# IMAYAM ARTS AND SCIENCE COLLEGE KANNANUR, THURAIYUR.

# DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

SUB NAME : PRINCIPLES OF INFORMATION TECHNOLOGY

CLASS : B.Sc (I CHE, II PHY, II MAT)

SUB CODE : 16SACCS2

SUB HANDLER: S.PAVITHRA(COMPUTER SCIENCE)

One Marks:

UNIT-1

- 1. Which of the following produces high-quality output:
  - A. Impact Printer.
  - B. Non-Impact Printer.
  - C. Plotter.
  - D. Both 1 and 2.

Answer: B. Non-Impact Printer

- 2. A bar code reader is an example of:
  - A. Processing Device.
  - B. Storage Device.
  - C. Input device.
  - D. Output Device.

Answer: C. Input Device.

- 3. Which type of device is a digital camera:
  - A. Input.

Answer: B. Internal Memory

8. A is an electronic device that processes data, converting it into information:
A. Processor. B. Case. C. Computer. D. Stylus.
Answer: A. Processor
9. Which one is the secondary memory devices?
A. CPU. B. Floppy Disk. C. ALU. D. Mouse.
Answer: B. Floppy Disk
10. starting or restarting the computer is called:
A. Exit. B. Kick. C. Boot. D. Kickstart.
Answer: C. Boot
11. Joysticks typically have a button onthat is used to select the option pointed by the cursor.
A. Bottom
B. Left
C. Right
D. Top
Answer: D. Top

12. A device for converting handwritten impressions into coded characters & positional coordinates for input to a computer is
A. Touch panel
B. Mouse
C. Wand
D. Writing tablet
Answer: D. Writing Tablet
13keys are present on the top row of the keyboard.
A. Function
B. Type writer
C. Numeric
D. Navigation
Answer: A. Function 14. The device primarily used to provide hardcopy is the
A.CRT
B. Computer Console
C. Printer
D. Card Reader
Answer: C. Printer
15. A light sensitive device that converts drawing, printed text or other images into digital form is
A. Keyboard
B. Plotter
C. Scanner
D.OMR
Answer: C. Scanner
UNIT-2

#### 1. Process is:

- A. Program in high-level language kept on disk.
- B. Contents of main memory.
- C. A Job in secondary memory.
- D. None of the above.

Answer: C.A job in secondary memory.

- 2. The Software used to drive microprocessor-based system is called:
  - A. Assembly language programs.
  - B. Firmware.
  - C. Basic Interpreter Instruction.
  - D. Flowchart Instructions.

Answer: A. Assembly language programs

- 3. Which of the following is designed to control the operations of a computer:
  - A. Application Software.
  - B. System Software.
  - C. Utility Software.
  - D. User.

Answer: B. System Software

- 4. Which of the following is not an example of system software:
  - A. Language Translator.
  - B. Utility Software.
  - C. Communication Software.
  - D. Word Processors

Answer: D. Word Processors

- 5. A person who designs the programs in a software package is called:
  - A. User.
  - B. Software Manager.
  - C. System Developer.

D. System Programmer.

Answer: D. System Programmer.

- 6. Assembler is used as a translator for:
  - A. Low level language.
  - B. High level language.
  - C. COBOL.
  - D. C

Answer: A. Low level language

- 7. What do you call a program in execution:
  - A. Command.
  - B. Process.
  - C. Task.
  - D. Instruction.

Answer: B. Process

- 8. A program:
  - A. Is a sequence of instruction.
  - B. Is the device where information is stored.
  - C. Is a device that performs a sequence of operations specified by instructions in memory.
  - D. None of these.

Answer: A.Is a sequence of instruction

- 9. An assembly language is a:
  - A. Low level programming language.
  - B. Middle level programming language.
  - C. High level programming language.
  - D. Internet based programming language.

Answer: A. Low level programming language

10. The -----program compresses large files into:

- A. Smaller life.
- B. Win Zip.
- C. Win Shrink.
- D. Win Style.

