



**FACULTY OF SCIENCE, TECHNOLOGY, AGRICULTURE AND FOOD
SYSTEMS DEVELOPMENT**

DEPARTMENT INFORMATION SYSTEMS

EXAMINATION PAPER

COURSE CODE : BIS213
COURSE TITLE : SOFTWARE PROJECT MANAGEMENT
SPECIAL REQUIREMENTS : **None**
DURATION : 3 Hours
LEVEL : 2.1
DATE : 2024

08 APR 2024

INSTRUCTIONS TO CANDIDATES:

1. Answer all questions in Section A and any 3 in Section B.
2. Show all the working
3. Calculators and slide rules are allowed
4. Each question carries 20 marks

SECTION A: Answer all Questions

- 1) Discuss the following stages in software project management:
 - a) Feasibility study (4 marks)
 - b) Planning (5 marks)
 - c) Project execution (4 marks)
- 2) A software development company is considering a new project with cashflows forecasted as follows where year 0 is the investment needed:

Year	Project 1	Project 2	Project 3
0	-\$47000	-\$50000	-\$100000
1	\$12000	\$30000	10 000
2	\$16000	\$10000	10 000
3	\$19000	\$20000	10 000
4	\$23000	\$10000	20 000
5	\$15000	\$5000	100 000

- a) Calculate the Net Profit for each project. (15 marks)
- b) Rank the projects according to financial desirability using the Net Profit method. (4 marks)
- c) What are the advantages and disadvantages of using Net Profit method. (8 marks)

SECTION B: Answer any 3 Questions.

- 3) Discuss how emergent technologies are positively and negatively affecting the software development industries of late giving practical examples. (20 marks)
- 4) Discuss agile development methodology and outline its advantages and where its applicable. (20 marks)
- 5) a) What are the key factors that can contribute to software project failure? (10 marks)

- b) How can software project managers improve the chances of success for their projects? (10 marks)
- 6) a) What are the different levels of a WBS? (8 marks)
- b) Explain the purpose of WBS to software project managers. (12 marks)
- 7) a) What are the different quality control activities that can be used in a project? (8 marks)
- b) Explain the different stages of project human resource management? (12 marks)

The End