



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY (DICT 13S FT/EV)

EIT 2207: NETWORK DESIGN & IMPLEMENTATION

END OF SEMESTER EXAMINATION

SERIES: APRIL 2015

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) What is a NOS? **(2 marks)**
- b) List FOUR Network Operating Systems **(2 marks)**
- c) Discuss how NOS differ from other OS's **(4 marks)**
- d) Differentiate between client/server and peer to peer networks highlighting merits and demerits of each architecture **(6 marks)**
- e) Briefly describe the role of the following hardware:
 - (i) Router
 - (ii) Switch
 - (iii) NIC**(6 marks)**

Question Two

- a) As an IT personnel, what would you consider when selecting a server to purchase in terms of hardware specifications **(5 marks)**
- b) What is RAID? **(2 marks)**
- c) Describe the common levels of RAID **(8 marks)**
- d) A company would like to setup a gateway on their network. Advice on the best NOS to use. Giving reasons **(5 marks)**

Question Three

- a) An instructor in a college is putting together systems on which students will practice installing windows server 2008. Advice on the basic PC specifications that will be required in order for the labs to be a success **(6 marks)**
- b) What would be the difference if the students had to install Ubuntu Server 14.0? **(4 marks)**
- c) DHCP has 3 different IP allocation methods. Discuss **(6 marks)**
- d) List any FOUR privileges that can be assigned to a user by window 2008 server **(4 marks)**

Question Four

- a) Discuss system resource management in NOS **(6 marks)**
- b) NOS's have client support functions. Discuss **(10 marks)**
- c) Distinguish between permissions and rights that can assigned to a user accounts. **(4 marks)**

Question Five

- a) Identify and describe FOUR major network services **(8 marks)**
- b) Identify and describe FOUR networks protocols associated with major NOS's **(8 marks)**
- c) List the major differences among NOS's **(4 marks)**

