Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: CSC501 and Course Name: Microprocessor

Time: 1 hour

Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

| Q1. | DT/R pin of 8086 is connected to pin of 8286 |
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| Option A: | OE pin |
| Option B: | T pin |
| Option C: | CS pin |
| Option D: | R pin |
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| Q2. | By using TRAP flag 8086 can |
| Option A: | Enable the FLAG register |
| Option B: | Can execute one instruction at a time |
| Option C: | Can execute group of instruction at a time |
| Option D: | Can add breakpoint |
| | |
| Q3. | A0 pin of 8086 is used for selecting the data from |
| Option A: | Even bank |
| Option B: | Odd bank |
| Option C: | Both |
| Option D: | Parity bank |
| | |
| Q4. | Maximum mode of 8086 is |
| Option A: | Uniprocessor system |
| Option B: | Multiprocessor system |
| Option C: | Superscalar system |
| Option D: | Single processor system |
| Q5. | With 8086 the use of DX register is to |
| Option A: | |
| • | Store count value |
| Option B: | Store Operations result |
| Option C: | Store I/O addresses |
| Option D: | Store data value |
| | |

| Q6. | |
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| | In 8086 the overflow flag is set when |
| Option A: | The sum is more than 16 bit |
| Option B: | Carry and sign flags are set |
| Option C: | Signed numbers go out of their range after an arithmetic operation |
| Option D: | During subtraction |
| Q7. | The instruction, CMP to compare source and destination operands it performs |
| Option A: | Addition |
| Option B: | Subtraction |
| Option C: | Multiplication |
| Option D: | Division |
| Q8. | Which of the following instruction is not valid? |
| Option A: | MOV AX, BX |
| Option R: | MOV DS, 5000H |
| Option C: | MOV AX, 5000H |
| Option D: | PUSH AX |
| option D. | |
| Q9. | The instructions that involve various string manipulation operations are |
| Option A: | branch instructions |
| Option B: | flag manipulation instructions |
| Option C: | shift and rotate instructions |
| Option D: | string instructions |
| • | |
| Q10. | CBW instruction converts |
| Option A: | Byte to word |
| Option B: | Word to byte |
| Option C: | Signed no to unsigned no |
| Option D: | Unsigned no to signed no |
| Q11. | Which of the following is conditional branch instruction? |
| Option A: | CALL |
| Option B: | Loop |
| Option C: | JMP |
| Option D: | JNC |
| 0.4.0 | |
| Q12. | When 8259 PIC's SP/EN pin is connected to GND |
| Option A: | Its Master PIC |
| Option B: | Its slave PIC |
| Option C: | Its Core PIC |
| Option D: | Its basic PIC |
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| Q13. | The fully nested mode of 8259 PIC is also called as |
|-----------|---|
| Option A: | Fixed priority mode |
| Option B: | Rotating Priority mode |
| Option C: | Automatic rotation |
| Option D: | Specific rotation |
| option B. | |
| Q14. | While responding to an interrupt 8086 microprocessor doesn't |
| Option A: | It pushes flags to stack |
| Option B: | Pushes CS to stack |
| Option C: | Pushes IP to stack |
| Option D: | Push the content of general purpose register to stack |
| | |
| Q15. | The Synchronization between microprocessor and memory is done by |
| Option A: | ALE |
| Option B: | HOLD |
| Option C: | READY |
| Option D: | HLDA |
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| Q16. | Following register of 8237 DMAC is used for storing the no. of bytes to be |
| | transferred |
| Option A: | Address register |
| Option B: | Word count register |
| Option C: | Command register |
| Option D: | Status register |
| 0.17 | |
| Q17. | All the functions of the ports of 8255 are achieved by programming the bits of an |
| | internal register called |
| Option A: | data bus control |
| Option B: | read logic control |
| Option C: | control word register |
| Option D: | address buffers |
| Q18. | The following mode of 8253 PIT can be used in digital clock |
| Option A: | Square Wave Generator |
| Option B: | Programmable Rate Generator |
| Option C: | Software Triggered Strobe |
| Option D: | Programmable One Shot |
| | |
| Q19. | In square wave generator mode in case of odd count(N) the output stays high for |
| Option A: | |
| | N+2 clock cycles |
| Option D: | N 2 clock cyclos |
| Option B: | N-2 clock cycles |
| Option C: | (N+1)/2 clock cycles |

| Option D: | (N-1)/2 clock cycles |
|-----------|---|
| Option D. | |
| Q20. | The memory of 80386 was divided into following no of banks |
| Option A: | 2 banks |
| Option B: | 4 banks |
| Option C: | 6 banks |
| Option D: | 8 banks |
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| Q21. | Following control register of 80386 holds the page directory physical base |
| | address. |
| Option A: | CRO |
| Option B: | CR1 |
| Option C: | CR2 |
| Option D: | CR3 |
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| Q22. | The flag register of 80386 is also called as |
| Option A: | Enabled flag register |
| Option B: | Extended flag register |
| Option C: | Emulated flag register |
| Option D: | Extra flag register |
| Q23. | The type of execution which means that the CPU should guess which of the next |
| <u> </u> | instructions can be executed earlier is |
| Option A: | speculative execution |
| Option B: | out of turn execution |
| Option C: | dual independent bus |
| Option D: | multiple branch prediction |
| Q24. | The salient feature of Pentium is |
| Option A: | superscalar architecture |
| Option B: | superpipelined architecture |
| Option C: | superscalar and superpipelined architecture |
| Option D: | Scalable Architecture |
| | |
| Q25. | The stage in which the CPU fetches the instructions from the instruction cache in |
| | superscalar organization is |
| Option A: | Prefetch stage |
| Option B: | D1 (first decode) stage |
| Option C: | D2 (second decode) stage |
| Option D: | Final stage |