Vidya Vikas Mandal's
Shree Damodar College of Commerce & Economics, Margao-Goa
FY BCA, Semester-I, Semester End Examination, October 2019
Computer Organization and Architecture: BCA-102 (old course)

Duration: 2 hours   **Total Marks:** 50

Instructions:

    i)   *Questions 1-5 are compulsory.*

    ii)   *Figures to the right indicate full marks*

Q.1.A Match the items in Column A with their corresponding items in Column B   **(5x1=5)**

Column A	Column B
a) Second Generation Computers	1) Sequencing
b) Von Neumann Machine	2) Vacuum Tubes
c) ENIAC	3) Transistors
d) Interrupt	4) Stored Program Concept
e) ALU	5) DRAM
	6) Program
	7) Binary data

B) Fill in the Blanks   **(5x1=5)**

1. The _____ is a building block for computer systems, which is smaller, cheaper and dissipates less heat as compared to vacuum tubes.
2. A register called _____ is employed to temporarily hold operands and results of ALU operation.
3. The element of an instruction which specifies the operation to be performed is called

    _____.
4. In _____ implementation the control unit is essentially a state machine circuit.
5. Computer _____ refers to the attributes of the system that have direct impact on the logical execution of a program.

Q.2. Answer the following:

    A. What do your understand by a bus.   (2)

    B. State and explain the 2 approaches in dealing with multiple interrupts.   (3)

    C. Write a note explaining the different Addressing Modes.   (5)

Q.3. Answer the following:

    A. Differentiate between serial and parallel interface   (2)

    B. Explain the major functions of an I/O Module   (3)

    C. Write a note on Programmed I/O technique.   (5)

Q.4. Answer the following:

    A. What do you understand by a micro-operation? (2)

    B. What is a hardwired control unit? List its demerits. (3)

    C. Explain the structure of the Control Unit by means of a diagram. Explain the inputs and outputs of the control unit. (5)

Q.5. Answer the following:

    A. What is an Integrated Circuit? (2)

    B. What is an interrupt? Describe the different classes of interrupt. (3)

    C. C Write a note on Magnetic Disk. (5)