

**Code No: A109210503****Set No. 1****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****II B.Tech. I Sem., I Mid-Term Examinations, September – 2010****DIGITAL LOGIC DESIGN****Objective Exam**Name: \_\_\_\_\_ Hall Ticket No. 

						A			
--	--	--	--	--	--	---	--	--	--

**Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.****I Choose the correct alternative:**

1. The register AX is used as [      ]  
a. offset storage                      b. default counter                      c. accumulator                      d. none
2. Which of the following codes uses 7 bits to represent a character [      ]  
a. ASCII                      b. BCD                      c. EBCDIC                      d. GRAY
3. If  $(123)_5 = (X3)_y$  then the possible values of x are [      ]  
a.4                      b.1                      c.3                      d.2
4. Which of the following are not weighted codes [      ]  
a. Octal number                      b. Decimal number                      c. Excess 3 code                      d. Binary number
5. Which of the following is not a register [      ]  
a. Accumulator                      b. Buffer                      c. Stack pointer                      d. Program counter
6. The first operating system used in micro processor is [      ]  
a. Zenix                      b. DOS                      c. CP/M                      d. Multics
7. Minimum number of Nand gates required to construct full adder [      ]  
a.9                      b.10                      c.11                      d.12
8. Any given Boolean expression can be implemented by using [      ]  
a. Only NAND gates                      b. Only NOR gates                      c. Only AND gates                      d. both A and B
9. Which of the following logic families is well suited for high speed operation [      ]  
a. TTL                      b. ECL                      c. MOS                      d. CMOS
10. Addressing mode used in instruction ADD X Y is [      ]  
a. absolute                      b. immediate                      c. indirect                      d. index

**Cont....2**

**Code No: A109210503**

**:2:**

**Set No. 1**

**II Fill in the blanks:**

11. \_\_\_\_\_ is used to simplify a Boolean expression
12. \_\_\_\_\_ architecture is not suitable for realizing SIMD
13. Addressing mode using PUSH B instruction is \_\_\_\_\_
14. 'n' flip flops will divide the clock frequency by a factor of \_\_\_\_\_
15. In a positive edge triggered JK flip flop a low J and a low K produces \_\_\_\_\_
16. \_\_\_\_\_ type flip flop is preferred to design a boundary counter
17. \_\_\_\_\_ is a volatile memory
18. In \_\_\_\_\_ only one output line will be there irrespective of any number of input lines
19. Overflow can be identified by XOR ing \_\_\_\_\_ and \_\_\_\_\_
20. The cost for storing a bit is minimum in \_\_\_\_\_ memory device

-oOo-

**Code No: A109210503**

**Set No. 2**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**II B.Tech. I Sem., I Mid-Term Examinations, September – 2010**

**DIGITAL LOGIC DESIGN**

**Objective Exam**

**Name:** \_\_\_\_\_ **Hall Ticket No.**

						A				
--	--	--	--	--	--	---	--	--	--	--

**Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.**

**I Choose the correct alternative:**

1. Which of the following are not weighted codes [      ]  
a. Octal number                      b. Decimal number                      c. Excess 3 code                      d. Binary number
2. Which of the following is not a register [      ]  
a. Accumulator                      b. Buffer                      c. Stack pointer                      d. Program counter
3. The first operating system used in micro processor is [      ]  
a. Zenix                      b. DOS                      c. CP/M                      d. Multics
4. Minimum number of Nand gates required to construct full adder [      ]  
a.9                      b.10                      c.11                      d.12
5. Any given Boolean expression can be implemented by using [      ]  
a. Only NAND gates                      b. Only NOR gates                      c. Only AND gates                      d. both A and B
6. Which of the following logic families is well suited for high speed operation [      ]  
a. TTL                      b. ECL                      c. MOS                      d. CMOS
7. Addressing mode used in instruction ADD X, Y is [      ]  
a. absolute                      b. immediate                      c. indirect                      d. index
8. The register AX is used as [      ]  
a. offset storage                      b. default counter                      c. accumulator                      d. none
9. Which of the following codes uses 7 bits to represent a character [      ]  
a. ASCII                      b. BCD                      c. EBCDIC                      d. GRAY
10. If  $(123)_5 = (X3)_y$  then the possible values of x are [      ]  
a.4                      b.1                      c.3                      d.2

**Cont....2**

**Code No: A109210503**

**:2:**

**Set No. 2**

**II Fill in the blanks:**

11. 'n' flip flops will divide the clock frequency by a factor of \_\_\_\_\_
12. In a positive edge triggered JK flip flop a low J and a low K produces \_\_\_\_\_
13. \_\_\_\_\_ type flip flop is preferred to design a boundary counter
14. \_\_\_\_\_ is a volatile memory
15. In \_\_\_\_\_ only one output line will be there irrespective of any number of input lines
16. Overflow can be identified by XOR ing \_\_\_\_\_ and \_\_\_\_\_
17. The cost for storing a bit is minimum in \_\_\_\_\_ memory device
18. \_\_\_\_\_ is used to simplify a Boolean expression
19. \_\_\_\_\_ architecture is not suitable for realizing SIMD
20. Addressing mode using PUSH B instruction is \_\_\_\_\_

