UBQUITOUS COMPUTING

UNIT NUMBER 01

1) If the systems are made proactive as per the requirements of users then these efforts and attempts are built in concept called ……

A) Distributed Computing
B) **Ubiquitous Computing**
C) Cloud Computing
D) Cluster Computing

2) "Mobility mainly allows you to connect on the move. Ubiquitous computing connects environment and user in unobtrusive ways."

A) **True**
B) False

3) Advantages of Ubiquitous computing are: *i) Invisible ii) Socialization iii) Fast Connection*

A) i) & iii)
B) **i) & ii)**
C) iii)
D) ii) & iii)

4) Ubiquitous computing is dependent on

A) Converging Internet
B) Wireless Technology
C) Advanced Electronics
D) **All of the above**

5) Along with the idea of technology, Ubiquitous computing focuses on ……. in the environment.

A) one-to-one
B) many-to-one
C) **many-to-many**
D) one-to-many

6) "As the digital devices are wearable and constantly connected the surveillance is increased and possible restriction and interference in user privacies", is one of the key features of Ubiquitous computing.

A) False
B) **True**

7) What are the core properties of Pervasive computing?

A) Firstly, computers need to be networked, distributed and transparently accessible.
B) Interaction of computers with humans needs to be more hidden, because much HCI is overly intrusive.
C) **Both A) & B)**
D) None of the above.

8) The computers can be operated without human intervention that is autonomously and they are self-governed.

A) **True**
B) False

9) For smart devices, what are the **two** closely connected ideas to be understood to lead off true Ubiquitous Computing?

A) Cloud Computing & Internet of Things.
B) Cloud Computing & Machine-to-Machine communication.
C) **Internet of Things & Machine-to-Machine communication.**
D) Machine-to-Machine communication & Distributed Computing.

10) The term "Ubiquitous Computing" was first conferred by

A) Dennis Ritche
B) Bjarne Stroustrup
C) Linus Torvalds
D) **Mark Weiser**

11) The type of environment context which is dependent on physical dimensions such as time, temperature etc. is known as

A) Human Context
B) **Physical Environment Context**
C) Virtual Environment Context
D) None of the above

12) The context in which main constraint on interaction is applied on different users, it may include various types like experience of user, previous knowledge of users and various requirements of tasks is known as

A) **Human Context**
B) Physical Environment Context
C) Virtual Environment Context
D) None of the above

13) Any type of specific component in a distributed system is aware of different services that are available internally and externally.

A) Human Context
B) Physical Environment Context
C) **Virtual Environment Context**
D) None of the above

14) Various benefits of ubiquity which is context based mainly includes:
i) To deliver the ubiquitous services it will have limitation on various resources.
ii) There is choice of access limits from various services to useful services.
iii) For decision making overburdening on user with much information is avoided.

A) i) & ii)
B) **i), ii) & iii)**
C) ii) & iii)
D) i) & iii)

15) The aim of context awareness is to support the ubiquity which is context based.

A) False
B) **True**

16) What is **True** about Virtual Reality?
i) In virtual reality, different people are involved and VR is mainly generated by a single system.
ii) In VR time and space are collapsed.
iii) VR also exists as a separate reality from physical world.

A) **i), ii) & iii)**
B) i) & iii)
C) ii) & iii)
D) i) & ii)

17) When through different devices access is provided then it is called as

A) Transparency
B) **Ubiquity**
C) Mobility
D) Reality

18) When access is integrated into various environments then it is called as

A) Ubiquity
B) Mobility
C) Reality
D) **Transparency**

19) Practically the system transparency is fuzzier.

A) **True**
B) False

20) Because of Openness, the systems get support from all functions at the design time.

A) **False**
B) True

21) The bottom first layer of different ICT systems is

A) **Hardware Resource Layer**
B) Middle ware and Operating Systems
C) Human Computer Interaction Layer
D) None of the above

22) The middle second layer of different ICT systems is

A) Hardware Resource Layer
B) **Middle ware and Operating Systems**
C) Human Computer Interaction Layer
D) None of the above

23) The top layer of different ICT systems is

A) Hardware Resource Layer
B) Middle ware and Operating Systems
C) **Human Computer Interaction Layer**
D) None of the above

24) User performs an action which is having primary aim to interact with particularly a computerized system but such a system understands as input is known as

A) **Implicit Human Computer Interaction**
B) Explicit Human Computer Interaction
C) Both A) & B)
D) None of the above

25) The user tells the computer in a certain level of abstraction what he/she expects the computer to do is known as

A) Implicit Human Computer Interaction
B) **Explicit Human Computer Interaction**
C) Both A) & B)
D) None of the above

26) In augmented reality (AR), computer information is added to have augmentation of different physical world experiences.

