

**BENGAL ENGINEERING AND SCIENCE UNIVERSITY, SHIBPUR**  
**B.E. (Civil) 8<sup>th</sup> SEMESTER EXAMINATIONS, MAY 2013**  
**Project Planning and Management (CE 802)**

**Full Marks: 70**

**Time: 3 hrs.**

Use separate answer-script for each half.  
 2 (two) marks are allotted for neatness in each half.

**FIRST HALF**

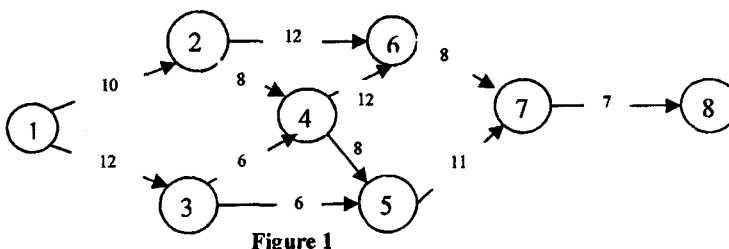
Answer any 3 (three) questions from each half.

1. What is DPR in context of a project work? List the components of a typical DPR of a civil engineering work. Write the objectives of preparing a 'FR'. What are the tasks associated with an 'Appraisal Report' (2+4+2+3=11)
2. Write the utility of 'cost-benefit analysis' in a public project. How would you evaluate cost and benefits arising out of a project? What are the important basic principles useful for running an organization effectively? (3+3+5=11)
3. Classify the organizational structure and briefly highlight on any one. Draw an organizational tree for a large scale construction firm and comment on different stages. Specify the important duties and role of a Project Manager in a construction firm. (4+4+3=11)
4. Briefly highlight on necessity and various types of 'Temporary services' required in a construction site. Write the objective of 'job layout' in a construction site. Briefly discuss about the factors affecting the job layout. (4+3+4=11)
5. List the 'essentials' of contract and comment on them. What are the advantages and disadvantages of 'percentage rate contract'? Define 'arbitration' and mention its necessity in civil engineering work. (3+4+4=11)

**SECOND HALF**

Answer Question No. 9 (nine) and any 3 (three) from the rest.

6. What is a Tender? Define negotiated Tender. Mention advantages and disadvantages of it and the circumstances at which 'Negotiated Tender' is invited. (1+2+5=8)
7. Mention the differences of 'Limited Competition' and 'Open competition' of tendering. Also state the advantages of open competition of tendering. (3+5=8)
8. Mention the different techniques of project management. What is Bar chart and Milestone chart? Describe the shortcomings of Bar charts and its remedial measures. (2+2+4=8)
9. Describe the following terms (Any three). (3 x 3 = 9)
  - a. Pre-Tender conference, b. Comparative statement
  - c. Slack, d. Free float, e. Expected time of an activity
10. Expected time of the activities of a project is shown in the following network (Figure 1). Find out the 'Critical Path' of the project and the 'Free Float' of the activities.



11. Mention the importance of labour welfare in an organization. How this can be achieved? (8)