

International Islamic University Chittagong

Department of Economics & Banking

Final Examination: Spring-2019

Program: BSS (Honours)

Course Code: COM-1101

Course Title: Computer Applications

Time: 2.5 Hours

Full Marks: 50

Answer any five of the following questions. All parts of a question must be answered sequentially. Figures in the right margin indicate full marks.

1. (a) Define positional number system. Also, define binary and hexadecimal number systems. 2+2
(b) A positional number system has base 6. Write its numerals. 2
(c) A student wrote an octal number as 50384. Is the number an Octal number? Explain your answer. 1
(d) What are meant by bit and digit? 2
(e) Give two examples of non-positional number system. 1
2. (a) What is the necessity of binary numbers? 2
(b) Describe BCD & ASCII codes and write their disadvantages. 4
(c) Convert the decimal number 2807 into BCD and hexa-decimal. 2
(d) Write next three numbers of the following counting sequences: 2
 i) Binary: 11010, 11011, 11100, ____, ____, ____
 ii) Hexadecimal: 1FC, 1FD, 1FE, ____, ____, ____
3. Convert three decimal numbers 8257, 7091 and 6950 into binary number and then add these 4+2+
binary numbers. Hence, convert the sum into decimal number. Also convert the sum into octal 2+2
and hexa-decimal numbers.
4. (a) Describe three basic logic gates. 3
(b) Is NAND gate a basic gate? Explain. 2
(c) Describe classification of software. 2
(d) Write the main function of an OS. Write names of four popular OS. 2+1
5. (a) What is firmware? Give an example of firmware. 1+1
(b) What is Internet? Describe its basic services. 1+2
(c) Write the full names of WWW and HTTP. 1
(d) Why do we use email for business & communication? Write the name of blank fields in header of 1+2+
an email message. Write web addresses of two popular email sites. 1
6. (a) Describe any two network topologies with advantages and disadvantages. 4
(b) What do we mean by algorithm? Draw any two flow chart symbols and describe their uses. 1+2
(c) Write names of four popular high level programming languages. Write advantage of high level 1+1
languages.
(d) What is compiler? 1
7. (a) What do we mean by search engine? Explain two popular search engines mentioning their web 1+2
address.
(b) Define LAN and WAN with examples. 2
(c) What is Wi-Fi? Is it LAN or WAN? Explain. 1+1
(d) Write short notes on: 3
 i) E-commerce ii) SWIFT iii) OOP