Lec. 1-MCQ

1- What is a distributed system?

a) A collection of dependent computers

b) A collection of independent computers

c) A single computer

d) None of the above

2- What is the purpose of a distributed system?

e) To ensure that a collection of independent computers appears as a single coherent system to its users

f) To ensure that a collection of independent computers work in isolation

g) To ensure that a single computer works efficiently

h) None of the above.

3- why distributed system?

a) Information exchange (collaborative work)

b) Hardware Resource sharing

c) Software Resource sharing (applications, information

d) all of the mentioned

4- What is a characteristic of a distributed system?

a) All computers in a distributed system are dependent on each other

b) All computers in a distributed system are physically located in the same location

c) All computers in a distributed system are independent of each other

d) None of the above

5- What is a parallel system?

a) A collection of processing elements that communicate.

b) A single computer

c) A network of workstations

d) A backup storage device

6- What is the purpose of a parallel system?

a) To achieve a common goal

b) To compete with other systems

c) To work in isolation

d) To achieve individual goals

7- … is/are collection of independent computers linked by a computer network that

a) appears to its users as a single coherent system.

b) parallel systems

c) distributed system

d) database management system

8- How are the processing elements in a distributed system interconnected?

a) By some network

b) By shared memory

c) By a centralized OS

d) By a physically centralized file system

9- Which of the following is an example of a distributed system?

a) Local Area Network

b) Calculator

c) Personal computer

d) Digital camera

10- As soon as computers are interconnected and communicating, we have a ……

a) distributed system

b) centralized system

c) both A & B

d) none of the above

11- What are the two important considerations of a distributed system?

a) Autonomous hardware and unifying software

b) Processor and memory

c) Network and software

d) Shared memory and centralized OS

12-... is a collection of processing elements that communicate and cooperate to achieve a common goal.

a) parallel system

b) distributed system

c) database management system

d) Non Of The Above

13- What are the basic concepts of a distributed system?

a) Processor and memory

b) Shared memory and centralized OS

c) Network and software

d) Centralized file system and message passing

14- What is the purpose of hardware resource sharing in a distributed system? a) Increase of availability

b) Increase of performance through parallelism

c) Information exchange

d) Resource sharing

15- the users think of the system as a. ..... computer.

a) Single.

b) Multiple.

c) Both.

d) None of the above.

16- Which one of the following is not from the characteristics of the distributed System in 1945-1985…….

a) Computers were large and expensive

b) No way to connect them

c) All systems were Centralized Systems.

d) Powerful microprocessors

17- Which of the following is an example of a distributed system evolution?

a) NOWs

b) COWs

c) Virtualization

d) All of the above

18- A distributed system is a piece of software that ensures that:

a) collection of independent computers appears to its users as a single coherent system.

b) collection of dependent computers appears to its users as a single coherent system.

c) Increase of performance through parallelism

d) none of the above

19- Internet / World Wide Web are examples of....

a) Distributed System.

b) Interconnected System.

c) Both.

d) None of the above.

20- Why Distributed System?

a) Cost reduction

b) Increase of availability (partial failure)

c) Increase of performance

d) All of the above

21- The advantage of distributed systems is the availability of ..... and cheap microprocessor.

a) Powerless

b) Powerful

c) Weak

d) none of the above

22- What is an example of collaborative work in distributed systems?

a) Hardware resource sharing

b) Applications

c) Software resource sharing

d) Information exchange

23- Which of the following is not an example of a distributed system technology?

a) Sensor networks

b) Mobile computing

c) Desktop grids

d) Mainframe computers

24- Software is distributed..... .

a) No centralized OS, each PE has its own OS

b) No physically centralized file system

c) Inter-process communication via message passing at the lowest level.

d) All the above.

25- Distributed systems lead to .....

a) Increasing costs.

b) reducing costs.

c) no effect on cost.

d) none of the above

Lec. 2-MCQ

1-Which of the following is an example of centralized systems?

