Examination October 2020

B.Sc. T.Y (Sem-V)

2208A Electronics Paper- XVI A) Micro Controller - I

Time: One Hour   **Max. Marks: 25**

Instructions
Solve any 25 questions from Q.1 to Q.30

Solve any 25 questions from Q.31 to Q.60

1 8051 microcontroller has _____ of on chip program memory.

(A)256 Bytes   (B)1KB   (C)2KB   (D)4KB

2 8051 microcontroller has _____ KB program external ROM and _____ KB external RAM accessibility.

(A)4, 64   (B)64, 4   (C)4, 4   (D)64, 64

3 8051 microcontroller has _____ bit _____ bus.

(A)8, Data   (B)16, Data   (C)8, Address   (D)20, Address

4 8051 microcontroller has _____ bi-directional and individual addressable lines arranged as four 8-bit ports P0-P3.

(A)4   (B)8   (C)16   (D)32

5 8051 microcontroller has _____ timers/counters of _____ bits.

(A)2, 4   (B)4, 8   (C)2, 16   (D)4, 16

6 8051 microcontroller has _____ register banks.

(A)2   (B)4   (C)8   (D)16

7 Bit addressable memory locations in 8051 microcontroller are of _____ bits.

(A)8   (B)16   (C)32   (D)128

8 _____ register of 8051 microcontroller has no internal RAM address.

(A)ACC   (B)TMOD   (C)PC   (D)PCON

9 _____ register of 8051 microcontroller is bit addressable.

(A)SBUF   (B)TMOD   (C)DPL   (D)ACC

10 _____ number of address lines is used to decode 2K bytes of memory.

(A)10   (B)11   (C)12   (D)13

11 If RS0=0 and RS1=1 then resister bank _____ of 8051 microcontroller is selected.

(A)0   (B)1   (C)2   (D)3

12 _____ instruction in 8051 microcontroller takes 48 oscillator periods to execute.

(A)ADD   (B)ANL   (C)SJMP   (D)DIV

13 _____ instruction of 8051 microcontroller does not affect carry flag.

(A)INC   (B)RL   (C)MUL   (D)SUBB

14 _____ pin of 8051microcontroller is multiplexed for external interrupt.

(A)P3.0   (B)P3.1   (C)P3.3   (D)P3.4

15 ANL A, _____ is used to clear MSB of Accumulator in 8051 microcontroller.

(A)7FH   (B)0FH   (C)F0H   (D)80H

16 Mode _____ of timer in 8051 microcontroller is also called auto-reload mode.

(A)0   (B)1   (C)2   (D)3

17 Bit _____ of PSW register of 8051 microcontroller is Auxiliary Carry flag

(A)0   (B)2   (C)6   (D)7

18 Which one is the correct instruction in 8051 microcontroller?

(A)ADD A, @R2   (B)ADD B, @R1   (C)ADD A, #255   (D)ADD B, A

19 Which one is an invalid instruction in 8051 microcontroller?

(A)INC A   (B)DEC @R1   (C)MUL A, B   (D)ADD A, B

20 Which one is a valid instruction in 8051 microcontroller?

(A)XCHD A, @R0   (B)XCHD A, R0   (C)XCHD A, 34H   (D)XCHD A, B

21 Which one is an invalid instruction in 8051 microcontroller?

(A)CPL C   (B)ORL C, 22H   (C)ANL C, /22H   (D)XRL C, 22H

22 _____ of 8051 microcontroller is an 8-bit I/O port without internal pull-up.

(A)PORT 0   (B)PORT 1   (C)PORT 2   (D)PORT 3

23 PC of 8051 microcontroller is a _____ bit register used to hold the _____ of the instructions.

(A)8, address   (B)8, data   (C)16, address   (D)16, data

24 The 128 bytes of internal RAM of 8051 microcontroller is divided into _____ parts.

(A)2   (B)3   (C)4   (D)5

25 Which of the following Interrupt has highest priority?

(A)IE0   (B)IE1   (C)TF0   (D)TF1

26 IE1 interrupt bit in 8051 microcontroller is available in _____ register.

(A)TCON   (B)IP   (C)IE   (D)TMOD

27 Mode 0 of timer in 8051 microcontroller uses _____ bits of TLx and _____ bits of THx.

(A)5, 8   (B)8, 5   (C)8, 8   (D)8, 0

28 RISC is abbreviation of _____.

(A)Reduced Instruction Set Computer (B)Remote Instruction Set Computer (C)Random Instruction Set Computer (D)Rapid Instruction Set Computer

29 _____ pin of Port 3 in 89C2051 microcontroller is not accessible as a general-purpose I/O pin.

(A)P3.4   (B)P3.5   (C)P3.6   (D)P3.7

30 _____ helps in generation of waveforms in microcontroller.

(A)Input   (B)Output   (C)Timer   (D)Memory