Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **14CE2028** | **Duration :** | **3hrs** |
| **Sub. Name :** | **CONSTRUCTION MANAGEMENT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | List the objectives and principles of Construction Planning? | CO2 | 6 |
| b. | Paraphrase Feasibility Report of a project. Explain in detail. | CO2 | 6 |
| c. | Explain the different types of contract. | CO3 | 8 |
| (OR) | | | | |
| 2. | a. | Bring out the different stages in Construction Project. | CO2 | 6 |
| b. | List the possible contractual problems. Discuss in detail. | CO2 | 8 |
| c. | Explain the meaning of specifications. Bring out its importance in Construction Management. | CO1 | 6 |
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| 3. | a. | Write note on tender and tender notices. | CO3 | 6 |
| b. | Enumerate the different activities for which expenses are to be incurred while estimating the capital cost for a construction project. | CO3 | 9 |
| c. | List out the classification of scheduling. | CO2 | 5 |
| (OR) | | | | |
| 4. | a. | Discuss on the procedures followed after the opening of a tender. | CO3 | 6 |
| b. | Explain the different types of estimates which are to be prepared for assessing the construction cost of the project. | CO3 | 8 |
| c. | Explain work breakdown structure. Prepare the work breakdown structure for the launching of a communication satellite. Assume activities suitably. | CO3 | 6 |
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| 5. | a. | Define: dummy activity. How and where should a dummy be used? | CO3 | 4 |
| b. | Prepare a critical path method network from the list of operations and time for each operation.    Prepare a table giving:   1. EST, EFT, LST and LFT of all operations; 2. Floats of all operations; 3. Mark on the diagram the critical path; and 4. Mark the minimum time required for completion of the project. | CO3 | 16 |
| (OR) | | | | |
| 6. | a. | Explain briefly the different types of activity times. | CO3 | 4 |
|  | b. | A management student identifies the following list of activities and sequencing requirement along with time estimates for various activities related to completion of his project work.     1. Draw the network; 2. Determine the minimum time required to complete the project; 3. Identify the critical path and duration of the project; and 4. Identify project activities that can be delayed without affecting project duration. | CO3 | 16 |
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| 7. | a. | Bring out the importance of material management. | CO1 | 4 |
| b. | Explain the main considerations necessary in storing and stacking Civil Engineering Materials. | CO1 | 8 |
| c. | Discuss the procedure to be followed in maintaining imprest account? Bring out essential difference between imprest account and temporary advance account. | CO1 | 4 |
| d. | Explain Maintenance of Works Register. | CO1 | 4 |
| (OR) | | | | |
| 8. | a. | List the duties and responsibilities of the following Officers in Public Works Department (any two):   1. Executive Engineer 2. Assistant Executive Engineer; and 3. Junior Engineer | CO1 | 8 |
| b. | Discuss the important aspects to be considered in material procurement. | CO1 | 6 |
| c. | A company is engaged in producing a spare part which is sold at an uniform price of Rs. 100/- each. The variable cost of producing the spare parts amounts to Rs. 60/- per unit while the fixed costs amounts to Rs. 2.5 lakhs.  How many spare parts must be produced and sold that the company breaks even? How much sales could be made at this level of activity, if the firm desires a profit of Rs. 1.5 lakhs? | CO1 | 6 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss on Artificial Intelligence and reasoning system. | CO1 | 4 |
| b. | List the requirements of Management Information Systems. | CO1 | 4 |
| c. | Write brief notes on the following:   1. Environmental Impact Statement; 2. Environmental Management Plan; and 3. Environmental Impact Assessment. | CO1 | 12 |