A) False
B) **True**

27) The process to draw computer out of electronic shells is known as

A) **Embodied Virtuality**
B) Virtual Reality
C) Augmented Reality
D) Mediated Reality

28) The reality is reduced or otherwise altered as desired is knows as

A) Embodied Virtuality
B) Virtual Reality
C) Augmented Reality
D) **Mediated Reality**

29) If user wants to use various computers very effectively in the physical world, then they cannot remain embodied in very limited electronic forms.

A) **True**
B) False

30) The essence of human nature can be changed by use of various types of mechanisms which are

A) **Physical and Virtual**
B) Physical and Augmented
C) Augmented and Virtual
D) None of the above

31) Context aware UbiCom systems are having main aim of physical world awareness.

A) False
B) **True**

32) Another name of User context awareness is

A) **Person Awareness**
B) Social Awareness
C) Context Awareness
D) Physical Awareness

33) This type of awareness is having concern to various ubiquitous services, resources and devices is known as

A) **User context awareness**
B) Physical environment context
C) Virtual environment context
D) None of the above

34) User context awareness is used to support different user centered tasks and goals

A) **True**
B) False

35) Which of the following statements is true?

A) **User awareness supports different user centered tasks and goals.**
B) User awareness supports different computing tasks and goals.
C) User awareness ignores a user activity goals.
D) None of the above.

36) On behalf of user when UbiCom system mainly adjust with the context of environment then it is called as

A) Passive context awareness system
B) **Active context awareness system**
C) User context awareness
D) Virtual environment context

37) Active context awareness system is automatically adjusted to the context but the user is unaware of it.

A) **True**
B) False

38) Whenever there are hard time constraints, there active context awareness system couldn't be helpful

A) True
B) **False**

39) On behalf of user when UbiCom system is having awareness of context of environment then it is called as

A) **Passive context awareness system**
B) Active context awareness system
C) User context awareness
D) Virtual context awareness

40) Passive context awareness system is mainly configured to give reports of deviations from the context paths which are planned previously.

A) **True**
B) False

41) The property of a system to manage its own actions independently is known as

A) **Autonomy**
B) Embodied Reality
C) Virtual Reality
D) Mediated Reality

42) …….. are outlines as systems that are self-governing and also, they are capable of taking their own independent decisions and actions.

A) **Autonomous system**
B) Active context awareness system
C) Passive context awareness system
D) None of the above

43) A software agent system is characterised often as an autonomous system.

A) **True**
B) False

44) Sometimes, autonomous systems may be designed such that these goals can be assigned to them dynamically by users.

A) False
B) **True**

45) Only one single administrative entity means a network administrator who is common to all networks available controls the network autonomously.

A) **True**
B) False

46) In UbiCom systems intelligence mainly have support to below behaviours:
i) Physical environment modelling
ii) Copying and Modelling its human environment
iii) Handling incompleteness
iv) Handling non-deterministic behaviour
v) Semantic and knowledge-based behaviour

A) i), ii) & v)
B) i), iii), iv) & v)
C) ii), iii), iv) & v)
D) **i), ii), iii), iv) & v)**

47) These types of design architectures are applied to UbiCom systems

A) Smart device
B) Smart environment
C) Smart interaction
D) **All of the above**

48) UbiCom system properties internal model is based upon five basic properties:

A) **i) Distributed, ii) IHCI, iii) Autonomy, iv) Artificial Intelligence, v) Context awareness**
B) i) Smart devices, ii) Smart environment, iii) Smart systems, iv) Smart interactions, v) Smart Users
C) i) Invisible, ii) Socialization, iii) Decision-making, iv) Emergent Behaviour, v) Convergence
D) None of the above

49) What is the important type(s) of interaction of UbiCom system's interaction model?

A) This is between computer systems and humans as systems (HCI).
B) This is between computers and the physical world (CPI).
C) **Both A) & B)**
D) None of the above

50) The type(s) of environment for UbiCom systems are

A) The human environment

B) The physical world environment
C) The infrastructure of other ICT systems
D) **All of the above**

51) Physical World to Physical World Interaction (P2P) refers to interactions inside nature that are not mediate by any important ICT system.

A) **True**
B) False

52) …….. is a hybrid model. It mainly combines the designs of smart environments, smart device, and smart interaction.

