



SCHOOL OF PROFESSIONAL STUDIES

DIPLOMA IN COMMUNITY DEVELOPMENT

UNIT CODE/NAME: DCD 166: PROJECT PLANNING AND MANAGEMENT

January – April 2018/2019 End Semester Exam - Time: 2 Hours

Instructions: Answer Question ONE (Compulsory) and any other TWO questions.

QUESTION ONE

- a) Many projects initiated both in the business environment and public domain fail to deliver on the objectives set. Some end up failing completely and are abandoned while others are completed albeit without meeting some of the objectives.

Required:

Identify and explain THREE possible reasons for the failure of projects. (6 marks)

- b) The following expresses a project that should be scheduled using PERT

Activity	Preceding activity	Optimistic time(days)	Most likely time (days)	Pessimistic time(days)
A	NONE	1	3	5
B	NONE	1	2	3
D	A	1	2	3
C	A	2	3	4
E	B	3	4	11
F	C,D	3	4	5
G	D,E	2	4	6
H	F,G	2	6	16

- i) Draw the network diagram using expected time for each activity (4 marks)
- ii) Identify the critical path and the expected duration of the project (4 marks)
- iii) What is the probability of completing the project in 16 days? (4 marks)

- c) Explain with the help of an example how a Gantt chart may be used in
i) Resource allocation and (4 marks)
ii) Resource smoothing (4 marks)
- d) Explain how project management software ease the application of the tools in (a) and (b) above? (4 marks)

QUESTION TWO

- a) Feasibility studies are generally carried out during the project preparation and analysis stages.

Required:

Discuss the importance of carrying out a feasibility study for projects. (5 marks)

- b) When a project is initiated many members of the organization cringe in fear. This leads to resistance and possibly failure of the project.

Required:

Discuss how projects can be successfully introduced into the organization. (5 marks)

- c) The project management environment is different from the normal or general management environment. This means that the management of the project is different from what generally takes place in general management.

Required:

Discuss Two differences between general and project management. (5 marks)

QUESTION THREE

- a) Planning is one of the phases in a project life cycle. Discuss three activities that are done during the planning phase. (6 marks)
- b) The management of Giggs Electronics Company is considering to purchase an equipment to be attached with the main manufacturing machine. The equipment will cost Sh600,000 and will increase annual cash inflow by Sh220,000 per year. The useful life of the equipment is 6 years. After 6 years it will have no salvage value. The management wants a 20% return on all investments.

Required:

- a) Compute net present value (NPV) of this investment project. (7 marks)
- b) Should the equipment be purchased according to NPV analysis? (2 marks)

QUESTION FOUR

Sharon Construction Company has just won a tender to construct an indoor stadium with a seating capacity of 20,000. The engineers well versed with construction have been asked to itemize the project activities along with their durations. After deliberations and discussions they have come up with the following:

The project begins with clearing the site, an activity that lasts eight weeks. Once the site is clear, the work can start simultaneously on the structure itself and on the field. The work in the field involves sub-surface drainage which lasts eight weeks, followed by filling for the playing field and the track. Only with the completion of filling (14 weeks) can the installation of artificial playing turf take place, an activity that consumes twelve weeks. The work on the structure itself starts with excavation followed by pouring of concrete footings. Each of these activities takes four weeks. Next comes the pouring of supports for seat galleries (12 weeks) followed by erecting pre cast galleries (13 weeks). The seats can then be poured (4 weeks) and are ready for painting. However, the painting (3 weeks) cannot begin until the dressing rooms are completed (4 weeks). The dressing rooms can be completed only after the roof is erected (8 weeks). The roof must be erected on a steel structure which takes four weeks to install. This activity can start only after the concrete footings are poured. Once the roof is erected, work can begin simultaneously on the lights (5 weeks) and on the scoreboard and other facilities (4 weeks).

Required:

- i) Prepare a table showing the activities durations and the necessary preceding activities. (6 marks)
- ii) Draw a network diagram for the construction project. (4 marks)
- iii) Determine the critical path and hence the duration of the project. (5 marks)

QUESTION FIVE

- a) During Team Success Visioning, both project and business success factors that measure project success are identified.

Required:

Identify and explain **four** project and **two** business success factors which the team may come up with. (6 marks)

- b) In your opinion what are the three most important parts of a project proposal? Explain your answer. (5 marks)
- c) A project Manager must be endowed with knowledge in various areas that impact successful project implementation. Discuss the **four** facilitating knowledge through which project objectives are achieved. (4 marks)