

Mobile Computing 2019

1) A television broadcast is an example of _____ transmission.

Answer: c) Simplex

2) PSTN stands for _____.

Answer: b) Public Switch Telephone Network

3) If mounted on the roof of a car, the length of _____ is efficient. This is also known as Marconi antenna.

Answer: a) $\lambda/4$

4) MAC sub layer is the part of _____.

Answer: c) Data link layer

5) BSS in GSM stands for _____.

Answer: b) Basic Services Set

6) _____ is essential for a database in Android.

Answer: b) SQLite

7) _____ is useful to receive broadcast messages from the system.

Answer: a) Broadcast receivers

8) MANET stands for _____.

Answer: c) Mobile ad-hoc networking

9) Radio transmission starts at several kHz, the _____ range.

Answer: b) Very low frequency

10) _____ is used for allocating a separated space to users in wireless networks.

Answer: c) TDMA

11) Infra-red technology uses diffuse light reflected at walls, furniture, etc. or directed light if _____ exists between sender and receiver.

Answer: b) Line-of-Sight (LOS)

12) PLCP stands for _____.

Answer: a) Physical layer convergence protocol

13) _____ is based on a client/server model.

Answer: a) DHCP

14) GSM stands for _____.

Answer: d) Global system for mobile communications

2018

Q.1 A) Choose correct alternatives:

1) _____ allows subscribers to operate in mobile phone service areas other than the service area where the service is subscribed.

Answer: a) Roaming

2) In cellular technology the concept used is _____.

Answer: c) Frequency Reuse

3) A small division of a given geographical area is known as _____.

Answer: b) Cell

4) _____ in FDMA is assigned between the spectrum of two adjacent users.

Answer: c) Guard band

5) The uplink frequency of P-GSM system is _____.

Answer: c) 890-915 MHz

6) The type of access technology used in GSM technology is _____.

Answer: a) FDMA / TDMA

7) A television broadcast is an example of _____ transmission.

Answer: a) Simplex

8) The _____ protocol solves the problem of hidden and exposed terminal.

Answer: d) MACA

9) PSTN stands for _____.

Answer: c) Public Switch Telephone Network

10) The _____ xml file that contains all the text that your application uses.

Answer: b) string.xml

B) State True or False:

1) EIR is a database that contains information about the identity of mobile equipment.

Answer: True

2) Fading of the received radio signal in a mobile communication environment occurs because of single path propagation.

Answer: False (Fading is caused by multi-path propagation)

3) The R.java file is where you edit the resources of an Android project.

Answer: False (The R.java file is auto-generated and should not be edited directly)

4) In Android, there can be only one activity at a given time.

Answer: False (Android applications can have multiple activities running concurrently)

2019 oct

Sure, here are the answers to the fill-in-the-blank questions:

1) Several directed antennas can be combined on a single pole to construct a _____.

Answer: a) Sectorized antenna

2) Which of the following is not the basis for SDMA algorithm?

Answer: b) Cells

3) In IEEE 802.11 wireless LAN, _____ sub layer handles modulation and encoding/decoding of signal.

Answer: b) PMD

4) In mobile IP, a tunnel usually ends at _____.

Answer: c) Home agent

5) _____ is used for cellular phone, satellite, and wireless LAN communications.

Answer: b) Microwaves

6) MAC is _____.

Answer: a) Medium Access Control

7) _____ can provide several services to the MN during its visit to the foreign network.

Answer: c) FA (Foreign Agent)

8) The Um radio interface is used to connect _____.

Answer: b) BTS and MS (Base Transceiver Station and Mobile Station)

9) IMSI number consists of _____.

Answer: d) All of the above (MSIN, Mobile Network Code, Mobile Country Code)

10) Which of the following algorithms is used for authentication in GSM?

Answer: c) A3

11) _____ is used to provide the data or to access the data by other applications which is stored by itself.

Answer: c) Content-provider

12) Which is not an Android layout?

