

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS UNIVERSITY EXAMINATION FOR THE DEGREE OF BSC INFORMATION SYSTEMS

4 TH YEAR 1ST SEMESTER 2015/2016 ACADEMIC YEAR

COURSE CODE: IIS 3415

COURSE TITLE: SOFTWARE PROJECT MANAGEMENT

**EXAM VENUE:** MAIN CAMPUS

DATE: STREAM: BIS

TIME: 2 HOURS EXAM SESSION:

### **INSTRUCTIONS:**

- 1. Answer question 1 (Compulsory) and any other two questions
- 2. Candidates are advised not to write on the question paper
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

## **QUESTION ONE** (30 Marks)

a) Define the following key concepts in relation to Project Management:

- i. Project Management (2 marks)
- ii. Project Scoping (2 marks)
- iii. Process Management (2 marks)
- iv. Project Planning (2 marks)
- b) Explain two motivations of a project such as developing information systems in an organization (4 marks)
- c) Define a project. What are the five characteristics that help differentiate projects from other functions carried in the daily operations of the organization? (6 marks)
- d) Draw a project network from the following information. What activity (s) is a burst activity? What activity(s) is a merge activity? (12 Marks)

ID	Description	Predecessor
A	Identify topic	None
В	Research topic	A
C	Draft Paper	В
D	Edit paper	С
E	Create graphics	С
F	References	С
G	Final draft	D,E,F

a) Explain the risks associated with leveling resources, compressing or crashing projects, and imposed durations or "catch-up" as the project is being implemented. (10 Marks)

# **QUESTION TWO** (20 Marks)

a) You are managing a software project. You are partway through the project, and your team has just delivered a preliminary version of part of the software. You are holding a weekly status meeting, when one of the team members points out that an important stakeholder is running into a problem with one of the features of the current software. The team member feels that there si a risk that the stakeholder will ask for a change in that feature even though that change would be out of scope of the current release, and if the stakeholder

requests that change, there is a high probability that the change control board would approve the change. What is the best action to take next? And why? (6 Marks)

b) Why do many software projects fail?

(4 Marks)

c) Discuss the software cost and estimation process?

(10 Marks)

# **QUESTION THREE (20 MARKS)**

a) What do you believe is the more important for successfully completing a project?

(2 Marks)

- b) You are the project manager for a software development project. When you need to get staff from the manager of the QA department, he suggests a few test engineers with performance problems for your team. Which is the best cause of action in this situation?

  Why?

  (5 Marks)
- c) Discuss the risk management process in software engineering. (6 Marks)
- **d)** Why is it important to assess the culture of an organization before deciding what project management structure should be used to complete a project? (7 Marks)

# **QUESTION FOUR (20 MARKS)**

- b) Identify any three feasibility analysis for effective project management (3 marks)
- c) What is meant by integrative approach to project management? Why is this approach important in today's environment? (5 Marks)

## **QUESTION FIVE (20 MARKS)**

- a) What do you believe is more important for successful completion of a project-the formal project management structure or the culture of the parent organisation? (12 Marks)
- b) Describe the following types of project termination:

- i. Termination by addition
- ii. Termination by integration
- iii. Termination by starvation (3 Marks)
- c) How does a communication plan benefit management of projects? (3 Marks)
- d) Discus the Pros and Cons of the checklist versus the weighted factor method of selecting projects.(2 Marks)