

- Question 1

Recommended Budget (5 minutes)

Answering the following question based on the Weighted Scoring Model below. (4 points)

| Criteria | Weight | Project 1 | Project 2 | Project 3 | Project 4 |
|--|-------------|--------------|--------------|--------------|--------------|
| Supports Key Business Objectives | 25% | 90 | 90 | 50 | 20 |
| Has Strong Internal Sponsor | 15% | 70 | 90 | 50 | 20 |
| Has Strong Customer Support | 15% | 50 | 90 | 50 | 20 |
| Uses Realistic Level of Technology | 10% | 25 | 90 | 50 | 70 |
| Can be Implemented in one year or less | 5% | 20 | 20 | 50 | 90 |
| Provides Positive NPV | 20% | 50 | 70 | 50 | 50 |
| Has Low Risk in Meeting Scope, Time and Cost goals | 10% | 20 | 50 | 50 | 90 |
| Weighted Project Scores | 100% | 56 | 78.5 | 50 | 41.5 |

- What is the most important Criterion? (1 point)
- What is the 2nd most important Criterion? (1 point)
- Which project is the best project to select for implementation? (1 point)
- Which project is the 2nd best project to select for implementation? (1 point)

Recommended Budget (20 minutes)

You just won the lottery! After paid off all your debt and set aside enough money for all your tuition till graduation, you still have \$50,000 left. You would like to spend this money on a once-in-a-lifetime month-long graduation trip to Europe. You would like to manage it like a project and organize all necessary processes into the 5 Project Management Process Groups: Initiation, Planning, Execution, Monitoring and Control, and Closing.

Please identify and describe all the major Project Management activities and/or deliverables in each of the 5 Process Groups. Please make sure the activities and deliverables are described in a way that are specific to your trip not generic ones. Generic activities and deliverables will not be accepted. That is, you have to provide enough details and description to make each activity and deliverables specific to your project, the month-long graduation trip to Europe. That could mean you have to provide some specific content of the deliverables and activities to make them unique

and specific to your trip. **Hint: strict cut and paste generic project management activities and deliverables from any sources will not receive any credit.** (20 points + 5 bonus points)

- a. Initiation (5 points)
- b. Planning (5 points)
- c. Execution (2 points)
- d. Monitoring and Control (5 points)
- e. Closing (3 points)

Question 3

Recommended Budget (20 minutes)

Please answer all the following questions (a to j) based on the attached Network Diagram.

Network Diagram (Large) .pdf

- a. Please identify all paths. (2 points)
- b. Please identify the critical path(s). (2 points)
- c. Please do a forward path on ADHJ to determine the Early Start (ES) and Early Finish (EF) for each of the activities. (4 points)
- d. Please do a backward path on ADHJ to determine the Late Start (LS) and Late Finish (LF) for each of the activities. (4 points)
- e. What is the total float of ADHJ? (1 point)
- f. What is the total float of the critical path? (1 point)

The Crash Costs and Crash Days (number of days able to be crashed) of each activity are listed in the table below.

| Task | Crash Cost | Crash Days |
|-------------|-------------------|-------------------|
| A | N/A | 0 |
| B | N/A | 0 |
| C | 4000 | 2 |
| D | 3000 | 2 |
| E | 2000 | 2 |
| F | 1000 | 2 |
| G | 3000 | 3 |
| H | 4000 | 3 |
| I | 4000 | 2 |
| J | 2000 | 1 |

If you have to reduce the overall project schedule by 3 days:

- g. Which activity or activities would you crashed? (4 points)
- h. Please provide the crash cost per day for each of the crashed activity. (2 points)
- I. What is the total crash cost? (2 points)
- J. Please identify the new critical path(s) are crashing the schedule. (4 points)

Question 4

Recommended Budget (20 minutes)

You would like to throw a surprise birthday party for your significant other and to practice what you learnt in the course you would like to manage it like a project.

A. Please create a simplified Project Charter with the following elements for the surprise party:

- Project Objectives (1 points)
- Benefits (1 points)
- Major Deliverables (2 points)

- Key Milestones (2 points)
- Key Stakeholders and their Role/Involvement (3 points)

B. Project Scope Statement:

1. What are the 5 key elements of a Project Scope Statement? (5 points)
2. Please write a Project Scope Statement that contains all 5 key elements for the surprise party (10 points + 5 bonus points)

Question 5

Recommended Budget (15 minutes)

After 3 months, the progress of a project is reported as follows:

| | |
|------------------------|-----------|
| Planned Completed Work | 20% |
| Actual Completed Work | 10% |
| Budget Spent so far | 300,000 |
| Total Budget | 1,000,000 |

Please answer the following questions (a to m) and please show your work to get full credit.

- a. What is the Budget at Completion (BAC)? (1 point)
- b. What is the Earned Value (EV)? (2 points)
- c. What is the Planned Value (PV)? (2 points)
- d. What is the Actual Cost (AC)? (1 point)
- e. What is the Cost Variance (CV)? (2 points)
- f. What is the Schedule Variance (SV)? (2 points)
- g. What is the Cost Performance Index (CPI)? (2 points)

- h. What is the Schedule Performance Index (SPI)? (2 points)
- i. What is the Estimation at Completion (EAC)? (2 points)
- j. What is the Estimation to Completion (ETC)? (2 points)
- k. What is Remaining Work based on BAC? (2 points)
- l. What is remaining Funds based on BAC? (2 points)
- m. What is the To-Complete Performance Index to meet the current EAC? (4 points)