Answer: A. Smaller life

- 11. Which is the device that should get the highest priority in assigning the interrupts?
  - A. Floppy disk
  - B. Hard disk
  - C. CPU temperature sensor
  - D. Keyboard

Answer: C.CPU temperature sensor

- 12. 1. The physical devices of a computer :
- A. Software
- B. Package
- C. Hardware
- D. System Software

Answer: C. Hardware

- 13. Which of the following is designed to control the operations of a computer?
- A. Application Software
- B. System Software
- C. Utility Software
- D. User

Answer: B. System Software

- 14. A person who designs the programs in a software package is called:
- A. User
- B. Software Manager
- C. System Developer
- D. System Programmer

Answer: D. System Programmer

- 15. What do you call a program in execution?
- A. Command
- B. Process
- C. Task

## D. Instruction

Answer: B. Process

#### UNIT-3

- 1. ODBC stands for:
  - A. Object Data Base Connectivity.
  - B. Oracle Data Base Connectivity.
  - C. Oral Data Base Connectivity
  - D. Open Data Base Connectivity.

Answer: D. Open Data Base Connectivity

- 2. Architecture of the database can be viewed as:
  - A.2 levels.
  - B.4 levels.
  - C.3 levels.
  - D.1 level.

Answer: C.3 levels

- 3. In the architecture of a database system external level is the:
  - A. Physical level.
  - B. Logical level.
  - C. Conceptual level.
  - D. View level.

Answer: D. View level

- 4. A logical schema:
  - A. Is the entire database.
  - B. Is a standard way of organizing information into accessible parts.
  - C. Describes how data is actually stored on disk.
  - D. Both A& C.

Answer: A.is the entire database

5. The DBMS language component which can be embedded in a program is a:
<ul><li>A. The data definition language (DDL).</li><li>B. The data manipulation language (DML).</li><li>C. The database administrator (DBA).</li><li>D. A query language.</li></ul>
Answer: B. The data manipulation language (DML)
6. The statement in SQL which allows changing the definition of a table is:
A. Alter. B. Update. C. Create. D. Select.
Answer: A. Alter
7. The RDBMS terminology for a row is:
A. Tuple. B. Relation. C. Attribute. D. Degree.
Answer: A. Tuple
8.can help us detect poor E-R design:
<ul><li>A. Database design process.</li><li>B.E-R design process.</li><li>C. Relational Schema.</li><li>D. Functional dependencies.</li></ul>
Answer: D. Functional Dependencies
9. All of the following are non-volatile memory except:

A.ROM. B. PROM.

D.RAM.

C. Flash memory.

Answer: D.RAM

- 10. Register used as a working area in CPU is:
  - A. Program counter.
  - B. Instruction Register.
  - C. Instruction decoder.
  - D. Accumulator.

Answer: A. Program counter

- 11. Related fields in a database are grouped to form a
- A Data file
- B. .Data record.
- C. Menu.
- D. Bank.

Answer: B. Data Record

- 12. The database environment has all of the following components except:
- A. Users.
- b. Separate files
- c. Database.
- d. Database administrator

Answer: B. Separate files

- 13. A relational database developer refers to a record as
- A.A criteria.
- B. A relation.
- C. A tuple.
- D. An attribute.

Answer: C.A Tuple

14. A subschema expresses

- A. The logical view
- B. .The physical view.
- C. The external view.
- D. All of the above.

Answer: C. The External view

- 15. An advantage of the database management approach is
- A. Data is dependent on programs
- B.. Data redundancy increases.
- C.. Data is integrated and can be accessed by multiple programs.
- D.. None of the above

Answer: C. Data is integrated and can be accessed by multiple programs.

#### UNIT-4

- 1. Which address identifies a process on a host:
  - A. Physical address.
  - B. Logical address.
  - C. Post address.
  - D. Specific address.

