

Register No.: Name.:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

THIRD SEMESTER MBA DEGREE EXAMINATION (Regular), FEBRUARY 2022

(2020 Scheme)

Course Code : 20MBA289

Course Name: Advanced Project Management

Max. Marks : 60

Duration: 3 Hours

Use of calculator is permitted.

PART A

(Answer all questions. Each question carries 2 marks)

1. List the different types of projects.
2. Name the key people in the project organization and mention their role.
3. In project management terminology, the words 'plan' and 'schedule' can have different meanings. Explain.
4. Recall earned value analysis.
5. What is Rolling Wave Planning?

PART B

(Answer any 3 questions. Each question carries 10 marks)

6. Explain Pre-feasibility studies and Project portfolio.
7. Describe the various types of project organizations and discuss its suitability for different project.
8. A project schedule has the following characteristics.

Activity	Time	Activity	Time
1-2	4	5-6	4
1-3	1	5-7	8
2-4	1	6-8	1
3-4	1	7-8	2
3-5	6	8-10	5
4-9	5	9-10	7

Construct network diagram. Also, find critical path and project duration.

9. As a buyer for a new business venture, your first responsibility is to identify a suitable source of supply. In this context, plan a stage by stage supplier selection process.
10. Explain project financing in India and list any two schemes and/or incentives for new projects in India.

PART C

(Compulsory question, the question carries 20 marks)

- 11 Codeword is a medium-size firm that designs and manufactures electronic systems for
(A) the mass transit industry. It competes with other firms to win contracts to provide such systems. When Codeword receives a contract, it creates a project to complete the work. Most projects range from \$10 million to \$50 million in cost and from one to three years in duration. Codeword can have 6 to 12 projects going on at any one time, in various stages of completion—some just starting and others finishing. Codeword has a handful of project managers who report to the general manager; other people report to their functional manager. For example, the electronics engineers all report to the manager of electrical engineering, who reports to the general manager. The functional manager assigns particular individuals to work on various projects. Some people work full-time on a project, whereas others split their time among two or three projects. Although individuals are assigned to work for a project manager on a specific project, administratively they still report to their functional manager.

Jack Kowalski has been with the company for about 12 years, since graduating from college with a B.S. in electronic engineering. He has worked his way up to senior electronics engineer and reports to the manager of electrical engineering. He has worked on many projects and is well respected within the company. Jack has been asking for an opportunity to be a project manager. When Codeword is awarded a \$15 million contract to design and manufacture an advanced electronics system for a new aircraft, the general manager promotes

Jack to project manager and asks him to run this project. Jack works with the functional managers to get the best people available assigned to the project. Most of the people are buddies who have worked with Jack on previous projects. However, with Jack's position as senior electronics engineer vacant, the manager of electrical engineering has no one with the appropriate level of expertise to assign to Jack's project. So the manager hires a new person, Alfreda Bryson. Lured away from a competitor, she has a Ph.D. in electronic engineering and eight years experience. She was able to command a high salary—more than Jack is making. She is assigned to Jack's project full-time as the senior electronics engineer. Jack takes a special interest in Alfreda's work and asks to meet with her to discuss her design approaches. Yet most of these meetings turn into monologues, with Jack suggesting how Alfreda should do the design and paying little attention to what she says. Finally, Alfreda asks Jack why he is spending so much more time reviewing her work than that of the other engineers on the project. He responds, "I don't have to check theirs. I know how they work. I've worked with them on other projects. You're the new kid on the block, and I want to be sure you understand the way we do things here, which may be different than at your previous employer."

On another occasion, Alfreda shows Jack what she thinks is a creative design approach that will result in a lower-cost system. Jack tells her, "I don't even have a Ph.D. and I can see that that won't work. Don't be so esoteric; just stick to basic sound engineering." During a business trip with Dennis Freeman, another engineer assigned to the project

who has known Jack for six years, Alfreda says that she is frustrated with the way Jack treats her. “Jack is acting more like the electronics engineer for the project than the project manager,” she tells Dennis. “Besides, I have forgotten more about designing electronics than Jack ever knew! He really isn’t up to date on electronic design methodologies.” She also tells Dennis that she’s planning to discuss the matter with the manager of electrical engineering and that she’d never have taken the job with Codeword if she’d known it was going to be like this.

- 1) Do you think Jack is ready to serve as a project manager? Why or why not? How could Jack have prepared for his new role? Marks (5)
- 2) What is the major problem with the way Jack interacts with Alfreda? Marks (5)

- 11 Examine the importance of Goldratt’s Critical Chain Method in Project Planning
(B) (10 Marks)
