



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR DEGREE IN:
BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY
(BTIT11M J-FT Y4 S2)

EIT 4418: WORKFLOW MANAGEMENT SYSTEM

END OF SEMESTER EXAMINATION
SERIES: DECEMBER 2014
TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- Answer Booklet

This paper consists of **FIVE** questions. Attempt question **ONE (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) Define the following term: **(6 marks)**
(i) Business process
(ii) Workflow
(iii) Activity
- b) Give TWO advantages and disadvantages of production workflow management systems **(4 marks)**
- c) Distinguish between:
(i) Single-application and multiple workflow
(ii) System and human interaction workflow **(4 marks)**
- d) List TWO typical features associated with many workflows management system **(2 marks)**
- e) Explain the following workflow models perspectives:
(i) Information perspective
(ii) Task perspective
(iii) Resource perspective **(6 marks)**

f) With an aid of a diagram describe the steps involved in a business process life cycle (8 marks)

Question Two

a) List any TWO workflow management systems (WFMS) softwares (2 marks)

b) Describe any THREE stakeholders involved in development of business process (6 marks)

c) Distinguish between the following business processes:

(i) Organizational Vs Operational Business Processes

(ii) Intraorganizational Process Versus Process Choreographies (4 marks)

d) Discuss any FOUR process enablers (8 marks)

Question Three

a) What is a process metric? (2 marks)

b) Give any TWO benefits for workflow management (4 marks)

c) Describe the main steps in workflow design (6 marks)

d) Explain any FORU workflow patterns classification (8 marks)

Question Four

a) Differentiate between business process management and workflow management (2 marks)

b) Outline the steps for workflow driven methodology (6 marks)

c) Discuss the following basic workflow control flow patterns: (6 marks)

(i) Parallel split

(ii) Sequence

(iii) Simple Merge

d) Describe any FOUR challenges of workflow management (8 marks)

Question Five

a) What is a process map? (2 marks)

b) Distinguish between:

(i) Implicit Termination and Explicit Termination

(ii) Transient Trigger and Persistent Trigger (4 marks)

c) Discuss any THREE goals of business process management (6 marks)

d) Using a diagram describe the components of a workflows management system architecture (8 marks)