Answer: C. Post address

- 2. Communication channel is shared by all the machines on the network in:
  - A. Unicast network.
  - B. Multicast network.
  - C. Broadcast network.
  - D. None of these.

Answer: C. Broadcast network

3. Bluetooth is an example of:
<ul><li>A. Personal area network.</li><li>B. Local area network.</li><li>C. Virtual private network.</li><li>D. None of these.</li></ul>
Answer: A. Personal area network
4. Theis the physical path over which a message travel:
A. Path. B. Medium. C. Protocol. D. Route.
Answer: B. Medium
5. The address identifies a process on a host:
A. Physical. B.IP. C. Port. D. Specific. Answer: C. Port
6. Digital number 9 can be represented in binary number as:
A.110. B.1001. C.1010. D.1011.
Answer: B.1001
7. Each digit in a binary number is known as a:
A. Bit. B. Byte. C. Number.

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Answer: A. Bit

- 8. The communication protocol used by internet is:
  - A. HTTP.
  - B.WWW.
  - C.TCP/IP.
  - D.FTP.

Answer: C.TCP/IP

- 9. The first page that you normally view at a website is its:
  - A. Home page.
  - B. Master page.
  - C. First page.
  - D. None.

Answer: A. Home page

- 10. From which page on the intranet can you reset your printing pin:
  - A. Home page.
  - B. My links.
  - C. My website.
  - D. Team site.

Answer: A. Home page

- 11. Decrease in strength of signal is known as
  - A. tuning
  - B. modulation
  - C. attenuation
  - D. amplification

Answer: C. attenuation

12. At the end of communication system, the signal is converted from radio to

- A. sound
- B. mechanical energy
- C. kinetic energy
- D. potential energy

Answer: A. sound

- 13. Energy is lost in wires due to
  - A. heating
  - B. resistance
  - C. conduction
  - D. both 1 and 2

Answer: D. both 1 and 2

- 14. As compared to sound waves the frequency of radio waves is
  - A. lower
  - B. higher
  - C. equal
  - D. may be higher or lower

Answer: B. higher

- 15. Voltage signal generated by a microphone is
  - A. digital in nature
  - B. analogue in nature
  - C. consists of bits and bytes
  - D. hybrid in nature

Answer: B. analogue in nature

## UNIT-5

- 1.is used to compress images:
  - A.MPEG.
  - B.JPEG.
  - C. Either a or b.
  - D. None.

Answer: A.MPEG

- 2. A video consists of a sequence of:
  - A. Frames.
  - B. Signals.
  - C. Packets.
  - D. Slots.

Answer: A. Frames

- 3. HMD stands for:
  - A. Head Mounted Display.
  - B. Head Masked Display.
  - C. Head Mode Display.
  - D. Head Mounted Detection.

Answer: A. Head Mounted Display

- 4. Which of the following is part of the 4 main types for e-commerce:
  - A.B2B.
  - B.B2C.
  - C.C2B.
  - D. All of the above.

Answer: D. All of the above

- 5. Which of the following describes e-commerce:
  - A. Doing business electronically.
  - B. Doing business.
  - C. Scale of goods.
  - D. All of the above.

Answer: A. Doing business electronically

- 6. Which one of the following is not one of the major types of e-commerce:
  - A.C2B.
  - B.B2C.

	C.B2B. D.C2C.
	Answer: A.C2B
7. The	e data warehouse is
	A. Read only. B. Write only. C. Read and Write only. D. None.
	Answer: A. Read only
8. The	e data is stored, retrieved and uploaded in:
	A. OLAP. B. OLTP. C. SMTP. D. FTP.
	Answer: B. OLTP
9. <b>W</b> h	ich is the right approach of datamining:
	<ul> <li>A. Infrastructure, Exploration, Analysis, Interpretation, Exploitation.</li> <li>B. Infrastructure, Exploration, Analysis, Exploitation, Interpretation.</li> <li>C. Infrastructure, Analysis, Exploration, Interpretation, Exploitation.</li> <li>D. Infrastructure, Analysis, Exploration, Exploitation, Interpretation.</li> </ul>
	Answer: B. Infrastructure, Exploration, Analysis, Interpretation, Exploitation
10. Tl	ne fuel that launched the industrial revolution:
	A. Oil. B. Iron. C. Coal. D. None of them.
	Answer: C. Coal

