

**MBA – INFORMATION TECHNOLOGY  
MANAGEMENT (MBAITM)**

**Term-End Examination**

**December, 2014**

00234

**MBMI-013 : INFORMATION TECHNOLOGY PROJECT  
MANAGEMENT**

*Time : 3 hours*

*Maximum Marks : 100*

**Note :**

- (i) *Section I is **compulsory** and carries 30 marks.*
- (ii) *In Section II, answer any **five** questions. Section II carries 70 marks.*
- (iii) *Assume suitable data wherever required.*
- (iv) *Draw suitable sketches wherever required.*
- (v) *Italicized figures to the right indicate maximum marks.*

**SECTION I**

1. Given the following information for a one-year project :

Planned Value (PV) = ₹ 23,000

Earned Value (EV) = ₹ 20,000

Actual Cost (AC) = ₹ 25,000

Budget at Completion = ₹ 1, 20,000

Answer the following questions :

5+5+5+5

- (a) What is the Cost Variance, Schedule Variance, Cost Performance Index (CPI) and Schedule Performance Index (SPI) for the project ?
- (b) How is the project doing ? Is it ahead of schedule or behind schedule ? Is it under budget or over budget ?
- (c) Use the CPI to calculate the Estimate At Completion (EAC) for this project. Is the project performing better or worse than planned ?
- (d) Use the Schedule Performance Index (SPI) to estimate how long it will take to finish this project.

2. What is the role of a Project Manager ? Does it require to follow Project Ethics ? If not followed, what will be the consequence ?

3+2+5

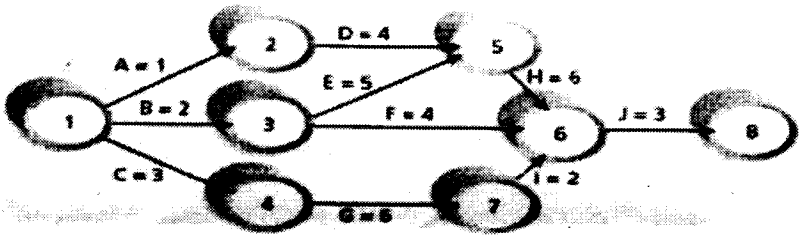
## SECTION II

3. (a) You are working on a project to develop a new job portal system to help people at your college, university, or organization to find jobs. The system must be tailored to your student work population and be very easy to use. Write a one-page paper describing how you would collect requirements for this system and include at least five requirements in a requirements traceability matrix. 8
- (b) What is Earned Value Management (EVM)? Explain how EVM can be used to control costs, measure project performance and speculate as to why it is not used more often. 2+4
4. (a) Briefly describe the project management framework, providing examples of stakeholders, knowledge areas, tools and techniques and project success factors. 7
- (b) You are preparing a cost estimate for a building based on its location, purpose, number of square feet, and other characteristics. What cost estimating techniques are you using? Explain them briefly. 7

5. Cliff was the president of a small Information Technology Company, which is a consulting firm that specializes in developing Internet applications and providing full-service support. The staff consists of programmers, business analysts, database specialists, web designers, project managers, and so on. The firm had 50 full-time people and planned to hire at least ten more in the next year. It also planned to increase the number of part-time consultants they used. The company had done very well for the past few years, but was recently having difficulty winning contracts. Spending time and resources to respond to various requests for proposal from prospective clients is becoming expensive. Many clients were starting to require presentations and even require prototype development before awarding a contract. Cliff had a aggressive approach to risk and liked to bid on the projects with the highest payoff. He did not use a systematic approach to evaluate the risks involved in various projects before bidding on them. He focused on the profit potentials and on how challenging the projects were. His strategy was now causing problems for the company because it was investing heavily in the preparation of proposals, yet winning few contracts. Several employees who were not currently working on projects, were still on the payroll and some of their part-time consultants were actively pursuing other opportunities, since they were being underutilized.

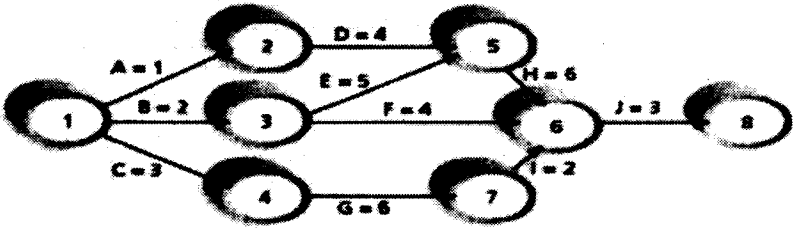
**Questions** : (Write your answers within 500 words)

- (a) What could Cliff and his company do to get a better understanding of project risks ? 5
- (b) Should Cliff adjust his strategy for deciding what projects to pursue ? How ? 2+3
- (c) Write four problems with resource underutilization. 4
6. What is the difference between white-box and black-box testing ? If a project group has only one tester for every 10 programmers, which approach needs to be stressed ? Why ? 6+8
7. What is critical path ? Why is it required ? Find the critical path for the following network diagram : 3+2+9



*Note : Assume all durations are in days; A = 1 means Activity A has a duration of 1 day.*

8. (a) Calculate the free slack and total slack for the following network diagram : 10



*Note : Assume all durations are in days; A = 1 means Activity A has a duration of 1 day.*

- (b) What makes information technology projects different from other types of projects ? 4
9. (a) How does project integration management relate to the project life cycle, stakeholders, and the other project management knowledge areas ? 4
- (b) Briefly explain the following project cost management tools and techniques : 5+5=10
- (i) Net Present Value (NPV)
  - (ii) Return on Investment (ROI)