

**CHUKA**



**UNIVERSITY**

## **UNIVERSITY EXAMINATIONS**

### **EXAMINATIONS FOR THE AWARD OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

**ACMP 488: E -SYSTEMS**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/TIME: THURSDAY 7/12/2017**

**2.30 P.M – 4.30 P.M**

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#### **INSTRUCTIONS:**

- **Answer Question ONE and any other TWO questions.**

#### **Question One: 30 marks**

- a) Define Electronic Data Interchange. What are the components of Electronic Data Interchange? (4marks)
- b) When designing an interactive web site, describe five desirable stylistic points. (3 marks)
- c) Describe the risks encountered in electronic payment systems (5 marks)
- d) What are cookies? (2marks)
- e) Discuss the following in relation to electronic payment systems (8 marks)
- Integrity and authorization
  - Out-band authorization
  - Password authorization
  - Signature authorization
- (f). Describe the importance of cryptography in internet data transfer security in E-commerce (4 marks)
- g) What is a block chain in the context of electronic money? [2 marks]
- f) Outline four web editing tools used in developing electronic commerce website.(2 marks)

**Question two: 20 marks**

- a) Describe types of information often collated when monitoring web traffic on a commercial site into detail. (6 marks)
- b) Discuss the difficulties in measuring the use of your website and related social media campaign. (6 marks)
- c) Define smart cards and also explain types of smart cards (5 marks)
- d) What is cyber-squatting and its purpose? Give its example. (3 marks)

**Question three: 20 marks**

- a) In your opinion what are the most essential requirements for safe e-payments/transaction (5 marks)
- b) Discuss how you would use social media to attract traffic to your website (5 marks)
- C) Consider the task of designing a Web server that will target specifically E-commerce, with the objective of accommodating a number of merchant sites, each consisting of a catalog, shopping cart, payment system interfacing with a credit card company, customer profiles repository based on previous transactions, and a recommender system. What specific architectural suggestions would you make to ensure:-
  - (i) Efficiency (2 marks)
  - (ii) Security (2 marks)
  - (ii) Reliability (2 marks)
- D) Explain relevance of the use digital certificates (4 marks)

**Question four: 20 marks**

- a) Discuss the five business models of E-commerce into detail. (4 marks)
- b) Explain four reasons why internet advertisement is preferred to other methods of advertisement. [6 marks]
- c) Spam is now a major problem for many companies and individuals using the WW. Some research shows that around 870 billion Spam messages were sent in one year in the US alone (Guardian 2003). Legal measures to combat Spam have had limited effect so far. Experts have discussed various measures that could be used to combat Spam.
  - (I) Using examples, discuss 3 different techniques that could be used within a company to combat Spam. (5 marks)
  - (II) Outline 4 guidelines that could be used to minimise Privacy issue. (4 marks)

d) Define the term E-system.

(1 mark)

**Question four: 20 marks**

a) Explain the following terms by use appropriate examples: -

(10 marks)

i) **\_utma**

ii) **\_utmb**

iii) **\_utmz**

iv) **\_utmv**

v) **PHPSESSID**

a) What are some of the unique features of e-commerce technology? Explain.

(6 marks)

b) What are the key dimensions of e-commerce security?

(4 marks)

**Question five : 20 marks**

Explain what is meant by the abbreviations CPC, CTR, CPA, ARPU, CLV in relation to online marketing? ( 10 marks)

a) Explain the security measures you would employ to safe guard your site from threats. (5 marks)

b) Discuss the advantages and disadvantages of showing stock levels on a commercial site. [5 marks]

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