These are sample MCQs to indicate pattern, may or may not appear in examination

## University of Mumbai <br> Online Examination 2020

Program: TE Computer Engineering
Curriculum Scheme: Revised 2016
Examination: Third Year Semester V
Course Code: CSC501 and Course Name: Microprocessor Time: 1hour Max. Marks: 50
Note to the students:- All the Questions are compulsory and carry equal marks .

| Q1. | converts the programs written in assembly language into machine |
| :--- | :--- |
| Option A: | Machine compiler |
| Option B: | Interpreter |
| Option C: | Assembler |
| Option D: | Converter |


| Q2. | If there is a carry from lowest nibble during addition,____ flag sets. |
| :--- | :--- |
| Option A: | Carry |
| Option B: | Auxiliary carry |
| Option C: | Over flow |
| Option D: | Sign |


| Q3. | To obtain 16bit data bus width, the two $4 \mathrm{k}^{*} 8$ chips of RAM and ROM are arranged in |
| :--- | :--- |
| Option A: | Serial |
| Option B: | Parallel |
| Option C: | serial as well as parallel |
| Option D: | parallel followed by serial |


| Q4. | To address a memory location out of $N$ locations, number of address lines required is |
| :--- | :--- |
| Option A: | $\log$ N (base 2) |
| Option B: | $\log$ N (base 10) |
| Option C: | $\log$ N (base e) |
| Option D: | $\log 2 N$ (base e) |


| Q5. | In 8086 microprocessor the following has the highest priority among all type interrupts. |
| :--- | :--- |
| Option A: | NMI |
| Option B: | DIV 0 |
| Option C: | TYPE 255 |
| Option D: | OVER FLOW |


| Q6. | In PPI, handshaking signals are generated by |
| :--- | :--- |
| Option A: | PORT A |
| Option B: | PORT B |
| Option C: | PORT C |
| Option D: | GROUP A |


|  | Data segment |
| :--- | :--- |
| Option A: | Code segment |
| Option C: | Stack segment |
| Option D: | Extra segment |


| Q8. | 8086 is interfaced to two 8259s (Programmable interrupt controllers). If 8259s are in <br> master slave configuration the number of interrupts available to the 8086 microprocessor <br> is |
| :--- | :--- |
| Option A: | 8 |
| Option B: | 16 |
| Option C: | 15 |
| Option D: | 64 |


| Q9. | Pentium has following pipelines. |
| :--- | :--- |
| Option $\mathrm{A}:$ | AB |
| Option $\mathrm{B}:$ | XY |
| Option $\mathrm{C}:$ | PQ |
| Option $\mathrm{D}:$ | UV |


| Q10. | If the size of the segment is 64 kb, what will be the starting and ending off set addresses of <br> it |
| :--- | :--- |
| Option A: | 0000 H to 7 FFFH |
| Option B: | 0000 H to FFFFH |
| Option C: | 8000 H to FFFFH |
| Option D: | 00000 H to FFFFFH |


| Q11. | Which of the following instruction is not valid? |
| :--- | :--- |
| Option A: | MOV AX, BX |
| Option B: | MOV DS, 5000 H |
| Option C: | MOV AX, 5000H |
| Option D: | PUSH AX |


| Q12. | PIC works in Special Fully Nested Mode , if this data bit is set to 1 in ICW4. |
| :--- | :--- |
| Option A: | D1 |
| Option B: | D2 |
| Option C: | D3 |
| Option D: | D4 |


| Q13. | BIU Prefetch the instruction from memory and store them in |
| :--- | :--- |
| Option A: | Instruction queue |
| Option B: | Instruction Pointer |
| Option C: | Stack Pointer |
| Option D: | Memory |


| Q14. | How much virtual memory can be accessed by 80386 microprocessor? |
| :--- | :--- |
| Option A: | 1 MB |
| Option B: | 4 MB |
| Option C: | 4 GB |
| Option D: | 64 TB |


| Q15. | Which of the following is not a data copy/transfer instruction? |
| :--- | :--- |
| Option A: | MOV |
| Option B: | PUSH |
| Option C: | DAS |
| Option D: | POP |


| Q16. | The |
| :--- | :--- |
| Option A: | XLAT |
| Optanslates a byte from one code to another code |  |
| Option C: | XCHNG |
| Option D: | PUSH |


| Q17. | If the paging unit is enabled, then it converts a linear address into |
| :--- | :--- |
| Option A: | effective address |
| Option B: | physical address |
| Option C: | segment base address |
| Option D: | Offset address |


| Q18. | Which is a correct statement from the following? |
| :--- | :--- |
| Option A: | upipe executes simple instructions only |
| Option B: | v pipe executes simple instructions only |
| Option C: | v pipe executes simple and complex instructions |
| Option D: | Floating point instructions can be paired |


| Q19. | In memory interfacing, following component is used for memory chip selection. |
| :--- | :--- |
| Option A: | Transceiver |
| Option B: | Bus Controller |
| Option C: | Timer |
| Option D: | Decoder |


| Q20. | What does it mean by bubble in pipeline? |
| :--- | :--- |
| Option A: | Flushing and reloading of pipeline |
| Option B: | Executing the instruction from pipeline |
| Option C: | Decoding instruction from pipeline |
| Option D: | No reloading of pipeline |


| Q21. | Direction flag is used with ___. |
| :--- | :--- |
| Option A: | String instructions |
| Option B: | Stack Instructions |
| Option C: | Arithmetic Instructions |
| Option D: | Branch Instructions |


| Q22. | An initialization control word, which is not used in single mode operation of PIC is |
| :--- | :--- |
| Option A: | ICW1 |
| Option B: | ICW2 |
| Option C: | ICW3 |


| Q23. | MESI protocol requires Pentium to monitor all accesses to main memory in multiprocessor <br> system. It is called |
| :--- | :--- |
| Option A: | Consistency |
| Option B: | Coherency |
| Option C: | Reliability |
| Option D: | Bus snooping |


| Q24. | register is used as a default counter in case of string and loop instructions. |
| :--- | :--- |
| Option $\mathrm{A}:$ | AX |
| Option $\mathrm{B}:$ | BX |
| Option C: | CX |
| Option D: | DX |


| Q25. | What does indicate exclusive state of cache memory? |
| :--- | :--- |
| Option A: | The current line has been modified and available in single cache |
| Option B: | The current line has not been modified and available in single cache |
| Option C: | The current line has been modified and available in more than one cache |
| Option D: | The current line has not been modified and available in more than one cache |

