FIRST YEAR B. C. A. EXAMINATION
Nov - 2016
PAPER – 104: COMPUTER ORGANIZATION
TIME: 3 HOUR   [TOTAL MARKS: 100]

CODE - 8053

Q -1 Answer the following questions 20
1. Explain block diagram of computer in detail.
2. What is printer? Explain any 2 printers.

OR

Q -1 Answer the following questions 20
1. Explain: Keyboard & Mouse.
2. Explain Hard Disk in detail. Differentiate Magnetic devices and Optical Devices.

Q -2 Answer the following questions 20
1. Explain 1's and 2's complement with example.
2. Do as directed.

   1. $(5411)_{10} = ($ _____ $)_8$

   2. $(170)_8 = ($ _____ $)_{16}$

   3. $(110111.110)_2 = ($ _____ $)_8$

   4. $(FFF)16 = ($ _____ $)_{10}$

   5. $1101.101 - 100.11$

OR

Q -2 Answer the following questions 20
1. Explain character codes: BCD, ASCII, EBCDIC, UNICODE in detail
2. Do as directed.
   1. $(23.54453)_{10} = (?)_8$
   2. $(1101) * (111)$
   3. $(EA13)_{16} = (?)_8$
   4. $(84AB. AB)_{16} = (?)_8$
   5. $(110110.100) + (1111.110)$

Q -3 Answer the following questions 20
1. Explain De Morgan's Theorem
2. Explain 3X8 encoder in detail.

OR

Q -3 Answer the following questions 20
1. What is Gate? Explain any three gates with truth table, graphical symbol and Boolean function.
2. Give circuit and Truth table of: F=A'BC + ABC + A'B'C + A'B'C'

Q -4 Answer the following questions 20
1. Write a note on JK Flip Flop and Buffer Register.
2. Explain general Micro Processor in detail

OR

Q -4 Answer the following questions 20
1. What is register? Explain Shift register in detail.
2. What is the use of Counter? Explain 3 bit Synchronous counter.

Q -5 Answer the following questions 20
1. Explain 2 stage and 5 stage pipeline in detail.

2. Explain RISC and CISC in detail.

<div align="center">OR</div>

Q-5   **Answer the following questions**   20
   1. Explain instruction format in detail.
   2. What is Addressing Technique? Explain any three addressing technique.