11. Which of the following is related to business?

- A. marketing
- B. stock exchange
- C. banks
- D. all of these

Answer: D. all of these

- 12. Most applications of robotic are used in area of
  - A. cooking
  - B. manufacturing
  - C. teaching
  - D. farming

Answer: B. manufacturing

- 13. Many banks provide the facility of
  - A.CAD
  - **B.CAM**
  - C.ATM
  - D.CBT

Answer: C.ATM

- 14. Computer in a home can be used for
  - A. keeping records
  - B. making budgets
  - C. watching movies
  - D. all of these

Answer: D. all of these

- 15. In computer, CBT stands for
  - A. computer based trade
  - B. computer based training
  - C. certificate based training
  - D. computer based transactions

Answer: D. computer based training

2marks:

UNIT-1

1. What is a computer?

A computer is an electronic device that manipulates information, or data. It has the ability to store, retrieve and process data.

2. What are the classes of digital computer?

Super computer, Micro Computer, Mini Computer & Mainframe Computer.

3. What are the examples of digital computer.

Cell Phones, Tablets, Laptops, PCs.

4. What is a memory unit?

Memory unit is the amount of data that can be stored unit.

This storage capacity is expressed in terms of bytes.

5. What are the types of memory units?

RAM-Random Access Memory

ROM-Read Only Memory

CMOS- Complementary Metal-oxide Semiconductor.

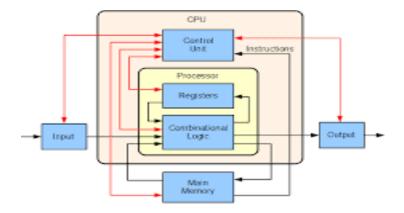
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6. What is auxiliary storage?

Auxiliary storage is any storage that is made available to the system through input/output channels.

Auxiliary storage may also be referred to as secondary storage.

7. Draw a computer architecture.



# 8. What is an Input device?

An input device is a hardware or peripheral device used to send data to a computer.

An Input device allows users to communicate and feed instructions and data to computers for processing, display, storage and/or transmission.

# 9. What is an output device?

An output device is any piece of computer hardware equipment which converts information into human-readable form.

It can be text, graphics, tactile, audio and video.

# 10. Difference between input and output device

Devices	Output Devices
Devices that are used to get input signals from the user.	Devices that are used to display the output signals to the user.
Working	1 5
Helps the computer get the data from the user and enters it in the computing system.	Helps the computer to display the data and results after the process completes.
Carrier	
Takes the data from the user and	Takes the data from the processor after the

then sends it to the processor for	actions complete and then sends it back to the
further processing.	user.
Examples	
Keyboard, Image Scanner,	Monitor, Printers of all kinds, Plotters,
Microphone, Pointing device,	Projector, LCD Projection Panels, Computer
Graphics tablet, Joystick.	Output Microfilm, Speakers.

#### UNIT-2

## 1. What is computer software?

Computer software or simply software is a collection of data or computer instructions that tell the computes how to work.

This is in contrast to physical network from which the system is built and actually performs the work.

# 2. What is Operating System (OS)?

An OS is system is system software that manages computer hardware, software and provides common services for computer programs.

The dominant desktop operating system is Microsoft windows with a Market share of around 82.74%.

# 3. What are the types of OS?

Batch Operating System, Multitasking/Time Sharing Operating System, Multiprocessing Operating System, Real Operating System, Distributed Operating System, Network Operating System, Mobile Operating System.

#### 4. What is kernel?

A kernel is the central component of a computer OS.

The only job performed by the kernel is to manage the communication between the software and the hardware.

