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**University Examinations 2015/2016**

THIRD YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

**ECV 2306: PROJECT MANAGEMENT II**

 **DATE: NOVEMBER 2015 TIME: 11/2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Define the following terms:
2. Project.
3. Work breakdown structure.
4. Project management
5. Critical path.
6. Resource leveling. (5 Marks)
7. Explain causes of delays in project management. (5 Marks)
8. Explain the three mechanisms of project control. (3 Marks)
9. Identify the objectives and functions of construction management. (5 Marks)
10. Explain the differences between a CPM and PeRT methods. (6 Marks)
11. Describe the advantages of scheduling. (4 Marks)
12. Explain any two uses of a Ganit chart in management construction projects. (2 Marks)



**QUESTION TWO (15 MARKS)**

Given the following information:

|  |  |  |
| --- | --- | --- |
| Activity | Preceding activities | Duration |
| A | - | 7 |
| B | - | 6 |
| C | A,B | 13 |
| D | A,B | 6 |
| E | B | 12 |
| F | D,E | 7 |
| G | C,F | 10 |
| H | D,E | 5 |
| I | G,H | 6 |

1. Draw the A.O.A diagram to determine the critical path and project duration. (7 Marks)
2. For all the non critical activities, determine the following:
3. Total float.
4. Free float.
5. Independent float
6. Slack. (8 Marks)

**QUESTION THREE (15 MARKS)**

1. Define the following terms:
2. Earliest start time.
3. Latest start time.
4. Earliest finish time.
5. Latest finish time.
6. Dummy. (5 Marks)
7. Explain the following terms as used in PERT method of scheduling:
8. Most likely time.
9. Pessimistic time.
10. Optimistic time (3 Marks)
11. Discuss the limitations of network analysis. (5 Marks)
12. Explain any two major differences between A.O.A and A.O.N networks. (2 Marks)

**QUESTION FOUR (15 MARKS)**

1. Explain the term project control. (1 Mark)
2. Describe any five characteristics of project control mechanism. (5 Marks)
3. Identify the common issues faced in project control. (5 Marks)
4. Identify the core resources for project control. (4 Marks)