

# Aryan College

## Computer Fundamental

### **Unit 1**

### **Introduction to Computer System**

1. List various characteristics of computer. (2017)
2. Give name of two super computers. (2017)
3. What do you mean by system software? (2017)
4. What is Computer? Explain classification of computers based on types. (2017, 2016)
5. What is Hardwar/Software? (2016)
6. Difference between hardcopy and softcopy. (2016)
7. Explain generation of computer. (2016,2008)
8. Draw a block diagram of computer system. Explain the function of various units of computer. (2016,2015,2011)
9. List advantages of IC technology over Transistor technology. (2015)
10. What is IC. (2014)
11. What is application software? (2014,2010)
12. Write a block diagram to illustrate basic organization of computer system. (2014,2009)
13. Define the term Hardware and Software. How Hardware and Software are necessary for each other? Discuss. (2014)
14. What is a computer? Why it is known as a data processor? Explain classification of computers.(2014)
15. Give full form of EDVAC. (2012)
16. What is mean by "Generation" in computer terminology? (2012)
17. List out and explain the characteristics of computer. (2012)
18. Write a short note on fifth generation of computer. (2012)
19. Write a name of computer which was made in first generation computer. (2011)
20. Write an example of Analog Computer. (2011)
21. Write an example of Hybrid Computer. (2011)
22. "Who is more intelligent – Human being and computer? " Justify your answer. (2011)
23. What are the five basic operation performed by any computer system? (2011)
24. List out four input and output devices. (2010)
25. What are the various component of computer system? (2010)
26. Give comparative study of mini computers, mainframe computers and super computer. (2009)
27. What is mean by "Generation " in computer technology? How many computer generations are there till now? (2009)
28. List out and explain characteristics of computer. (2008)
29. Hardware is one-time expense whereas software is continuing expense, why? (2008)
30. How many types of software available? Give two example of each. (2008)

### **Unit 2**

### **Input Devices**

1. What are the different types of mouse? (2017)
2. What do you mean by MODEM? (2017)
3. Write a short note on Scanner and Mouse. (2016)
4. What are input devices? Explain various input devices used with computer system. (2014,2008)
5. What is web camera? (2014)
6. What is bar code? (2012)
7. What are off-line data entry devices? (2012)
8. What is optical scanner? Describe the optical character reader, optical mark reader and optical bar code reader in brief. (2012)
9. Which liquid is used in touch sensitive screen monitor? (2011)

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10. Explain drum scanner. (2011)
11. What the use of Digitizer? (2011)
12. Write Short note on PDA. (2011)
13. Write short note on Touch pad. (2011)
14. Write full form of MICR. (2010)

## **Unit 3**

### **Output Devices**

1. Difference between plotter and pointer. (2016)
2. Difference between Dot Matrix printer and Laser Printer. (2016)
3. What are input and output devices. (2016)
4. What is plotter? What types of user need it? (2015)
5. Difference between Dot Matrix printer and Line Printer. (2011)
6. What is the unit of measuring printer output quality? According to this feature, what are the common classifications of printer? (2011,2008)
7. Why Laser printer is more suitable than Inkjet printer? (2011,2008)

## **Unit 4**

### **Computer Display**

1. Difference between CRT, LCD, LED, project display. (2016,2009)
2. Write short note on OCR, VGA, EGA. (2016)
3. Write full form of SXGA. (2010)
4. What is the difference between liquid crystal display and plasma display? (2010)

## **Unit 5**

### **Introduction to Memory**

1. What is Memory? Explain the various types of memory used in computer. (2017, 2016)
2. What is translator? Write short note on translator. (2017)
3. What is machine language? How does it differ from high level language? (2017)
4. What is linker and loader? (2017)
5. Short note on RAM and ROM. (2016)
6. What is memory? Explain the difference between volatile and non-volatile memory. Write an example of each type of memory. (2015)
7. Difference between UVEPROM and EEPROM. (2015)
8. What is cache memory? How is different from a primary memory? (2015)
9. What is flash memory? Why it is so called? (2015)
10. What is cache memory? (2014)
11. What is booting? (2014)
12. What do you mean by sequential access and direct access? (2014)
13. What are secondary storages? How is differ from a primary storages? Explain secondary storages devices that are used with computer system. (2014)
14. Distinguish between a sequential access, direct access and random access devices. Give one example of each. (2012)
15. What is a memory addresses. (2012)
16. What is the meaning of term "Memory Dumping"? (2012)
17. How information is recorded in magnetic tape. (2011)
18. What is memory hierarchy? Name the general classes of storages media that might make up a memory hierarchy. (2011,2009)
19. Write full form of EPROM. (2010)
20. What is auxiliary memory? (2010)

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21. Write difference between primary and secondary memory. (2010)
22. What are registers? Name some of the commonly used register and briefly describe the function of each. (2009)
23. Give the advantage and disadvantage of magnetic tape and magnetic disk storage. What is parity bit? How it is used for detecting error? (2009)
24. Describe the difference between ROM, RAM, PROM, EPROM. (2008)
25. How are data recorded on and read from an optical disk? What is the major drawback of optical disk storage? (2008)