A) Local Area Network

B) Database Management System

C) Mainframe and dumb terminals

D) Internet/World-Wide Web

2- What is the role of the mainframe in centralized systems? A)

It only serves as a storage device.

B) It only serves as a communication device.

C) All the computation is done on the mainframe.

D) All the computation is done on the dumb terminals.

3- What is the role of clients in a client-server system?

A) Only formatting the data

B) Only manipulating the data

C) Both formatting and manipulating the data

D) None of the above

4-What are Distributed Computing Systems used for?

A) Managing computer networks

B) High-performance computing tasks

C) Storing and organizing data

5-in a …, the nodes or sites depend on a coordinator node with extra knowledge or processing abilities.

a)centralized system

b)client-server system

c)distributed-with-coordinator

6-a … system has no distinguished node which acts as a coordinator and all nodes or sites are equals.

a)database management

b)true decentralization

c)parallel

7- types of Distributed systems …

a)Distributed Computing systems

b)Distributed Information systems

c)Distributed Pervasive systems

d)all of the mentioned

8- A------- is a group of interconnected whole computers working together as a unified computing resource.

a) cluster

b) grid

c) information system

d) none of the above

9-Clusters technology provides better ---- and -----

a) security and reliability

b) performance and reliability

c) both d and b

d) availability and performance

10-Cluster computing essentially a group of high-end systems connected through -----

a) LAN

b) WAN

c) MAN

d) any of them

11- Master nodes host processes that are responsible for all except

a) resource allocation

b) storing data

c) scheduling

d) monitoring.

12-also known as failover clusters

A. High availability clusters (HA)

B. low availability clusters (LA)

C. Network load balancing clusters

D. both A&B

13-from operating system issues is .....

A. failure management

B. load balancing

C. parallelizing computation

D. all the above

14- Which of the following is a type of Distributed System that involves multiple computers working together in a cluster?

A) Distributed Computing Systems

B) Cluster Computing Systems

C) Grid Computing Systems

15-Which operating system is commonly used in High Availability Clusters?

A) Windows

B) Linux

C) MacOS

16-What is the purpose of a Network Load Balancing Cluster?

A) To improve performance by distributing network traffic across multiple nodes

B) To improve availability by synchronizing data across multiple nodes

C) To improve processing power by distributing processing tasks across multiple Nodes

17-How are the components of a cluster commonly connected to each other?

A) Through slow local area networks

B) Through fast local area networks

C) Through wide area networks

18-Which distributed pervasive system is used for contactless payments? a) ZigBee

b) Bluetooth

c) Wi-Fi

d) NFC

19-Which distributed pervasive system is used for location-based services? a) ZigBee

b) Bluetooth

c) Wi-Fi

d) GPS

20-Which distributed system is used for distributed storage and sharing of digital assets?

a) Blockchain

b) Wi-Fi

c) Bluetooth

d) Ethernet

21- .....is a set of programs which provides SSI.

a) Operating system.

b) Distributed application.

c) Cluster Middleware.

d) All of above

22- SSI provided by cluster middleware and it is stands for .....

a) Single System Interfacing

b) Same System Information

c) single system image

d)All of the above

23- Cluster is classified to .....

a) High availability clusters .

b) Network Load balancing clusters .

c) Parallel/Distributed processing Clusters.

d) All of above .

24-A supercomputer built from ...

a) Computer in a high speed network

b) Computer in a low speed network

c) All of the above

d) None of the above

25-Most common use: a single program is run in .....on .....machines

a) series, multiple

b) Series, single

c) parallel, multiple

d) parallel, single

Lec. 3-MCQ

1) Nodes Are Heterogeneous ……..
a) Cluster Computing System.
b) Grid Computing System
c) A&B
d) None Of The Above

2) Cluster & Grid Are Types Of ……..
a) Distributed Pervasive Systems.
b) Information Systems.
e) Distributed Computing Systems.
c) None Of The Above

3) ……. Is A Network Where Nodes Have The Special Capability Of Sensing Some Parameters As
a) Pervasive Application.
b) Information Application.
c) Computing Application
d) Sensor N/W