A Kernel is at the nucleus of a computer.

# 5. What is programming language?

A programming language is a formal language, which comprises a set of instructions that produce various kinds of output.

Programming language are used in computer programming to the implement algorithms.

## 6. What is the role of programming language?

A programming language is an artificial language designed to communicate instructions to a machine, particularly a computer.

# 7. What are the types of software?

System software, Application software and programming software.

#### 8. List out the characteristics of software.

Reliability, Usability, Efficiency, Maintainability, Portability, Functionality.

## 9. What are the trends of software.

Artificial Intelligence (AI), Cross-Platform Development Tools, Blockchain, IOT, Continuous Delivery & Deployment, Progressive Web Apps, Low-code development.

# 10. Examples of software.

Internet browser - Google, Chrome, Firefox.

Operating System – Android, Linux, Windows.

Photo/Graphics program – Adobe Photoshop & Corel Draw.

Movie Player- VLC & Windows Media Player.

#### UNIT-3

#### 1. What is database?

A database is a data structure that stores organized information.

Most databases contain multiple tables, which may each include several different fields.

#### 2. What is a data?

Data is a collection of facts, such as numbers, words, measurements, observations or even just descriptions of things.

#### 3. What is DBMS?

A DBMS is a software package designed to define, manipulate, retrieve and manage data in a database.

A DBMS generally manipulates the data itself, the data format, field names, record structure & file structure.

# 4. List the types of DBMS?

Hierarchical, Network, Relational, Object-Oriented DBMS.

# 5. What is data processing?

Data Processing is the collection and manipulation of items of data to produce meaningful information.

#### 6. What is DBS?

A database is an organized collection of data, generally stored and accessed electronically from a computer system.

# 7. What is database design?

Database design is the organization of data according to the database model.

# 8. What are the 3 types of database design?

One-to-one, One-t0-many, Many-to-many.

# 9. What is database design in SQL?

Data design is a collection of processes that facilitate the designing, development, implementation and maintenance of enterprise data management system.

# 10. What is design data?

Database design is the organization of data according to a database model.

The designer determines what data must be stored and how the data elements interrelate.

#### UNIT-4

#### 1. What is telecommunication?

Telecommunication is the exchange of signs, signals, messages, words, writings, image and sounds or information of any nature by wire, radio, optical or other electromagnetic systems.

#### 2. what are the telecommunication devices?

Telecommunication devices include telephone, telegraph, radio, microwave communication arrangements, fiber optics, satellites and the internet.

#### 3. What is transceiver?

A transceiver is a device comprising both a transmitter and a receiver that are combined and share common circuitry or a single housing.

#### 4. What is receiver?

A receiver is a hardware module or device used to receive signals of different kinds, depending on the context of the application.

## 5. What is distributed system?

A distributed system, also known as distributed computing, is a system with multiple components located on different machines that communicate and coordinate actions in order to appear as a single coherent system to the end-user.

# 6. What is networking?

A group of people who exchange information, contacts and experience for professional or social purposes.

# 7. What is communication system?

A communication system is a collection of individual communications network, transmission system, relay stations, tributary stations and data terminal equipment usually capable of interconnection and interoperation to form an integrated whole.

#### 8. what is internet?

The internet is the global system of interconnected computer networks that uses the internet protocol suite to link devices worldwide.

#### 9. What is intranet?

An intranet is a private network contained within an enterprise that is used to securely share company information and computing resources among employees.

## 10. Difference between internet and intranet.

Internet	Intranet
Any one can access the	Accessible only by the organization members,
internet	having login details.
It is not as safe as compared	Safe
to Intranet	
Unlimited	Limited
Public	Private

#### UNIT-5

#### 1. What is Multimedia?

Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content.

#### 2. What are the multimedia tools?

Text, Graphics , Audio, Animation, Video, Graphic Objects (see: Computer graphics and visualization).