## Unit 6

## Number System

1. How we can convert an octal number into decimal number? Explain with the help of example. (2017)
2. Define computer code. Explain different type of codes used in computer. (2017)
3. What do you mean by "Number System"? list different types of Number System. (2017,2016)
4. What do you mean by logic gates explain with example? (2016)
5. Find decimal equivalent of Octal number 127.54 (2015)
6. Difference between positional and non-positional number system. (2015, 2011)
7. Write De Morgan's Law. (2015)
8. What NAND and NOR gates are called universal gates? (2015)
9. Why BCD code was extended to EBCDIC? (2015)
10. What do you mean by logic gates? Explain various types of logic gates with diagrams. (2015)
11. Give full form of abbreviation: SXGA, EBCDIC (2014)
12. What is Excess -3 code? Explains with example. (2014,2012)
13. Divide binary number 11001 by 101. (2014)
14. Prepare truth table for the following Boolean expression  

$$A \cdot B + \bar{A} \cdot B$$
 (2014)
15. Explain the following:
  - a. BCD code
  - b. EBCDIC code (2010)
  - c. ASCII code
  - d. Gray code
  - e. Unicode (2014)
16. What are logic gates? Explain with their types. (2012)
17. What will be the total number of different symbols or digits and the maximum value of a single digit for the following number system?
  - a. Number system with base 5
  - b. Number system with base 20
  - c. Number system with base 9
  - d. Number system with base 12
  - e. Number system with base 17 (2012)
18. Explain different types of computer code. (2012)
19. What is the difference between bit and byte? (2011)
20. Find octal equivalent of binary number  $(11010)_2$  (2011)
21. A computer uses EBCDIC as its internal representation of characters. In which order computer will sort the following string?  
 ABC, 123, 245 and ADD (2011)
22. Simplify the following Boolean expression and draw logic circuit diagram for your simplified expression using AND, NOT, and OR.  

$$(A' \cdot B' \cdot C' + A' \cdot B \cdot C' + A \cdot B' \cdot C' + A \cdot B' \cdot C + A \cdot B \cdot C')$$

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23. What is Boolean algebra? (2010)
24. Subtract 5 from 23 using binary number system. (2010)
25. Define term Nibble and Byte. (2010)
26. Prepare the truth table and logic diagram for the following Boolean expression :  
 a.  $(A + B) \cdot (A' + B')$
27. Convert the following:
  - a.  $(10010101011)_2 = (?)_8$
  - b.  $(100101010100)_2 = (?)_{16}$
  - c.  $(0.245)_{10} = (?)_2$
  - d.  $(723)_8 = (?)_2$  (2008)
28. What do you mean by Logic gates? Simplify the following Boolean function in SOP and POS forms by means of K- Maps.  

$$F(A, B, C, D) = \sum(0, 2, 8, 9, 10, 11, 14, 15)$$
 Also draw logic diagram. (2008)
29. Give the Boolean algebra representations and logic circuit of two input XOR gate with its truth table(2008)
30. Find out:
  - a.  $(2165)_{10} = (?)_8$
  - b.  $(ACDII)_{16} = (?)_8$
  - c.  $(4625)_{10} = (?)_2$
  - d.  $(23816)_{16} = (?)_{10}$
  - e.  $(1101011)_2 = (?)_{10}$  (2008)

## Unit 7

## Computer Viruses

1. What do you mean by Boot virus? (2017)
2. What is computer virus? What are the various types of computer virus? (2017)
3. What is computer virus? (2016,2011,2008)
4. What is computer virus? How you can remove virus from computer? Explain with example(2016)
5. What you understand by E-mail virus? (2015)
6. What is Computer Virus? How do Virus Spread? Discuss about the most likely routes by which a virus gets into an organization. (2015,2008)
7. What is Trojan horse? (2014)
8. What is firmware? (2012)
9. What is computer virus explain their types and symptoms. (2012)
10. What is computer virus? What are its various types? What are remedies available for computer viruses? (2010)

## Unit 8

## Applications of Computer

1. Describe various application area of computer system in education. (2014,2010)
2. Describe various application areas of computers. (2008)

## Unit 9

## Internet and WWW

1. What is CUI and GUI? (2017)

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2. Why E-mail is becoming so popular? (2017)
3. What do you mean by computer network? What are the various advantages of networking? Also explain types of networks. (2017)
4. What do you mean by TCP/IP? (2016)
5. What is FTP and UDP? (2016)
6. What is E-mail? How one can send and receive mail? Write down steps with example. (2016,2008)
7. What is WWW browser? Write 3 Uses of Internet in education. (2015)
8. What is FTP? Why it used? (2015)
9. What do you mean by IP addresses? (2015)
10. What do you mean by protocol? (2014)
11. What is website? (2014)
12. What do you mean by IP address and WWW? (2014,2010)
13. Write the definition of Internet with example. (2012)
14. Explain term dynamic and static website. (2012)
15. Write the definition of internet with example. Also write history, advantage and disadvantage of Internet. (2011)
16. Write the difference between TCP and UDP. (2010)
17. What do you mean by Internet accounts? Define the types of internet accounts. Define the required resources for internet. (2010)
18. What is meant by internet surfing? Name some of the commonly used surfing tools. (2009)
- 19.

## **Unit 10**

## **Data Warehouses**

1. What is Data Processing? (2016,2015)
2. What is Data Warehouse? Explain the components of Data Warehouse. (2015,2008)
3. What do you mean by "Mata Data?" (2015,2012)
4. What is Data Warehouse? Explain the advantages and component of data warehouses. (2014)
5. What is data warehouse? Write the different methods using for storing data in data warehouse.(2011,2009)
6. What do you understand by the data warehousing? (2010)

## **Extra Questions**

1. What is operating System? Write a brief note on it. (2017)
2. "The OS tends to isolate the hardware from the user." Discuss the statement. Define the term "Real Time System". (2009)
3. What is mean by real time processing? Give some examples of real time applications. (2009)