



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

HIGHER DIPLOMA IN COMPUTER STUDIES (HDIP)

FINAL EXAMINATION

APRIL/MAY 2010 SERIES

BUSINESS SOFTWARE IMPLEMENTATION II

TIME: 2 HOURS

Instructions to Candidates

Answer any **THREE** Questions.
ALL Questions Carry Equal Marks.

SECTION A

Question ONE

- (a). Explain the software engineering life cycle. **(12 Marks)**
- (b). Explain the following as used in software engineering.
- (i). Software reliability
 - (ii). Software integrity
- (6 Marks)**
- (c). Explain the security testing process. **(5 Marks)**

Question TWO

- (a). (i). Explain the term software testing. **(2 Marks)**
- (ii). Explain the objective of software testing. **(2 Marks)**
- (b). Explain the following test case design:
- (i). Black-box **(5 Marks)**
 - (ii). White-box **(5 Marks)**
- (c). Explain the following terms:
- (i). Software verification
 - (ii). Software validation
- (4 Marks)**
- (d). State any **FIVE** testing processes. **(5 Marks)**

Question THREE

- (a). Explain the following in relation to software engineering:
- (i). Methods
 - (ii). Tools
 - (iii). Procedures
- (9 Marks)**
- (b). (i). Explain any **TWO** objectives of software engineering. **(4 Marks)**

- (ii). Explain any **FIVE** program contribute engineering factors that contribute to successful software development. **(10 Marks)**

Question FOUR

- (a). Explain any **SIX** human factors that are relevant to software engineering. **(12 Marks)**
- (b). Explain the involvement of end-users in all stages of software development. **(10 Marks)**
- (c). State the meaning of CASE engineering in software development. **(1 Mark)**

Question FIVE

- (a). (i). Explain the term software quality assurance. **(2 Marks)**
- (ii). Explain the components of software quality assurance. **(10 Marks)**
- (b). Explain any **THREE** factors affecting software quality assurance giving examples on each. **(8 Marks)**
- (c). State the software evolutions. **(3 Marks)**