A) **Smart DEI**
B) Embodied Virtuality
C) Virtual Reality
D) Mediate Reality

53) For smart devices there are different characteristic(s) as follows:
i*) Mobility ii) Dynamic service discovery iii) Intermittent resource access*

A) **i), ii) & iii)**
B) i) &ii)
C) ii) & iii)
D) i) & iii)

54) …… also operate as a single portal to access different sets of popular multiple application services are known as

A) **Smart Devices**
B) Smart Environment
C) Smart Interaction
D) None of the above

55) ……. is grouping of MEMS which may be fashioned into three dimensional shapes as artefacts resembling many alternative types of entity

A) Smart Dust
B) Smart Skin
C) **Good Clay**
D) All of the above

56) MEMS devices can be painted onto numerous surfaces in order that a range of physical world surfaces in order that a range of physical world structures can act as networked surfaces of MEMS. This type is named as

A) **Good Skins**
B) Smart Dust
C) Smart Clay
D) None of the above

57) ……. devices aren't worn or constituted they'll be portable or hand-held or having some break free.

A) **Accompanied**
B) Portable
C) Hand Control
D) Wearable

58) …… are the highest resource devices.

A) Accompanied
B) **Portable**
C) Hand Control
D) Wearable

59) …… are usually operated one handed or generally occasion hands free.

A) Accompanied
B) Portable
C) **Hand Control**
D) Wearable

60) …… devices like accessories and jewellery and that they are typically operated hands free. Additionally, they operate autonomously.

A) Accompanied
B) Portable
C) Hand Control
D) **Wearable**

61) For augmentation of human functions …… are used for medical.

A) Accompanied
B) Portable
C) Hand Control
D) **Implanted and embedded**

62) Static devices tend to be delight before installation to a hard and fast location so reside there for his or her full operational life cycle.

A) **True**
B) False

63) Smart setting devices support many sorts of interaction with surroundings like the physical environment are:

A) Tagging and annotation the physical surroundings
B) Sensing or observance the physical surroundings
C) **Both A) & B)**
D) None of the above

64) …….. devices are sorts of surroundings devices which will be mixed with different particles and unfold onto surfaces or scattered into gases and fluids.

A) **Untethered**
B) Embedded system
C) Both A) & B)
D) None of the above

65) Smart environments could use elements that are embedded or untethered.

A) False
B) **True**

66) Devices are also embedded in:
i) Elements of physical environments
ii) Elements of human surroundings
iii) Elements of larger ICT devices

A) i) & ii)
B) ii) & iii)
C) i) & iii)
D) **i), ii) & iii)**

67) Macro sized devices incorporate a variety of device sizes such as:

A) Tab sized
B) Pad sized
C) Board sized
D) **All of the above**

68) The interaction protocol consists of a flow of management of two messages, missive of invitation then a reply or response.

A) **Synchronous Interaction**
B) Asynchronous Interaction
C) Both A) & B)
D) None of the above

69) The interaction protocol consists of single message that haven't any management of flow.

A) Synchronous Interaction
B) **Asynchronous Interaction**
C) Both A) & B)
D) None of the above

70) The dependent parties that are concerned by Basic Interaction

A) **Sender & Receiver**
B) Client & Server
C) Shopkeeper & Customer
D) None of the above

71) Good interactions extends basic interactions, those are:
i) Coordinated interactions
ii) Policy and convention primarily based on interaction
iii) Dynamic organisational interaction
iv) Semantic and linguistic interactions

A) i) & ii)
B) ii), iii) & iv)
C) i), ii) & iii)
D) **i), ii), iii) & iv)**

72) Completely different elements act along to attain a standard goal victimisation express communication is known as

A) **Coordinated interactions**
B) Policy and convention primarily based on interaction
C) Dynamic organisational interaction
D) Semantic and linguistic interactions

73) Completely different elements act along to attain a standard organisational goal however it's based upon in agreement rules is known as

A) Coordinated interactions
B) **Policy and convention primarily based on interaction**
C) Dynamic organisational interaction
D) Semantic and linguistic interactions

74) Organisations are systems that are a briefing of relationships (interactions) between people in order that they manufacture a system with qualities not gift at the amount of the people are known as

A) Coordinated interactions
B) Policy and convention primarily based on interaction
C) **Dynamic organisational interaction**
D) Semantic and linguistic interactions

75) Smart interaction additionally needs some smart orchestrator entity or creator entities to ascertain goals and be able to plan tasks with the participation of others.

A) **True**
B) False