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MSc INFORMATION TECHNOLOGY(MSC IT)
MODEL QUESTION PAPER
END SEMESTER, SEMESTER-1

TIME: 2 HOUR

FM: 70

SUB: Introduction to Information Technology

PAPER: FCMIT101

SECTION A

Direction: ALL QUESTIONS ARE COMPULSARY

10X2 = 20

1. One nibble is equivalent to how many bits?

- a) 2
- b) 4
- c) 8
- d) 1

2. Which of the following is not a function of the Input Unit?

- a) It reads instructions and data from the outside world
- b) It converts the data into computer acceptable format
- c) It makes the data into user understandable format
- d) It supplies the data and instructions to the computer for further processing

3. Saving data and instructions to make them readily available is the job of _____

- a) Storage Unit
- b) Cache Unit
- c) Input Unit
- d) Output Unit

4. Which of the following are types of ROMs?

- a) SRAM & DRAM
- b) PROM & EPROM
- c) Only one type there is no further classification
- d) PROM & EROM

5. The binary equivalent of the decimal number 10 is _____

- a) 0010
- b) 10
- c) 1010
- d) 010

6. Convert the binary equivalent 10101 to its decimal equivalent.

- a) 21
- b) 12
- c) 22
- d) 31

7. Which of the following is not a type of computer code?

- a) EBCDIC
- b) BCD
- c) ASCII
- d) EDIC

8. Which of the following gate will give a 0 when both of its inputs are 1?

- a) AND
- b) OR
- c) NAND
- d) EXOR

9. Which of the following holds the last instruction fetched?

- a) PC
- b) MAR
- c) MBR
- d) IR

10. _____ is the assembly language for an imaginary architecture.

- a) Byte code
- b) Machine code
- c) Native code
- d) Executable code

11. Which of the following is not a way of acquiring software?

- a) Buying pre-written software
- b) Ordering customized software
- c) Downloading public-domain Software
- d) Duplicating the software

12. A transmission that generally involves dedicated circuits.

- a) simplex
- b) half duplex
- c) full duplex
- d) semi-duplex

13. A technique of transmitting data or images or videos (information) using a continuous signal.

- a) direct**
- b) network**
- c) Analog**
- d) multiple**

14. In this type of multiplexing time slots are preassigned to sources and fixed.

- a) TDM**
- b) Synchronous TDM**
- c) Asynchronous TDM**
- d) FDM**

15. In this technique, there is a link between subscriber and network and a local loop.

- a) SSDL**
- b) DSDL**
- c) ASDL**
- d) TSDL**

16. A _____ WAN can be developed using leased private lines or any other transmission facility

- a) Hybrids**
- b) peer-to-peer**
- c) Two-tiered**
- d) Three-tiered**

17. Allows the user to create and maintain a personal list of favorite URL addresses.

- a) Software**
- b) Web Servers**
- c) Web Browsers**
- d) WWW**

18. Which of the following is designed to control the operations of a computer?

- a) Application Software**
- b) System Software**
- c) Utility Software**
- d) User**

SEC-B

DIRECTION: Answer any 4 questions

5x4=20

1. List out various applications of computers.
2. Discuss the basic combination of gates. Explain it with the help of truth tables and symbols.
3. Write a note on computer architecture.
4. What are the types of memories available in the computer system? How are they organized in the hierarchy?
5. Write a short note on the following:
 - 1) OMR
 - 2) Speech Recognition System
6. Differentiate between a compiler and an interpreter.
7. Briefly explain few system utilities.
8. Explain the concept of Virtual memory.
9. What do you mean by multiplexing? Explain FDM.
10. Explain the circuit and packing switching techniques used in the computer network.
11. Perform the following conversions:
 - 1) Convert binary 00011011 to decimal
 - 2) Convert 121_{16} to decimal number.
 - 3) Convert $(214)_8$ into a binary number.
 - 4) Convert DA216 into the binary number system

SEC-C

Direction: Ans any 2 question

15x2=30

1. Discuss classification of computers according to their purpose, functionality and data handling.
2. What are LCD, DLP and Screen image projectors? Differentiate between them based on their working mode.
3. Describe the classification of programming languages?
4. Explain the OSI model with the help of a diagram.
5. Explain any three guided and unguided data transmission media.
6. Define any three
 - 1) Paging
 - 2) Threads
 - 3) Virtual memory
 - 4) Deadlock