



**JARAMOGI OGINGA ODINGA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS 2013/2014

SCHOOL BASED, DECEMBER 2013, APRIL, 2014 SESSION

**THIRD YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF EDUCATION WITH
INFORMATION TECHNOLOGY**

(KOSELE LEARNING CENTRE)

SCS 306: INTERNET COMPUTING

QUESTION 1: {30 MARKS}

a) Define the following terms;

(3 Marks)

- (i). Internet,
- (ii). Intranet, and
- (iii). Extranet.

b) Explain the functions of the following four features of a browser window.

(8 Marks)

- (i). Search box,
- (ii). Navigation buttons,
- (iii). Status bar, and
- (iv). Address bar.

c) Define a router and explain Dijkstra's routing Algorithm (4 marks)

d) Explain Cascaded Style Sheet using suitable syntax (2marks)

e) State four advantages of email over traditional mail. (3Marks)

f) Identify *two* internet connection options available to individuals in Kenya.

(2 Marks)

g) With the aid of diagram, explain how routers work. (4 Marks)

h) Identify and explain how Jaramogi Oginga Odinga University of Science and Technology can put the World Wide Web to use in its academic and administrative functions.

(4Marks)

QUESTION 2: {20 MARKS}

- a) What is ISP? Give *two* (2) examples of ISPs in Kenya. (2 Marks)
- b) Define what is meant by *Access Control* in computer security measures.
(4 Marks)
- c) State and describe *at least five* types of primary access control measures.
(10 Marks)
- d) Intentional computer and e-commerce threats usually fall into certain categories, list *at least four*.
(4 Marks)

QUESTION 3:{20 MARKS}

- a) In the recent past there has been hype on the arrival of fiber optics cable to the Kenyan coast. How is Kenya set to benefit from fiber optics projects?
(6 Marks)
- b) State and explain the role of each protocol layer of the OSI model giving an example of each.
(14 Marks)

QUESTION 4: {20 MARKS}

- a) Despite being the latest addition to the internet, the World Wide Web (WWW) is the most widely used internet service. Give reasons behind this phenomenon.
(5 Marks)
- b) Name *at least five* popular internet browsers. (5 Marks)

- c) Why is TCP protocol referred to as the “software of reliability”? Describe techniques / mechanisms that TCP employs to achieve reliability.

(10 Marks)

QUESTION 5: {20 MARKS}

- a) Describe *six* methods of attack that are currently being experienced on the internet.

(12 Marks)

- b) Suggest *at least four* corresponding security strategies that can be employed to computer attacks.

(8 Marks)