



COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

PMP201 PROJECT MANAGEMENT

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2017

LECTURER: P TAFA

DURATION: 3 HOURS

INSTRUCTIONS

1. THIS PAPER HAS TWO SECTIONS, A AND B

2. SECTION A: ANSWER ALL QUESTIONS {40 MARKS}

3. SECTION B: ANSWER ANY THREE QUESTIONS {60 MARKS}

SECTION A: COMPLUSORY QUESTIONS {40 MARKS}

You are instructed to answer ALL questions in this section.

The Case of the ZIM Commission

In 2015, **ZIM Commission**, a statutory body of the Republic of Zimbabwe found that its outdated computer systems for managing public clients needed replacing. A business case was prepared for funding the replacement while at the same time implementing some improvements. The total budget requested was \$1.8 million.

In view of a shortage of funds at the time, government did not approve this amount. Only \$1 million was authorized. However, the ZIM Commission accepted this amount after they decided that they could maybe do the work for around the \$1 m.

Accordingly, a project was scoped and planned, with specific milestones for implementing the hardware and, subsequently the software, across 10 sites within its jurisdiction. A final completion date of 31st December 2016 was projected. The original business case had loosely identified some risks to the project that were also included in the project plan. A project steering committee was established, with the Commission's CEO as the sponsor, and representation by influential managers with differing outcome needs to suit their particular work environment. The project commenced in January 2016.

In view of the shortfall on its original budget request, the committee decided not to employ a project manager. Instead, it assigned this responsibility to its Finance Manager, who would undertake the work along with his normal duties.

A company called IT Works was contracted to supply the software and assist in the implementation. This company recognized the marketing opportunities of this project, as government was its biggest client in the country. As a result, they offered, free of charge, many more features that were not in the original scope, provided the commission allowed them to be, in essence a research and development (R&D) site. This would assist IT Works to more readily sell their products elsewhere around the country, while providing the Zim Commission with additional functionality and benefits.

Initially, the steering committee met regularly, but as new versions of the resulting software were being implemented regularly, meetings became less frequent and IT Works were left to do more and more of the day to day management of the new version implementations.

These new versions were developed after consultation with the various individual managers to accommodate requested new features with little consultation amongst all of the managers. All the Zim Commission and steering committee had to do was to identify problems with the software and to make the system testers available for new versions. However, the effect was an unanticipated overhead for the commission.

Sometime after the original project was scoped and commenced, both the original CEO and finance manager were moved out of the commission and new officers appointed.

The new CEO has been advised that about \$200,000 more is needed for the project, which is not in his current budget. The original project has not been signed off, indeed, it is evident that it has not been completed. The new CEO of the commission is not sure of the original scope of the project, what aspects have been implemented, nor what has been spent for which parts. There do not seem to be any reliable reports available as to original scope, scope changes, schedule or budget.

The CEO is concerned that the project has become more of a career than a project, with yet another new version of the client management system now being tested, with yet more features. In addition, there are some past software problems that are still outstanding. Nevertheless, IT Works have promised that problems will be fixed in the next version.

Question

You are a senior consultant with PMP Projects, a competent project management consulting firm. The CEO has called you in for advice. The information is brief, but this is all the information that he and the new finance manager are able to provide. The CEO's mandate to you is to:

1. Report your assessment of the current project status. {10 Marks}
2. Recommend steps to bring the project to a close. {10 Marks}
3. Recommend improvements to Zim Commission's future project management practices. {7 Marks}
4. If a very similar project had to be done again, what attributes and/or skill sets would you recommend in selecting a project manager? {7 Marks}
5. What other advice might you give to the CEO? { 6 Marks}

SECTION C: OPTIONAL QUESTIONS {60 MARKS}

You are instructed to answer any three questions from this section. Each question carries {20 marks}.

1. Time management is vital in project management.

(a) Draw and demonstrate how a network diagram can capture the following concepts:

Activity on arrow, node, earliest event time, latest event time, burst point, sink point, slack/float, reverse pass and forward pass {5 Marks}

(b) PERT introduces uncertainties in terms of completion time and the probability of completing on time. Using a three node example, illustrate and explicitly show how these problems can be resolved. {9 Marks}

(c) Using your own example, show how a project manager can crash time. {6 Marks}

2. 'Project execution is iterative' Discuss, supporting your arguments with practical examples. {20 Marks}

3. The human resource is the most important asset in project execution. Can you, as a project manager create dedication and a true winning spirit amongst your team and still be hated by all? Validate your answer with relevant theories. {20 Marks}

4. (a) Given the situation currently obtaining in Zimbabwe in terms of project environment, do project cost overruns just happen, or are they caused? {14 Marks}

(b) Cemeteries are filled with projects that went out of control. Below are several causes that can easily develop into out-of-control conditions. In which phase of a project should each of these conditions be detected and, if possible, remedied? {6 Marks}

- a. Customer's requirements not understood
- b. Project team formed after bid was prepared
- c. Accepting unusual terms and conditions
- d. Permitting a grace period for changing specifications
- e. Lack of time to research specifications
- f. Overestimation of company's capabilities

5. You are a councilor of Mutare Municipality and a member of the city's investments committee. The municipality has received a non-conditional grant from the government and has asked your committee guidance on where to invest this money.

Question: Educate the municipality on any three investment appraisal techniques. {20 Marks}

1. From the information in the table below, you are required to answer the short questions that follow. {20 Marks}

1	Week	1	2	3	4	5	6	7
2	Activities	60,000	40,000			90,000		
3	BCWS	60,000	25,000	15,000		30,000	30,000	30,000
4	BCWP	60,000		25,000	15,000	30,000	30,000	30,000
5	AC	62,000		26,000	15,000	32,000	33,000	30,000

This project has three completed activities whose durations are indicated by the boxes in row 2. The budgeted costs of work scheduled for each task are shown in the boxes in row 2. The budgeted cost of work scheduled for each week is shown in row 3. Notice that the amounts in row 3 add up to the amounts shown in the borders. Rows 4 and 5 indicate the budgeted cost of work performed and actual cost. Notice that the second task started a week late.

- What is the planned value (PV) at the end of week three?
- What is the earned value (EV) at the end of week three?
- What is the actual cost (AC) at the end of week three?
- What is the cost variance (CV) at the end of week three?
- What is the schedule variance (SV) at the end of week three?
- What is the planned value (PV) at the end of week seven?
- What is the earned value (EV) at the end of week seven?
- What is the actual cost (AC) at the end of week seven?
- What is the cost variance (CV) at the end of week seven?
- What is the schedule variance (SV) at the end of week seven?
- What is the cost performance index (CPI) at the end of week seven?
- What is the schedule performance Index (SPI) at the end of week seven?
- If the budget at completion (BAC) for this project is \$500,000, what is the Estimate to Complete (ETC) at the end of week seven if the cost and schedule variances experienced are typical of the remainder of the activities?
- Based on your answer to the previous question, what is the estimate at completion (EAC) for this project?