

The Open University of Sri Lanka  
B.Sc. /B.Ed. Degree Programme - Level-03  
Department of Mathematics and Computer Science  
Final Examination- 2014/2015  
Computer Science  
CSU1179-Introduction to Information Systems



Duration: Two Hours (2hours)

Date : 20.10.2015

Time: 1.30pm-3.30pm

**Answer Four Questions Only**

(1)

- (i) Compare the difference between Real Time Systems and Online Systems.
- (ii) What are the four types of Real Time Systems? Briefly describe each of them.
- (iii) Which software can be used for supporting management levels of an organization?
- (iv) Classify the following systems as Batch Processing Systems, Real Time Systems or Online Systems.
  - (a) Airline controlling system.
  - (b) Chemical manufacture process control system.
  - (c) Pre-paid card system
  - (d) Chatting system

(2)

- (i) Describe the advantages and disadvantages of WWW technology.
- (ii) Briefly describe the following terms.
  - (a) Web Client
  - (b) Telemedicine
  - (c) Web Application
  - (d) Search Engines
- (iii) Briefly describe five facilities of the Internet.

(3)

- (i) Distinguish between a Database and an Expert System.
- (ii) Describe two methods that can be used to develop an expert system.  
Which method is the easiest to develop an expert system? Justify your answer.
- (iii) **“To create a good expert system, the inference engine should be stronger”**  
Do you agree with the above statement? Justify your answer.
- (iv) What are the advantages of Hybrid systems? Justify your answer with a suitable example for each advantage you stated.

(4)

- (i) What is a computer network? Explain how it can be useful for the developing countries.
- (ii) Describe the advantages and the disadvantages of File Transfer Protocol (FTP).
- (iii) Compare and contrast the following terms.
  - (a) FTP and Telnet.
  - (b) Website and Web application.
  - (c) Dialup connection and Direct connection.
  - (d) HTTP and TCP/IP.

(5)

- (i) Suppose you are asked to develop an Internet-based counseling system for OUSL. Describe the facilities / services on the Internet that you can use and how they can be used for this purpose.
- (ii) Explain the relevance of the following technologies for Sri Lanka.
  - (a) E-Commerce
  - (b) Pen based computing

- (iii) What are the essential hardware and software that you should use to connect with Internet from your computer? Describe the whole process between the Internet and your computer.
- (iv) "*One node can act as both the client and the server at the same time*" Do you agree with this statement ? Justify your answer.
- (6)
- (i) Determine whether the following statements are **TRUE** or **FALSE**. In each case justify your answer.
- (a) Solar system is a natural system.
- (b) Washing machine is a man-made system.
- (ii) Can all man-made systems be computerized? Justify your answer.
- (iii) What are the differences between *Information* and *Knowledge*.
- (iv) It is proposed to automate the function of the controlling fans for OUSL lecture halls. Explain how for you can achieve this automation.

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