FACULTY OF COMPUTER APPLICATIONS
Bachelor of Computer Applications

- **Sem.** 1
- **Subject Code** : 05BC3102
- **Subject** : Basic of Web Developemt
- **Course Objectives** :
    1. To understand basic organization of digital computer.
    2. To understand various digital circuits and components.
    3. To understand basics of CPU.
    4. To understand basics of IO.
    5. To understand basics of Memory.
- **Prerequisites: Knowledge of Basic Computer &input output devices**

Unit No	Topics Covered	No of lectures required
1	Basic Of Digital Computer: Digital Computers, Characteristic of Digital Computer, Block Diagram of Digital Computer, Introduction of Number System, Multiplication and division of binary number, Floating Point Representation, Fixed Point Representation, Error detection code (Parity bit)	**07**
2	Digital Logic Circuit: Logic Gates, Boolean Algebra, Map Simplification, Combinational Circuits, Flip-Flops and Sequential circuits.	**13**
3	Digital Components: Integrated Circuits, Decoders, Encoder,Multiplexers, De-multiplexer, Registers, Shift Registers and Binary Counters.	**08**
4	Central Processing Unit: Instruction code, Common Bus System, GeneralRegisterOrganization, StackOrganization, Addressing Modes.	**07**
5	Input – Output and Memory Organization: Peripheral Devices, Input – Output Interface, Asynchronous Data Transfer, Modes of Transfer, DMA, Memory Hierarchy, Main Memory, Auxiliary Memory and Cache Memory	**10**

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Course Outcomes:

1. Outlinetheorganizationofa digital computersystem and understandthedigitalrepresentationofdataanddifferentiatebetweennumbersystemsandcod es.
2. DescribelawsofBooleanAlgebraandtheirusage, understandfunctionsoflogicgates and understandtheconceptofsequentiallogicandcombinationalcircuit
3. Under stand the component of the CPU.
4. Outlinetheorganizationofacomputersystemintermsofitsmaincomponent
5. Understandtheconceptofsystemmemoryhierarchy and input/output interface.

Course Outcomes – Program Outcomes Mapping Table:

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
05BH0102.1	M	L					H	
05BH0102.2	M	M					M	
05BH0102.3	L	L					M	
05BH0102.4	L	L					M	
05BH0102.5	M	M				M	H	

Course Outcomes – Program Specific Outcomes Mapping Table :

	PSO1	PSO2	PSO3
05BH0102.1			L
05BH0102.2			L
05BH0102.3			L
05BH0102.4			M
05BH0102.5			M

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Text Book :

"Computer System Architecture", M. Morris Mano, Pearson Publication, Third Edition.

Reference Books :

"Computer System Architecture", John. P. Hayes, McGraw Hill Education, Third Edition.

"Computer Architecture and parallel processing", Hwang K. Briggs, McGraw Hill Education, First Edition.

"Computer Organization and Architecture", Ikvinderpal Singh, Baljinder Singh, Khanna Publishers, First Edition.

"Fundamentals of Digital Circuits", A. Anand Kumar, PHI Publishers, Second Edition.

Web References:

1. **https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web &cd=1&ved=2ahUK EwjezrrhmOrgAhUNk3AKHb9vAJYQFjAAegQICRAC&url=https%3A% 2F%2Ffacult y.psau.edu.sa%2Ffiledownload%2Fdoc-10-pdf-d171a71acbe44cd5cd2f78a40570a069-original.pdf&usg=AOvVaw1AkKILXxtjpEJAV74qSEqvApp References :**

App References:

1. **https://play.google.com/store/apps/details?id=com.faadooengineers.free_computerorg anizationarch&hl=en**
2. **https://play.google.com/store/apps/details?id=com.cdac.csa&hl=en_US**

Syllabus Coverage from text /reference book & web/app reference:

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Unit #	Chapter Numbers
1	TextBook,Ch.1:[1.1] Ch.3:[3.1 to 3.6]
2	TextBook,Ch.1:[1.2to1.7]
3	TextBook,Ch.2:[2.1to 2.6]
4	TextBook,Ch.5:[5.1,5.2]Ch.8:[8.2to 8.3,8.5]
5	TextBook,Ch.11:[11.1to11.4,11.6] Ch.12:[12.1 to12.3,12.5]