

TED (10)–3023

(REVISION—2010)

Reg. No.

Signature

THIRD SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—OCTOBER, 2014

CONSTRUCTION MATERIALS AND ENGINEERING

(Common to CE, AR, QS, EN and WR)

[Time : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

I Answer all questions in one or two sentences. Each question carries 2 marks.

1. How metamorphic rocks are formed ?
2. List the essential components of paint.
3. Define the term English bond.
4. Distinguish baluster and balustrade.
5. List the classification of lift.

(5×2=10)

PART—B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. What are the constituents of good portland cement ? Explain briefly.
2. What are the factors affecting the workability of concrete ?
3. List the physical properties of wrought iron.
4. What are the general principles which should be adhered to for a good brick masonry ?
5. Compare the prefabricated and monolithic construction methods.
6. Explain different types of prestressing.
7. How arches are classified ? Explain briefly.

(5×6=30)

PART—C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT—I

- III (a) How rocks are classified ? Explain briefly any one. 8
- (b) What are the characteristics of good sand ? Define bulking of sand. 7

OR

- | | Marks |
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| IV (a) What are the factors affecting workability of concrete ? Explain briefly. | 8 |
| (b) Draw the cross section of exogenous tree and mark all parts. | 7 |

UNIT—II

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| V (a) How paint is applied in a old wood surface ? | 8 |
| (b) What is asbestos ? What are the properties of asbestos ? | 7 |

OR

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| VI (a) What is glass ? What are the properties of glass ? | 8 |
| (b) Explain different types of wood products. | 7 |

UNIT—III

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| VII (a) What is hollow block masonry ? Explain method of laying hollow block masonry. | 8 |
| (b) Explain different types of pointing. | 7 |

OR

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| VIII (a) Explain the classification based on method of tensioning . | 8 |
| (b) Explain brick nogged partition wall with neat sketch. | 7 |

UNIT—IV

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| IX (a) What are the purpose of foundation ? Explain well foundation. | 8 |
| (b) Write a short note on dog legged stair with a figure. | 7 |

OR

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| X (a) Write the construction procedure of RCC roof. | 8 |
| (b) What are the different types of ceiling ? Explain any two. | 7 |