

Daffodil International University

Department of Computer Science and Engineering Faculty of Science and Information Technology Midterm Examination, Semester: Summer 2019

Course Code: CSE 322 Course Title: Computer Architecture and Organization Section: DAY ALL Course Teacher: ALL

Time: 1.5 hours Total Marks: 25 Answer any five from the following questions Q. 1. (a) Differentiate between 'Computer Architecture' and 'Computer Organization' with some applications. (b) What are the similarities between computing processing system and human processing system? (c) What is an abacus? 1 Q. 2. (a) b. What are the major changes take place from first generation computer to second generation computer? 2 (b) Draw the circuit of a full adder using two half adders and an OR gate. 2 (c) What is slide rule? 1 Q. 3. (a) What are the main two drawbacks of a mechanical computer in contrast to electronic computer? (b) Write an IAS program to subtract two numbers stored in main memory. 2 (c) What is a batch monitor? 1 Q. 4. (a) Draw the Organization of the CPU and main memory of the IAS computer? 2 (b) Discuss System Design and also mathematical explanation of it. 2 (c) What is interrupt? 1 Q. 5. (a) Define the terms: ASCII & EBCDIC. 1 (b) If the decimal value of C is 67, find out the both binary and octal values of F and A? (c) What is Ripple Carry Adder? Draw a ripple carry adder which could use to add two 4-bits binary numbers. 2 Q. 6. (a) Write short notes on the following: 2 (i) VLSI (ii) Control Bus (b) Write down the name of three design levels of computer? 1 (c) Classify following components according to three design levels: 2 (i) Register (ii) XOR gate (iii) System bus (iv) CPU (v) Flip-flop (vi) CounterThe End.