

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER- III EXAMINATION – SUMMER 2020**

**Subject Code: 3130607**

**Date: 28/10/2020**

**Subject Name: Building Construction Technology**

**Time: 02:30 PM TO 05:00 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1**
- |  |           |
|--|-----------|
| (a) Give names of various methods of demolition of structures. | <b>03</b> |
| (b) Explain friction pile with neat sketch.                    | <b>04</b> |
| (c) Differentiate between stone masonry and brick masonry.     | <b>07</b> |

- Q.2**
- |   |           |
|---|-----------|
| (a) Explain combined footing with neat sketch.  | <b>03</b> |
| (b) Discuss about pile cap and pile shoes.  | <b>04</b> |
| (c) Enumerate various methods of soil exploration and discuss any one with neat sketches. | <b>07</b> |

**OR**

- |  |           |
|--|-----------|
| (c) Write brief note on seismic refraction method and electrical resistivity method. | <b>07</b> |
|--|-----------|
- Q.3**
- |  |           |
|--|-----------|
| (a) Explain English bond with its use.                           | <b>03</b> |
| (b) Which are the remedial measures to prevent caisson diseases? | <b>04</b> |
| (c) Differentiate between stone masonry and brick masonry.       | <b>07</b> |

**OR**

- Q.3**
- |   |           |
|---|-----------|
| (a) Define Intrados, Rise and Springer in connection with arch.                     | <b>03</b> |
| (b) Draw neat sketch of RCC lintel with chhaja.                                     | <b>04</b> |
| (c) Enumerate various types of cement and discuss about sulphate resistance cement. | <b>07</b> |

- Q.4**
- |  |           |
|--|-----------|
| (a) Draw form work for RCC footing with nomenclature.    | <b>03</b> |
| (b) Define the terms: Nosing, Newel post, Winder, Soffit | <b>04</b> |
| (c) Write short notes on Glazed door and Flush door.     | <b>07</b> |

**OR**

- Q.4**
- |  |           |
|--|-----------|
| (a) Enlist various roofing material.   | <b>03</b> |
| (b) Discuss clear storey window with neat sketch.  | <b>04</b> |
| (c) Explain dog legged stair, Open well stair and bifurcated stair with its suitability. | <b>07</b> |

- Q.5**
- |  |           |
|--|-----------|
| (a) What is cofferdam? What is its use?                            | <b>03</b> |
| (b) Write brief note on double scaffolding.                        | <b>04</b> |
| (c) Discuss various causes of fire and its precautionary measures. | <b>07</b> |

**OR**

- Q.5**
- |  |           |
|--|-----------|
| (a) Explain rating system of green building used in India and Globally.    | <b>03</b> |
| (b) Which factors are considered for deciding the method of demolition?    | <b>04</b> |
| (c) Discuss and explain with proper figure single and double flying shore. | <b>07</b> |

\*\*\*\*\*