



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

SCO 302: SOFTWARE PROJECT MANAGEMENT

DATE: 24/3/2021

TIME: 2.00-4.00 PM

INSTRUCTION: Answer Question ONE and any other TWO Question

QUESTION ONE (30 MARKS) (COMPULSORY)

- a) State four attributes of projects (3 marks)
- a) Briefly explain the differences between functional, matrix and project organizations. (6 marks)
- b) Explain two project management knowledge areas. (4 marks)
- c) Describe risk management as used in projects. (2 marks)
- d) State three members of a project team. (3 marks)
- e) Explain four techniques for performing risk monitoring and control. (8 marks)
- f) Discuss the life cycle of an ICT project (4 marks)

QUESTION TWO (20 MARKS)

- a) Describe the different ways to develop a WBS. (6 marks)
- b) Explain three reasons why organizations outsource. (6 marks)
- c) Summarize the different tools and techniques project managers use to help them manage project teams. (8 marks)

QUESTION THREE (20 MARKS)

- a) Describe each of the following charts and state the situations where it would be most appropriate.
 - i. Project organizational chart
 - ii. Responsibility assignment matrix
 - iii. Resource histogram. (6 marks)
- b) Discuss three common sources of risk on information technology projects and suggestions for managing them. (6 marks)
- c) Discuss project planning in terms of the major three activities that are involved in it. (8 marks)

QUESTION FOUR (20 MARKS)

- a) Explain three roles of the project team in project management. (6 marks)
- b) Discuss four dimensions of standards that can be used to analyze a software product. (8 marks)
- c) A project management team wants to undertake quality management as one of the major activities of the team. Explain three quality management activities they are likely to do. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Differentiate between a GANT chart and a PERT chart as used in project management. (4 marks)
- b) State four steps for strategic process management in a typical organization. (4 marks)
- c) Risk management is important in ensuring success of a project. Evaluate four response strategies for negative risks identified in a project. (8 marks)
- d) Explain the triple constraint of project management. (4 marks)