



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR BACHELOR OF TECHNOLOGY IN
INFORMATION TECHNOLOGY (BTIT M11/S-EV)

EIT 4408: STRUCTURED CABLING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2013

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** 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) (i) Outline any **FIVE** tools that are found in standard structured cabling tool KIT. (5 marks)
(ii) Explain the main usage of the tool identified in Q1(a)(i).
- b) Sate any **THREE** common Fibre optical cable configurations. (3 marks)
- c) Outline any **THREE** common technologies that are used in wireless networks. (3 marks)
- d) (i) Outline any **FOUR** twisted pair cable connectors.
(ii) Outline any **TWO** coaxial cable connectors. (3 marks)
- e) (i) Define patch panel
(ii) Explain the benefit of installing a patch panel. (4 marks)
- f) Justify the need for structured cabling. (4 marks)

g) Distinguish between labeling and certifying cables. (4 marks)

h) Explain the popularity of copper conductors in electrical cables. (4 marks)

Question Two

a) An organization that is experiencing computer network problems related to cables has approached you for advice. Required:

Describe how the cable performance can be increased. (10 marks)

b) Discuss TIA/EIA 8B design requirement for horizontal cabling as well as backbone cabling. (10 marks)

Question Three

a) (i) As the person in charge of network installation, describe any **TWO** standards that deal with safety in structured cabling

(ii) Describe any **FOUR** safety issues that are of high concern during cable termination. (10 marks)

b) (i) Differentiate between TS68A and TS68B copper patch cord with the aid of sketch.

(ii) Differentiate between roll over and crossover cables. (10 marks)

Question Four

a) Describe any **FIVE** common coaxial cable categories. (10 marks)

b) Describe any **FIVE** fibre optical cable tests that are normally carried out before installation. (10 marks)

Question Five

A company that deals with computer networking has approached you to advice on the structured cabling system design. Required:

Describe the consideration that you would make for any **FIVE** subsystems of the make for any **FIVE** subsystems of the structured cabling system. (20 marks)