(c) Explain the rking of Auxiliary Memory. [6]

7. Describe the Mem ierarchy, in terms of execution speed, execution time and size. Explain the owing properties in reference to Cach nory : Principles of Locality, Coherenc Inclusion. [16]

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8. (a) Describe the n's Classification of computer sys [8]

(b) Explain the cept of Reservation table. [8]

9. (a) List down va principles of Linear pipeline. Als tion the advantages of applying it system. [8]

(b) Pictorially re it the working of an Instruction F e. Mention the basic conditions th st be satisfied before Pipelining ca nstalled. [8]

Roll No. .....

67072

M.C.A. 2nd Sem.
(with new notes - M.M. 80 w.e.f. May, 2013)

Examination–May, 2016

Computer Organisation & Architecture (New)

Paper-MCA-202

Time : 3 hours ***Max. Marks : 80***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Question No. **1** is **compulsory**. Attempt any **four** more questions from Unit I to Unit IV, selecting **one** question from each unit. All questions carry equal marks. [8×2=16]

1. (a) Define functional units of a computer designed for business purpose.

(b) What is the basic purpose of system buses?

(c) What do you lerstand by effective address of ar and?

(d) List down v s types of registers available in c ter system.

(e) Write short on working of an assembler.

(f) Describe term Computer Organization

(g) Explain varic sign principles of an effective pipe

(h) Enlist variou llenges faced during Parallel Proce .

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2. (a) Operating Sy are the main core of any compute tem", support your answer by entioning various functions of c ng system. [8]

(b) Differentiate een an Instruction and Micro ruction, with an illustration. [8]

3. Explain in detail omplete Instruction Cycle, along with i ous phases and also depict the timing ls at various steps, with the help of a f art. [16]

Unit-II

4. (a) Explain why an interface is always required between the peripheral and processor communication. [8]

(b) Describe the working of any four Data Transfer and Data Manipulation instructions each. [8]

5. (a) Describe various Instruction formats, based upon the number of operands included. [8]

(b) Explain the working of Base addressing mode and Index addressing mode. [8]

Unit-III

6. (a) Define Interrupts. Why is it required to set priorities for interrupts and how these priorities are solved. Explain any one such method to solve the priority of interrupts. [5]

(b) "It is mandatory to use Direct Memory Access in every computer system", Give your views and support your answer. [5]