTRUCTION & CONSTRUCTION MATERIALS

(Maximum Marks : 75)

[Time : 3 hours]

PART–A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark.

(9x1=9 marks)

		Module Outcome	Cognitive level
1	Name the type of trees from which the best form of timber is obtained.	M 1.03	R
2	List the classification of burnt clay bricks.	M 1.04	R
3	How is Bagasse used in construction industry?	M 2.03	U
4	List any two non-ferrous metals used in civil engineering field.	M2.04	R
5	Write down the condition when combined footings are preferred over isolated column footing.	M3.04	A
6	List the purpose of providing plinth in a building.	M3.02	U
7	Name the code of practice for ductile design and detailing of reinforced concrete structures subjected to seismic forces.	M3.03	R
8	Define bond in brick masonry.	M4.01	R
9	List any two vertical communication methods in buildings.	M4.03	R

PART - B

II. Answer any Eight questions from the following. Each question carries 3 marks.

(8x3=24marks)

		Module Outcome	Cognitive level
1	Enumerate the different field tests on bricks.	M 1.04	U
2	List down the classification of rocks.	M 1.02	R
3	List any six defects in timber caused due to natural forces.	M1.03	U
4	Discuss any three water proofing materials used in buildings.	M2.03	A
5	Write notes on any two ferrous metals used in construction industry.	M2.03	U
6	Describe the procedure for layout of load bearing structure by center line method.	M3.03	U
7	Enumerate the functions of foundation.	M3.04	U
8	Write down the classification of buildings as per NBC.	M3.01	R
9	List the precautions to be observed in brick masonry.	M4.01	A
10	Explain underpinning.	M4.02	U

PART - C

Answer **all** questions from the following. Each question carries 7 marks.

(6x7=42marks)

		Module Outcome	Cognitive level
III	Explain the process of manufacturing of burnt clay bricks.	M1.04	U
	OR		
IV	Compare and contrast first class and second class burnt clay bricks.	M1.04	A
V	Sketch any three rolled structural steel sections commonly used in buildings.	M2.04	U
	OR		
VI	Write short notes on a) distempers b) varnishes.	M2.03	U
VII	Explain the main constituents of an oil paint.	M2.03	U
	OR		
VIII	List the industrial and agricultural waste products used in construction industry and explain any 2 of them in detail.	M2.03	A
IX	Discuss any 4 types of shallow foundations with neat sketches.	M3.04	U
	OR		
X	Discuss the different types of deep foundations.	M3.04	U
XI	Explain the terms: a) Baluster b) Balustrade c) Newel post d) Nosing e) Going.	M4.03	R
	OR		
XII	Discuss the different types of staircases and draw neat sketches of any two.	M4.03	U
XIII	Draw plans of two consecutive courses of one and half brick wall corner in Flemish bond.	M4.01	R
	OR		
XIV	Discuss different roofing materials suitable under different site conditions.	M4.04	A
