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MBH-003-004203 Seat No. _____

B. Sc. (Information Technology) (Sem. II) (CBCS) (W.I.F. 2016) Examination

March / April - 2018

CS - 09 : Computer Organization & Architecture

Faculty Code : 003
Subject Code : 004203

Time : Hours] [Total Marks : **70**

1 (A) Answer the following : **4**

(1) What is AND gate result of input true and true?

(2) Logical diagram of boolean function is also called_____

(3) What is the output of buffer gate?

(4) AND gate followed by inverter is logical diagrame of _____ gate.

(B) Answer in brief : (Any **One**) **2**

(1) Explain Clock Pulses.

(2) Explain Universal Gate.

(C) Answer in brief : (Any **One**) **3**

(1) Explain Don't Care conditions.

(2) Explain D Flip Flop.

(D) Answer in brief : (Any **One**) **5**

(1) Explain Half adder.

(2) Explain K'map in detail.

2 (A) Answer the following : **4**

(1) De'mux means _____

(2) What is IC?

(3) Decoder means _____

(4) Multiplexer is also called _____

(B) Answer in brief : (Any **One**) **2**

(1) Explain encoder

(2) Explain 3*8 line decoder

(C) Answer in brief : (Any **One**) **3**

(1) Explain multiplexer in detail

(2) Explain counter in detail.

(D) Answer in brief : (Any **One**) **5**

(1) Explain shift register in detail.

(2) Explain de-mux in detail.

3 (A) Answer the following : **4**

(1) 001010 perform 1'S Complement.

(2) 000011 perform 1'S Complement.

(3) 000110 perform 2'S Complement.

(4) 001010 perform 2'S Complement.

(B) Answer in brief : (Any **One**) **2**

(1) Explain fixed point representation.

(2) Explain error detection code.

(C) Answer in brief : (Any **One**) **3**

(1) Explain floating point presentation.

(2) Explain fixed point representation.

(D) Answer in brief : (Any **One**) **5**

(1) Explain mantissa and exponent.

(2) Explain multiplication of two binary numbers.

4 (A) Answer the following : **4**

(1) ALU means _____.

(2) AC stands for _____ register.

(3) Give example of any one flag.

(4) What is control word?

(B) Answer in brief : (Any **One**) **2**

(1) Explain control word.

(2) Explain cpu.

(C) Answer in brief : (Any **One**) **3**

(1) Explain a register stack.

(2) Explain memory stack.

(D) Answer in brief : (Any **One**) **5**

(1) Explain reverse polish notation

(2) Explain interrupt.

5 (A) Answer the following : **4**

(1) Give full form of DMA.

(2) What is input out put interface?

(3) Explain system bus.

(4) Explain internal bus.

(B) Answer in brief : (Any **One**) **2**

(1) Explain concept of input output processor.

(2) Explain input output bus.

(C) Answer in brief (Any **One**) **3**

(1) What is memory bus?

(2) Explain DMA transfer.

(D) Answer in brief : (Any **One**) **5**

(1) Explain control lines

(2) Explain DMA controller.