-oOo-

**Code No: A109210503**

**Set No. 3**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**II B.Tech. I Sem., I Mid-Term Examinations, September – 2010**

**DIGITAL LOGIC DESIGN**

**Objective Exam**

**Name:** \_\_\_\_\_ **Hall Ticket No.**

						A				
--	--	--	--	--	--	---	--	--	--	--

**Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.**

**I Choose the correct alternative:**

1. The first operating system used in micro processor is [      ]  
a. Zenix                      b. DOS                      c. CP/M                      d. Multics
2. Minimum number of Nand gates required to construct full adder [      ]  
a.9                      b.10                      c.11                      d.12
3. Any given Boolean expression can be implemented by using [      ]  
a. Only NAND gates                      b. Only NOR gates                      c. Only AND gates                      d. both A and B
4. Which of the following logic families is well suited for high speed operation [      ]  
a. TTL                      b. ECL                      c. MOS                      d. CMOS
5. Addressing mode used in instruction ADD X Y is [      ]  
a. absolute                      b. immediate                      c. indirect                      d. index
6. The register AX is used as [      ]  
a. offset storage                      b. default counter                      c. accumulator                      d. none
7. Which of the following codes uses 7 bits to represent a character [      ]  
a. ASCII                      b. BCD                      c. EBCDIC                      d. GRAY
8. If  $(123)_5 = (X3)_y$  then the possible values of x are [      ]  
a.4                      b.1                      c.3                      d.2
9. Which of the following are not weighted codes [      ]  
a. Octal number                      b. Decimal number                      c. Excess 3 code                      d. Binary number
10. Which of the following is not a register [      ]  
a. Accumulator                      b. Buffer                      c. Stack pointer                      d. Program counter

**Cont....2**

**Code No: A109210503**

**:2:**

**Set No. 3**

**II Fill in the blanks:**

11. \_\_\_\_\_ type flip flop is preferred to design a boundary counter
12. \_\_\_\_\_ is a volatile memory
13. In \_\_\_\_\_ only one output line will be there irrespective of any number of input lines
14. Overflow can be identified by XOR ing \_\_\_\_\_ and \_\_\_\_\_
15. The cost for storing a bit is minimum in \_\_\_\_\_ memory device
16. \_\_\_\_\_ is used to simplify a Boolean expression
17. \_\_\_\_\_ architecture is not suitable for realizing SIMD
18. Addressing mode using PUSH B instruction is \_\_\_\_\_
19. 'n' flip flops will divide the clock frequency by a factor of \_\_\_\_\_
20. In a positive edge triggered JK flip flop a low J and a low K produces \_\_\_\_\_

-oOo-

**Code No: A109210503****Set No. 4****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****II B.Tech. I Sem., I Mid-Term Examinations, September – 2010****DIGITAL LOGIC DESIGN****Objective Exam**Name: \_\_\_\_\_ Hall Ticket No. 

						A			
--	--	--	--	--	--	---	--	--	--

**Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.****I Choose the correct alternative:**

1. Any given Boolean expression can be implemented by using [      ]  
a. Only NAND gates      b. Only NOR gates      c. Only AND gates      d. both A and B
2. Which of the following logic families is well suited for high speed operation [      ]  
a. TTL      b. ECL      c. MOS      d. CMOS
3. Addressing mode used in instruction ADD X Y is [      ]  
a. absolute      b. immediate      c. indirect      d. index
4. The register AX is used as [      ]  
a. offset storage      b. default counter      c. accumulator      d. none
5. Which of the following codes uses 7 bits to represent a character [      ]  
a. ASCII      b. BCD      c. EBCDIC      d. GRAY
6. If  $(123)_5 = (X3)_y$  then the possible values of x are [      ]  
a.4      b.1      c.3      d.2
7. Which of the following are not weighted codes [      ]  
a. Octal number      b. Decimal number      c. Excess 3 code      d. Binary number
8. Which of the following is not a register [      ]  
a. Accumulator      b. Buffer      c. Stack pointer      d. Program counter
9. The first operating system used in micro processor is [      ]  
a. Zenix      b. DOS      c. CP/M      d. Multics
10. Minimum number of Nand gates required to construct full adder [      ]  
a.9      b.10      c.11      d.12

**Cont....2**

**Code No: A109210503**

**:2:**

**Set No. 4**

**II Fill in the blanks:**

11. In \_\_\_\_\_ only one output line will be there irrespective of any number of input lines
12. Overflow can be identified by XOR ing \_\_\_\_\_ and \_\_\_\_\_
13. The cost for storing a bit is minimum in \_\_\_\_\_ memory device
14. \_\_\_\_\_ is used to simplify a Boolean expression
15. \_\_\_\_\_ architecture is not suitable for realizing SIMD
16. Addressing mode using PUSH B instruction is \_\_\_\_\_
17. 'n' flip flops will divide the clock frequency by a factor of \_\_\_\_\_
18. In a positive edge triggered JK flip flop a low J and a low K produces \_\_\_\_\_
19. \_\_\_\_\_ type flip flop is preferred to design a boundary counter
20. \_\_\_\_\_ is a volatile memory

-oOo-