CHUKA

UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE IN COMPUTER SCIENCE

COSC 436: SOFTWARE PROJECT MANAGEMENT

STREAMS: BSC (COMP SCI)   Y4S2   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 08/04/2020   **2.30 PM – 4.30 PM**

INSTRUCTIONS:

Answer question one and any other two questions

Question One (30 marks)

(a) Discuss the three project triple constraints in software project management.   (3 marks)

(b) Explain the importance of teamwork in software development.   (3 marks)

(c) Discuss four project scheduling activities for a large software project.   (4 marks)

(d) Explain two reasons why project planning is an iterative process.   (4 marks)

(e) Discuss four indications that can be used to ascertain that a software project was successful.
                                                                                (4 marks)

(f) Briefly explain how, in a team of five software developers, you would go about assessing quality of a software system.   (4 marks)

(g) Identify four reasons why people are the most important resource for an organization.
                                                                                (4 marks)

(h) In software change management processes, identify four factors that should be used to in the analysis of the changes to be made in a software component.   (4 marks)

Question Two (20 marks)

(a) Discuss four processes in integration management.   (8 marks)

(b) Estimating the cost of a software project/system is inherently a risky task, irrespective of the technique being used. Suggest and explain any five ways in which the risk in cost estimation can be reduced. (12 marks)

Question Three (20 marks)

(a) Discuss four ways how you would go about organizing the project development environment to motivate the developers. (8 marks)

(b) The simplistic meaning of a software quality is "a product meeting its specifications". However, this meaning is subject to different interpretations given that software has many stakeholders. It is more common to refer to software quality as "fitness for purpose". In light of this common understating, explain six guiding questions that a quality review team can use in establishing whether software is fit for purpose or not. (12 marks)

Question Four (20 marks)

(a) Discuss the four configuration management activities. (8 marks)

(b) In your new job placement, as a practicing software developer, you are assigned the role of managing risks for upgrading banking services to online services. The bank intends to allow its client to manage their accounts online with services such as money transfers to other accounts (individual or other people's accounts), generating bank statements for selected periods, among other services desired by the clients. Discuss in details the risk management process you would adopt for this particular project. (12 marks)

Question Five (20 marks)

(a) Discuss four possible problems that could arise if a company does not develop effective configuration management policies and processes. (8 marks)

(b) As a project manager of a recently won student's management system project, discuss six principles that would increase your chances of leading the project to success. (12 marks)