SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY, INDORE
DEPARTMENT OF COMPUTER SCIENCE AND ENGG.

Vision of the Department
"To be renowned for excellence in Computer Science & Engineering."

Mission of the Department
"To impart quality education, meeting the latest industry requirements, futuristic research & developments in Computer Science & Engineering.

MID SEM TEST-I

CLASS: - I YEAR SECTION: E SEM:-II **TIME- 01 Hr**
SUBJECT NAME: Computer System Organization (BTCS-404) **MAX MARKS: 20**

NOTE :-1. Attempt any 4 question.

Q. No.	Question	Max Marks
Q.1	What is instruction cycle? Explain different phases of instruction cycle & show flow chart of instruction cycle?	5
Q.2	Explain von Neumann model of computer with block diagram & its features?	5
Q.3	**SHORT NOTES ON : (1)** System bus (2) Von Neumann bottleneck (3) addressing modes Or With reference to 8085 micro processor, explain databus, control bus and address bus.	5
Q.4	**Explain the following:** (1) Program counter, (2) Instruction register , (3) MAR, (4) MBR, (5)Accumulator	5
Q.5	Explain and draw a diagram of bus system that uses multiplex K register of n bits each to produce an n-line common bus with merits of bus system.	5

MID SEM TEST-I
Feb-2018

ASS: - II YEAR SECTION: CS-C SEM:- IV
BJECT NAME: Computer System Organization (BTCS-404)

TIME- 01 Hr
MAX MARKS: 20

)TE :-All Questions are compulsory.

).	Question	Max Marks	CO Mapped
1	**Differentiate Between Computer Architecture and Organization.**	2	CO1
2	**Consider the following code fragment:** **ADDI R1,R0,#1 //R0=117** **ADD R2,R0,R0** **ADDI R3,R0,#128** **Loop: MUL R1,R1,#2** **ADDI R2,R2,#1** **BNE R2, R3, loop** **(a) No. of Instructions executed after this code.** **(b) Find the value of R1 ← R1+R2**	4	CO1
.3	**What number is represented by the 32-bit floating point representation:** ***01000010101001110001000000000000***	3	CO2
.4	***Explain Booth's multiplication algorithm. Consider X and Y with X=1010 & Y=0110. Compute the product P=X*Y.***	5	CO2
5	***Define the following term :*** ***(a) Direct addressing mode (b) Register Indirect addressing mode*** ***(c) Displacement addressing mode***	6	CO1

OURSE OUTCOME:

O1-Students should perceive the behavior, architecture, internal details and structure of different building blocks f a computer system.

O2- Student should recognize the instruction set, basic programming and architecture of 8085 Microprocessor.

)3- Students should understand and learn different I/O interfaces and communication between the components omputer system.

- Student should able to describe memory management in detail

CLASS: -II **MID SEM TEST-I**

SECTION: CS-B

SUBJECT NAME: Computer System Organization (BTCS-404) **SEM:-IV** **TIME- 01 Hr**

NOTE :-Each question carries equal marks. Attempt any four questions. **MAX MARKS: 20**

Q. No.	Question	Max Marks
Q.1	a) Explain Von-Neumann Model with its expanded Architecture and bottleneck. b) What is MBR, MAR, IR, IBR, PC, AC & MQ? Explain.	5
Q.2	a) Explain Bus System in detail. b) Explain about Fetch-Execute Cycle of the instruction.	5
Q.3	What are different Cycles of Micro operations? Explain. OR Explain Registers with its types.	5
Q.4	Explain Addressing Modes with types in detail.	5
Q.5	Explain the organization of Microprocessor 8085 in brief. What are its different Pins?	5