Form No. Ex- 8
Particulars about the candidate
and the subject are checked thoroughly
and corrected where necessary.

302

Sl. No.....637

CENTRE ROLL:.....

Invigilator

Seal & Signature of Officer-in-Charge

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

BCA Examination 2013 (4th Semester)

Subject : COMPUTER ORGANIZATION

Enrolment Number. | | | | | | | | | | |

INSTRUCTIONS TO CANDIDATES

1. An Examinee is allowed to bring only Admission Card and Identity Card to the Examination Hall. Any Examinee found in possession of loose papers, books etc. is liable to be Expelled.
2. Enrolment No. must be written legibly at the specified places. Examinee's name and any other identifying mark which reveals examinees identity shall not be written anywhere in the script.
3. For Making calculations, only the last page provided for rough work shall be used.
4. No pages of the script be torn out .
5. ***MOBILE PHONES are strictly prohibited in the examination Centre.***
6. No candidate will be allowed to leave or go out of the hall during the First hour of the Examination.
7. A candidate having completed his/her answer, the script must be handed over, to an invigilator before leaving the hall.
8. Contravention of any of the instructions mentioned above shall render a candidate liable for disciplinary action as per regulations of the University.

Question No.	Marks
Total =	

Examiner's Signature_____

Scrutiniser's Signature_____

Head Examiner's Signature:_____

KKHSQU BCA 4TH SEMESTER Examination 2013

Subject : Computer Organization

Paper - 11 : Computer Organization

Time : 3 Hrs. Full Marks : 80

1. Answer the following questions $1 \times 8 = 8$

(a) 'A half-subtractor can perform product of two binary bits' - state true or false.

(b) 'Magnitude comparator is a sequential circuit' - state true or false.

(c) 'The primary job of any microprocessor is to .....'.
Fill in the blanks.

(d) Identify the addressing mode :
'MOV A, B'

(e) In a DMA, the data transfer takes place between which type of components?

(f) Refresh circuitry is required in which type of memory?

(g) Why cache memory is used in computer system?

(h) Stack pointer is an example of which type of registrar?

2. Answer the following questions $2 \times 8 = 16$

(a) How many bits can add by a full adder and mention the name of the output.

(b) If a decoder has 6 input lines how many output lines it can have?

(c) Mention the name of any two branch instruction.

(d) What is the function of an assembler?

(e) What do you mean by an I/O interface?

(f) What is 'bit ratio' in terms of cache memory?

(g) What is the basic function of general purpose registers found inside a CPU?

(h) What is the function of 'Program counter'?

3. Answer any five questions from the following $4 \times 5 = 20$

(a) What is a magnitude comparator? Differentiate between a combinational circuit and a sequential circuit.

(b) Draw the diagram of a static RAM cell.

(c) Write down the basic difference between programmed I/O and interrupt driven I/O.

(d) Explain the term 'Locality of reference'. What are its two types? Explain.

(e) Explain the following term :

Track, Sector and Cylinders.

(f) Differentiate between a pipelined computer and a non-pipelined computer.

(g) Draw the block diagram of Control Unit and just mention the function of each component.

4. Answer any two questions from the following $8 \times 2 = 16$

(a) Explain the different instruction formats of 8085 with example.

(b) What is the use of virtual memory? Differentiate between logical address and physical address. What is paging?

(c) What is RAID? Name the different RAID levels and discuss their functions.

5. Answer any two questions from the following $10 \times 2 = 20$

(a) What do you mean by a multiplexer? How is it different from a demultiplexer? Draw suitable diagram to explain the working of a 8- to- 1 multiplexer.

(b) What is addressing mode? What addressing modes are supported in the CPU you have studied? Give syntax and state their use with one example each.

(c) What is the significance of pipelining? Disucss it. What is pipeline hazard? Write merits and demerits of pipelining.