## 3. What is virtual reality?

Virtual reality is the term used to describe a three-dimensional, computer generated environment which can be explored and interacted with by a person.

That person becomes part of this virtual world or is immersed within this environment and whilst there, is able to manipulate objects or perform a series of actions

#### 4. What is e-commerce?

E-Commerce or Electronic Commerce means buying and selling of goods, products, or services over the internet. E-commerce is also known as electronic commerce or internet commerce.

# 5. What are the types of e-commerce?

- 1. Business to Business
- 2. Business to Consumer
- 3. Consumer to Consumer
- 4. Consumer to Business

# 6. Give some examples of e-commerce.

Amazon, Flipkart, eBay, Fiverr, Upwork, Olx, Quikr

# 7. What is data mining?

Data mining is the process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems.

# 8. What is data warehousing?

A Data Warehousing (DW) is process for collecting and managing data from varied sources to provide meaningful business insights.

A Data warehouse is typically used to connect and analyze business data from heterogeneous sources.

# 9. Explain GIS.

A geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data

# 10. What is Education and training.

Multimedia applications play a crucial role in education which range from preschool education to postgraduate students and corporate training packages.

11. What is computer in business.

Business software (or a business application) is any software or set of computer programs used by business users to perform various business functions.

These business applications are used to increase productivity, to measure productivity and to perform other business functions accurately.

## 5 marks:

#### UNIT-1

- 1. What is computer and its types?
- 2. What are the classifications of digital computer system?
- 3.Draw the computer architecture. \*\*\*
- 4. Explain the architecture parts.
- 5. What is a memory and its units? \*\*\*
- 6. What are the types of memory. \*\*\*
- 7. List out the Input device \*
- 8. List out the Output device. \*

## UNIT-2

- 1. What is software and its types. \*\*\*
- 2. Explain operating system and its types. \*\*\*
- 3. What are the programming languages. \*
- 4. What is an application software.
- 5. What is system software.

#### UNIT-3

- 1. What is database management system?
- 2. What is data processing. \*
- 3. What is database design.
- 4. Explain the architecture of DBMS. \*\*\*
- 5. List out the types of tier. \*

#### UNIT-4

1. What is networking?

- 2. What is communication system explain it. \*\*\*3. What are the telecommunication systems.4. Explain the distributed system.
- 5. Advantages of internet. \*
- 6. Advantages of intranet. \*
- 7. Dis-advantages of internet. \*
- 8. Dis-advantages of intranet. \*

## UNIT-5

- 1. What is multimedia and its tools.
- 2. What is e-commerce and its types. \*\*\*
- 3. What is data warehousing. \*
- 4. What is data mining. \*
- 5. Explain computer in business. \*
- 6. What are the education and training applications.
- 7. Write short notes on GIS. \*

#### 10 marks:

#### UNIT-1

- 1. Write brief notes about computer.
- 2.Explain the computer architecture briefly. \*
- 3. What are the auxiliary storage device. \*\*\*
- 4. Explain the input device detailly. \*\*\*

5. Explain the output device detailly. \*\*\*

## UNIT-2

- 1.Explain the operating system briefly. \*
- 2. List out the general software features and trends. \*\*\*
- 3. What is an computer software and its types, explain.

## UNIT-3

- 1. Write brief notes on DBMS. \*\*\*
- 2.Explain I) Database design

# II) Data processing

3. Explain DBMS architecture. \*\*\*

#### UNIT-4

- 1. Write brief notes on Communication system. \*
- 2.Explain Internet detailly. \*\*\*\*\*
- 3. Explain Intranet detailly. \*\*\*\*\*
- 4. Explain advantage and dis-advantage of internet.
- 5. Explain advantage and dis-advantage of intranet.

## UNIT-5

- 1.Explain multimedia and its tools. \*\*
- 2. Write brief notes about e-commerce. \*\*\*
- 3. What is datamining explain it.
- 4. What is data warehousing explain it.

5. Write a notes about i) GIS ii) computer in business. \*