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**KNS INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF ECE**

**Computer Organization and Architecture**

**1st Internal Question Bank**

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| **Q.No** | **SYLLABUS**  **Module 1, 2 and Module 3** | **CO** | **PO** |
| **QUESTION** |
| 1 | With a neat diagram, explain basic operational concept of computer. | CO1 | 1,2,3,4,5 |
| 2 | Explain in brief different types of key parameters that affect the processor performance. | CO1 | 1,2,3,4,5 |
| 3 | What is a Bus? Explain the Bus Structure with a neat sketch. | CO1 | 1,2,3,4,5 |
| 4 | Illustrate Instruction and Instruction sequencing with an example. | CO1 | 1,2,3,4,5 |
| 5 | Define Byte Addressability, Big-endian and Little-endian assignments. | CO1 | 1,2,3,4,5 |
| 6 | Represent 85.125 in IEEE floating point using single precision. | CO1 | 1,2,3,4,5 |
| 7 | Explain the basic functional units of a computer with neat diagram. | CO1 | 1,2,3,4,5 |
| 8 | Explain basic operational concept along with the connection between the processor and the memory. | CO1 | 1,2,3,4,5 |
| 9 | How to measure the performance of a computer? Explain basic performance equation in detail. | CO1 | 1,2,3,4,5 |
| 10 | Explain IEEE standard for floating point numbers. | CO1 | 1,2,3,4,5 |
| 11 | Explain memory location and addresses along with byte addressability with relevant diagram. | CO1 | 1,2,3,4,5 |
| 12 | Explain Branching and Condition Codes in detail. | CO1 | 1,2,3,4,5 |
| 13 | Explain number, Arithmetic operations, and characters. | CO1 | 1,2,3,4,5 |
| 14 | What is an addressing mode? Explain all (six) types of addressing mode with examples. | CO2 | 1,2,3,4,5 |
| 15 | Explain various assembler directives used in assembly language program. | CO2 | 1,2,3,4,5 |
| 16 | With neat block diagram, describe the input and output operations. | CO2 | 1,2,3,4,5 |
| 17 | Explain the operation of stack, with an example | CO2 | 1,2,3,4,5 |
| 18 | What are stacks? Explain its uses along with line code to Implement stack. | CO2 | 1,2,3,4,5 |
| 19 | What are queues? Give the differences between stacks and queues. | CO2 | 1,2,3,4,5 |
| 20 | Define subroutine. Explain subroutine linkage using a link register with a neat sketch. | CO2 | 1,2,3,4,5 |
| 21 | Explain subroutine nesting along with their classification with a neat diagram. | CO2 | 1,2,3,4,5 |
| 22 | Explain passing parameters using registers and passing parameters using memory with an example. | CO2 | 1,2,3,4,5 |
| 23 | Explain passing parameters using pointers and passing parameters using stack with an example. | CO2 | 1,2,3,4,5 |
| 24 | Explain the shift and rotate operation with explain. | CO2 | 1,2,3,4,5 |
| 25 | Explain any two logic instruction with the help of examples. | CO2 | 1,2,3,4,5 |
| 26 | What is the necessity of I/O interface? Explain accessing of I/O devices with a neat diagram along with their requirements. | CO3 | 1,2,3,4,5 |
| 27 | With a neat block diagram explain the I/O interface unit along with I/O interface for input and out devices. | CO3 | 1,2,3,4,5 |
| 28 | Explain I/O interfacing techniques in detail. | CO3 | 1,2,3,4,5 |
| 29 | What is interrupt? With example explain the concept of interrupts. | CO3 | 1,2,3,4,5 |
| 30 | Explain interrupt hardware for single and multi level interrupt with a neat diagram. | CO3 | 1,2,3,4,5 |
| 31 | Explain the concept of (a) enabling and disabling interrupts (b) handling multiple devices (c) controlling device requests | CO3 | 1,2,3,4,5 |
| 32 | Explain the concept of DMA along with registers in a DMA interface in detail with a example. | CO3 | 1,2,3,4,5 |
| 33 | Explain the use of DMA in a computer system with a neat diagram. | CO3 | 1,2,3,4,5 |
| 34 | Explain the concept of Vectored Interrupt. | CO3 | 1,2,3,4,5 |

Signature of the Staff HOD