4) Banks, Travel Agencies ……
a) Distributed Pervasive Systems.
b) Distributed Information Systems.
c) Distributed Computing Systems.
d) None Of These

5) Which Of The Following Is Not An Advantages Of Distributed Systems?
a) All The Nodes In The Distributed System Are Connected ToEach Other
b) It Can Be Scaled As Required
c) Failure Of One Node Does Not Lead To The Failure Of The Entire Distributed System
d) Some Messages And Data Can Be Lost In The Network While Moving From One Node To Another

6) Transaction Is Classified As .
a) Distributed Computing Systems
b) Distributed Information Systems
c) Distributed Pervasive Systems
d) None Of Them

7) Majority Of Clusters Are ---------- Systems.
a) Homogenous
b) Heterogenous
c) Both And B
d) None Of The Above

8) In Pervasive Computing Systems, We Are Faced With Distributed Systems In Which Is The Default Behavior.

a) Instability
b) Stability
c) Both Of Them
d) None Of Them

9) Devices In Distributed Pervasive Systems Are

a) Small
b) Battery-Powered
c) Have Only A Wireless Connection
d) All The Above

10) Requirement For Pervasive Application: a) Embra Contextual Changes

b) Encourage Adhoc Composition
c) Recognize Sharing As The Default
d) All Of The Above

11) Sensor N/W Is A Network Where Nodes Have The Special Capability Of Sensing Some Parameters As a) Light Intensity

b) Temperature
c) Pressure And Velocity
d) All Of The Above

12) Grid Computing Process Include: a) Resource Discovery (RD)

b) Scheduling
c) Execution
d) All Of The Above

13) Cloud Computing Include: a) Hardware

b) Service And Network
c) Software
d) All Of The Above

14) A User Interacts With The Computer, Which Can Exist In Many Different Forms, Including a) Laptop Computers

b) Tablets
c) Terminals And Phones.
d) All Of The Above

15) The Nodes To Which Sensors Are Attached Are

a) Many (10s-1000s)

b) Often Battery-Powered

c) A&B

d) None Of The Above

16) Contrary To Clusters, Grids Are Usually Composed Of Different Types Of Computers Like:

a) Hardware

b) Operating System (OS)

c) Network

d) All Of The Above

17) A ……. Is Responsible For Coordinating The Execution Of A Transaction.

a) TP Monitor

b) LED Monitor

c) A&B

d) None Of The Above

18) : The Nodes To Which Sensors Are Attached Are:

a) Simple

b) Complex

c) Hardly Any Memory, CPU Power, Or Communication Facilities

d) A&C

19) Stability Means Nodes Have ….. Connection To A Network.

a) Fixed

b) Changing

c) Weak

d) None Of The Above

20) A TP Monitor Works Fine For Database Applications Where There Is ….. Client

a) More Than One

b) One

c) Two

d) None Of The Above

21) When There Are More Than One Client , A TP Monitor

a) Works Fine

b) Faces A Problem

c) Gives Average Functionality

d) None Of The Above

22) The Most Usual Different Communication Models Used Are

a) RPC

b) RMI

c) A&B

d) None Of The Above

23) Why Is It Important To Encourage Adhoc Composition In Pervasive Applications?

a) To Limit The Number Of Users Who Can Access The Application

b) To Ensure That The Application Is Only Used By Certain Types Of Users

c) To Make It Easy For Users To Configure The Suite Of The Application

d) To Increase The Complexity Of The Application

24) What Is The Default Action Of Devices In A Pervasive System? a)
To Keep Information Private And Not Share It

b) To Constantly Update Their Hardware

c) To Only Access Information When Necessary

d) To Join The System To Access, Read, Store, Manage And Share Information

25) What Is The Main Requirement For A Home System To Be Considered Pervasive?

a) It Should Be Completely Self-Organizing

b) It Should Have A Dedicated System Administrator

c) It Should Provide A Personal Space For Each User Outside Of The Home

d) It Should Require A Complex Setup Process

Lec. 4-MCQ

1. Distributed systems are necessary because …
a) Existence of large number of PCs
b) Need for people to work together
c) Sharing resources and information
d) All of the above

