## Question Bank for S.E. (Sem-IV) Examination (A.Y. 2019-2020)

| Code of Institute: | TSEC (238) |
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| Branch: | COMPUTER |
| Sem: | IV |
| Subject Name (with Subject Code): | COA (CSC***) |
| Module Number and Title (if any): | Entire syllabus |
| Number of questions: | $\mathbf{1 0}$ |

## Important Note: All Questions Compulsory.

Only one option is correct for each question.
Each question carries 0.5 mark each.

| Q. <br> No. |  |  |
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| $\mathbf{1}$ |  | Which of the following is NOT true about Control and Status registers |
|  | (a) | Not visible to the programmer. |
|  | (b) | They are used by control unit. |
|  | (c) | These are accessible to the programmer. |
|  | (d) | These are privileged registers and used by operating system programs only. |
| $\mathbf{2}$ |  | Which of the following is NOT true about condition codes |
|  | (a) | Condition codes are the bits that are set as a result of some ALU operation |
|  | (b) | They are called as Flags |
|  | (c) | Programmer can explicitly refer and alter them |
|  | (d) | They are transparent to the programmer |
| $\mathbf{3}$ |  | Consider a memory module of 1024 locations. Each location can store 16 bits of <br> information. What is the size of the memory, size of address bus, size of data bus <br> and size of decoder? |
|  | (a) | Size: Memory- 1024X 16 B, address bus = 10bits, data bus=4 bits, decoder: $10: 1024$ |
|  | (b) | Size: Memory- 1024X 16 bits, address bus = 1024 bits, data bus=16 bits, decoder: <br> 1024:10 |
|  | (c) | Size: Memory- 16KB, address bus = 10bits, data bus=16 bits, decoder: 10:1024 |
|  | (d) | Size: Memory- 1024B, address bus = 10 bits, data bus=4 bits, decoder: 1024:10 |
| $\mathbf{4}$ |  | More opcodes in fixed length Instruction Format means |
|  | (a) | More bits in opcode field and less bits for addressing |
|  | (b) | More bits for the instruction length, more bits in the opcode field and less bits for <br> addressing |
|  | (c) | More bits in instruction length, more bits in the opcode field and more bits in the <br> addressing |
| $\mathbf{5}$ | (d) | More bits in the instruction length, less bits in the opcode field |
|  | (a) | Large no of opcodes, Different opcode lengths and Flexible addressing |
|  | (b) | Large no of opcodes and Flexible addressing |

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|  | (c) | Small number of opcodes but different opcode lengths |
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|  | (d) | Large number of opcodes with Fixed opcode lengths |
| $\mathbf{6}$ |  | Identify the addressing mode in the following instruction: Add (R1), R2 |
|  | (a) | Indirect addressing |
|  | (b) | Direct addressing |
|  | (c) | Register Indirect |
|  | (d) | Register Addressing |
| $\mathbf{7}$ |  | Which of the following instruction cycle states involve indirection? |
|  | (a) | Operand Fetch, operand store and operand address calculation |
|  | (b) | Operand Fetch, operand store |
|  | (c) | Operand fetch, operand address calculation |
|  | (d) | Operands store, operand address calculation |
| $\mathbf{8}$ |  | For Interrupts choose Incorrect option |
|  | (a) | The processor can be engaged in executing other instructions while an I/O operation is <br> in progress. (b) |
|  | The processor's efficiency cannot be improved |  |
|  | (c) | IO modules can interrupt the normal processing of the processor |
| $\mathbf{9}$ |  | ISR is executed by the processor in response to an interrupt |
|  | (a) | After the Fetch Cycle is completed |
|  | (b) | Before Instruction address Calculation |
|  | (c) | Before Fetch Cycle |
|  | (d) | After Operand Store is completed |
| $\mathbf{1 0}$ |  | Which of the following is an example of Software Interrupt? |
|  | (a) | Division by zero |
|  | (b) | Power Failure |
|  | (c) | Service request from Printer |
|  | (d) | Service request from Keyboard |


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