



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF EDUCATION SCIENCE, ARTS,**  
**SPECIAL NEEDS, BBA/ FINANCE AND ACCOUNTING**  
**3<sup>RD</sup> YEAR 1<sup>ST</sup> SEMESTER 2018/2018 ACADEMIC YEAR**  
**MAIN , KISUMU, KISII, NAIROBI CAMPUSES**

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**COURSE CODE : SCS 306**  
**COURSE TITLE : INTERNET COMPUTING**  
**EXAM VENUE : STREAM :**  
**DATE : EXAM SESSION :**  
**TIME :**

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**INSTRUCTIONS:**

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

### **QUESTION ONE 30 MARKS**

- a) Internet started as a small intra-university project but has evolved into a massive information resource. Write a brief history of the internet noting the major milestones (8 marks)
- b) What are the differences between the Internet and the World Wide Web? (4 marks)
- c) A friend has just bought a new computer and needs an internet connection at home. Advice on the hardware, software and other requirements for him to connect to the internet and start conducting email correspondence and searching. (8 marks)
- d) A company is contemplating whether to use a client/server or a peer-to-peer network. What are characteristics of a peer-to-peer network? (4 marks)
- e) Define the following terms as used internet computing (6 marks)
- i. Tcp/Ip
  - ii. Smtp
  - iii. Ftp
  - iv. Http
  - v. Https
  - vi. DHCP

### **QUESTION TWO 20MARKS.**

- a) What is a web browser? (2 marks)
- b) Compare and contrast between the TOP FOUR web browsers (8 marks)
- c) With an aid of a diagram, discuss the seven layers of OSI Model (10 marks)

### **QUESTION THREE 20MARKS.**

- a) What is a search engine? (2 marks)
- b) Briefly explain how a search engine works (6 marks)
- c) Compare and contrast **THREE** major types of search engine used on the Internet. (6 marks)
- d) Internet has converted the world into a global village. Explain this statement with respect to the impact of internet on our day to day activities. (6 marks)

### **QUESTION FOUR 20MARKS.**

- a) The Internet is easily the mostly widely used and accessible network in the world. Clearly explain the architecture of the Internet, the protocols used and how redundancies are built into the Internet. (12 marks)
- b) What is the difference between a router and a switch (2 marks)
- c) What is internet protocol?. Differentiate between DNS and DHCP (6 marks)

### **QUESTION FIVE 20 MARKS**

You have been promoted to the post of ICT Director and the management would like to know how adoption of electronic commerce will benefit the Organization.

Respond by explaining how SOAP and web services have opened up new options for E- Commerce (20 marks)