MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

SCHOOL OF SCIENCE AND INFORMATION SCIENCES
DEPARTMENT OF COMPUTING AND INFORMATION SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION
FOR DEGREE IN INFORMATION SCIENCES

COURSE CODE: INS 2203
COURSE TITLE: DATA COMMUNICATION

DATE: 30TH APRIL, 2018　　　　　　　　　**TIME: 0830 - 1030HRS**

INSTRUCTION TO CANDIDATE

   i.   Question ONE in section A is compulsory
  ii.   Answer any Two (2) Questions from section B
 iii.   Use diagrams, example and illustration where necessary
 iv.   All questions in section B have equal marks

SECTION A (COMPULSORY – 30 MARKS)

QUESTION ONE

a) Define the following terms
    i.   Data communication   [2 Marks]
    ii.   Computer networking   [2 Marks]
b) Explain any Two COMMUNICATION MEDIA used in Data Communication   [4 Marks]
c) Discuss Four characteristics of Data Communication   [8 Marks]
d) Discuss the seven layers of Open Systems Interconnection (OSI)   [14 Marks]

SECTION B (ANSWER ANY TWO (2) QUESTIONS – 40 MARKS)

QUESTION TWO [20 MARKS]

a) Discuss Five Data Communications system components   [10 Marks]
b) Explain Five properties of computer Network   [5 Marks]
c) Outline Five benefits of a computer network   [5 Marks]

QUESTION THREE [20 MARKS]

a) Define the following terms in reference to computer network
    i.   Network Topology   [2 Marks]
    ii.   Protocol   [2 Marks]
b) Distinguish between the following
    i.   Serial and Parallel Data Transmission   [4 Marks]
    ii.   Client/server model and Peer-to-peer model   [4 Marks]
c) Discuss the Four Data Transmission mode   [8 Marks]

QUESTION FOUR [20 MARKS]

a) Discuss Five network topologies   [10 Marks]
b) Discuss Five Network Classifications/Types   [10 Marks]

END//