2. If computer A costs twice as much as computer B then you should expect:
a) Computer A is four times as fast as computer B
b) Computer A is two times as fast as computer B
c) Computer A is as fast as computer B
d) Computer B is better than computer A

3. Seymour Cray's Law tells that
a) Computers should not follow a law
b) Computers should obey a square law
c) Computers should obey a double law
d) Computers should obey a cube law

4. When price doubles, you should get at least ….. times as much speed
a) 2
b) 4
c) 6
d) 8

5. Distributed Systems have a ……. price/performance ratio than large centralized system
a) better
b) worse
c) same
d) None of the above

6. A system from 10,000 modern CPU chips, each of which runs at 50 MIPS has a total performance of
a) 300,000 MIPS
b) 400,000 MIPS
c) 500,000 MIPS
d) 600,000 MIPS

7. One of the ways strong economic forces motivate the creation of distributed systems
a) Distributed systems are slower and less efficient than centralized ones
b) Distributed systems require complex and expensive hardware
c) Microprocessors make it more difficult to add computing power to a system
d) Microprocessors make it cheap to add computing power

8. Advantage of microprocessors rather than mainframes

a) Microprocessors offer a better price/performance

b) Microprocessors have more total computing power than mainframe

c) Inherent distribution

d) All of the above

9. ……. applications are inherently distributed

a) Banking

b) Business

c) Military

d) All of the above

10. A complete system that looks like a single computer to the application programs but implemented with one computer per store is called

a) Commercial distributed Systems

b) Technical distributed Systems

c) Business distributed Systems

d) Computing distributed Systems

11. Computer supported cooperative work means that software is designed to

a) Make people work from a single computer

b) help physically separate people

c) demand people to work from one location

d) prevent remote work

12. In a fault tolerant system, if one machine is down the rest will

a) Also be down

b) Await the fix

c) Still interact

d) None of the above

13. In distributed systems if workload grows at certain point,

a) System will have to be replaced

b) It is possible to add more processors

c) Growth can not be handled

d) System will shut down

14. ….. is a distributed system that offers payment solutions.

a) Amazon

b) eBay

c) PayPal

d) Booking

15. Distributed systems affected the information society by
a) the development of web search engines such as Google
b) The emergence of digital libraries and the large-scale digitization
c) The increasing significance of user-generated content
d) All of the above

16. **……..** is one of the fields that got affected by distributed systems.
a) Finance and commerce
b) Creative industries and entertainment
c) Healthcare
d) All of the above

17. ……. is one of the advantages of distributed systems
a) Inevitability
b) Preventing data sharing
c) Having to buy expensive equipment
d) Less flexibility

18. A problem which can occur by distributed systems in networking
a) Limited experience
b) Network Saturation
c) Impossible to lose a message
d) Little software

19. People have easy access to secret data is one of the …. of distributed systems.
a) Advantages
b) Disadvantages
c) Requirements
d) Suggestions

20. Challenges which face the distributed systems
a) Increasing the (inter-processor communications) that used to connect individual computers
b) Number of processors available to execute on, and processors synchronization
c) Memory size and the bandwidth of interconnection network
d) All of the above

21. Problems of distributed systems can be mainly classified to
a) Software Problems
b) Hardware Problems
c) Both a & b
d) None of the above

22. Little software exists at present for distributed systems is a …… disadvantage of distributed systems.

a) Software
b) Hardware
c) Networking
d) Security

23. For data that must be kept secret at all costs, it should be

a) Highly available
b) Easy accessed
c) Saved on isolated computer
d) Shared on a public network

24. Distributed systems allow people to share expensive hardware such as

a) Printers
b) Scanners
c) Signal processing hardware
d) All of the above

25. ……. Is one of the ways distributed systems affected healthcare.

a) Telemedicine
b) Online gaming
c) Social media
d) Digital libraries