| TED (21) 3013   |
|-----------------|
| (Revision-2021) |

### 2110220096A

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## DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER - 2025

## **BUILDING CONSTRUCTION AND 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 $(9 \times 1 = 9 \text{ Marks})$

|   |   | Module outcome | Cognitive<br>level |
|---|---|----------------|--------------------|
| 1 | Give any two examples for recycled materials.                         | M1.02          | R                  |
| 2 | List the constituents of brick earth.                                 | M1.04          | R                  |
| 3 | Enumerate any four wooden products.                                   | M2.02          | R                  |
| 4 | Differentiate ferrous and non ferrous metals.                         | M2.03          | U                  |
| 5 | List any four Special processed construction materials.               | M2.03          | R                  |
| 6 | Define cavity wall.   | M3.02          | R                  |
| 7 | As per KPBR, Educational buildings falls under which occupancy group. | M3.01          | R                  |
| 8 | List the types of door.   | M4.02          | R                  |
| 9 | Define bonding in brick masonry.                                      | M4.01          | R                  |

#### **PART B**

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

 $(8 \times 3 = 24 \text{ Marks})$ 

|         |   | Module  | Cognitive |
|---------|---|---------|-----------|
|         |   | outcome | level     |
| 1       | Enumerate any three characteristics of good bricks.                 | M1.04   | R         |
| _       | Ziminorum unij unioo enuruomismos er geed errons.                   | 1,1110  |           |
| 2       | Discuss the uses of bamboo in construction.                         | M1.03   | U         |
|         |   |         | _         |
| 3       | Explain any two Industrial waste materials used in construction.    | M2.03   | U         |
|         | 1 7   |         |           |
| 4       | Describe any two advantages and uses of pavement blocks.            | M2.01   | U         |
|         |   |         |           |
| 5       | List the properties of sound insulating materials. Give examples.   | M2.03   | R         |
|         |   |         |           |
| 6       | Draw the cross section of wall of a building showing all            | M3.02   | Α         |
|         | components.   |         |           |
|         | 1   |         |           |
| 7       | List the types of shallow foundations.                              | M3.04   | R         |
|         |   |         |           |
| 8       | List down the precautions to be made in brick masonry               | M4.01   | R         |
|         | construction.   |         |           |
|         |   |         |           |
| 9       | Differentiate Rubble masonry and Ashlar masonry.                    | M4.01   | U         |
| <u></u> |   |         |           |
| 10      | Sketch the plans of two consecutive courses of a 1 brick thick wall | M4.01   | Α         |
|         | corner in English bond.   |         |           |
|         | Corner in English bolid.  |         |           |

 ${\bf PART\ C}$  Answer all questions from the following. Each question carries 7  $\,$  marks

 $(6 \times 7 = 42 \text{ Marks})$ 

|       |   | Module<br>outcome | Cognitive level |  |  |  |
|-------|---|-------------------|-----------------|--|--|--|
| III.  | Explain the different methods of seasoning for the preservation of    | M1.03             | U               |  |  |  |
|       | timber.   |                   |                 |  |  |  |
|       | OR  |                   |                 |  |  |  |
| IV.   | Discuss on types of lime and its uses.                                | M1.02             | U               |  |  |  |
| V.    | Briefly explain any four wooden products.                             | M2.02             | U               |  |  |  |
|       | OR  |                   |                 |  |  |  |
| VI.   | Discuss on any three Agro waste materials used for construction.      | M2.03             | U               |  |  |  |
| VII.  | Describe briefly any three types of flooring materials.               | M2.01             | U               |  |  |  |
|       | OR  |                   |                 |  |  |  |
| VIII. | List the types of thermal insulating materials and its suitability in | M2.03             | R               |  |  |  |
|       | construction works.   |                   |                 |  |  |  |
| IX.   | Explain the suitability of pile foundations and give classifications  | M3.04             | U               |  |  |  |
|       | of pile foundation.   |                   |                 |  |  |  |
|       | OR  |                   |                 |  |  |  |
| X.    | Discuss on classification of buildings as per KMBR.                   | M3.01             | U               |  |  |  |
| XI.   | Explain any three types of scaffoldings with the help of sketches.    | M4.02             | U               |  |  |  |
| OR    |   |                   |                 |  |  |  |
| XII.  | Draw King Post truss and Queen Post Truss and mark the parts.         | M4.04             | A               |  |  |  |
| XIII. | Draw plans of two consecutive courses of 1 ½ brick wall corner        | M4.01             | A               |  |  |  |
|       | in Flemish bond.  |                   |                 |  |  |  |
|       | OR  |                   |                 |  |  |  |
| XIV.  | Suggest any three suitable roofing materials to suit site conditions. | M4.04             | A               |  |  |  |

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