Answer: a) Activity

13) The main purpose of _____ is to inform the home agent of the current location for correct forwarding of packets.

Answer: b) Registration

14) Forming groups of piconets called _____.

Answer: b) Scatternet

Artificial Intelligence

2020

1) Knowledge may be _____.

Answer: d) Both (I) and (II) above (Declarative and Procedural)

2) The first widely-used commercial form of Artificial Intelligence (AI) is being used in many popular products like microwave ovens, automobiles and plug in circuit boards for desktop PCs. It allows machines to handle vague information with deftness that mimics human intuition. What is the name of this AI?

Answer: c) Fuzzy logic

3) What is the extraction of the meaning of utterance?

Answer: b) Semantic

4) One of the main challenges of NLP is _____.

Answer: a) Handling Ambiguity of Sentences

5) Treatment chosen by doctor for a patient for a disease is based on.

Answer: c) Current symptoms plus some knowledge from the textbooks plus experience

6) Which search strategy is also called as blind search?

Answer: a) Uniformed search

7) Which search is implemented with an empty first-in-first-out queue?

Answer: b) Breadth-first search

8) Which of the following is/are Uninformed Search technique/techniques?

Answer: d) All of the mentioned (Breadth First Search (BFS), Depth First Search (DFS), Bidirectional Search)

9) Best-First search can be implemented using the following data structure.

Answer: c) Priority Queue

10) _____ Is an algorithm, a loop that continually moves in the direction of increasing value – that is uphill.

Answer: b) Hill-Climbing

11) Which is true regarding BFS (Breadth First Search)?

Answer: b) The entire tree so far been generated must be stored in BFS

12) Fuzzy Set theory defines fuzzy operators. Choose the fuzzy operators from the following.

Answer: d) All of the mentioned (AND, OR, NOT)

13) Semantic Networks is _____.

Answer: a) A way of representing knowledge

14) Hill-Climbing approach stuck for the following reasons.

Answer: d) All of the mentioned (Local maxima, Ridges, Plateau)

2018

Q.1 A) Choose correct alternatives:

1) _____ begin with the start symbol and apply the grammar rules forward until symbols at the terminals of the tree correspond to the components of the sentence being parsed.

Answer: a) Top-Down parsing

2) _____ measures the strength of the evidence in favor of a set of propositions.

Answer: c) Belief

3) _____ is an act to represent building of new information out of old.

Answer: c) MBUILD

4) _____ reasoning suggests to generate the next level by taking each node generated at the previous level and applying to it all of the rules whose left sides match it.

Answer: b) Forward

5) The average branching factor Chess game is _____

Answer: a) 50

6) The real-world facts would be represented as logical propositions written as _____ in propositional logic.

Answer: b) Well formed formulas

7) _____ is a program that provides advice on mineral exploration.

Answer: b) PROSPECTOR

8) _____ is the ability to acquire new information easily.

Answer: d) Acquisition Efficiency

9) A two-list OPEN and CLOSED are used in the _____ algorithm.

Answer: a) AO*

10) The first requirement of a good _____ is that it causes motion.

Answer: b) Control strategy

B) State True or False:

1) Abstraction provides a way of solving problems for which no more direct approach is available.

Answer: True

2) Recoverable problems are those in which solution steps cannot be undone.

Answer: True

3) DENDRAL is a program that infers the structure of organic compounds using mass spectrogram and nuclear magnetic resonance data.

Answer: True

4) Matching is a collection of attributes and associated values that describes some entity in the word.

Answer: False

2019

Here are the answers to the multiple-choice questions:

1) A problem in a search space is defined by one of these states _____.

Answer: a) Initial state

2) Hill-Climbing algorithm terminates when, _____

Answer: c) No neighbor has a higher value

3) A search algorithm takes _____ as an input and returns _____ as an output.

Answer: b) Problem, solution

4) Which search method takes less memory?

Answer: a) Depth-First Search

5) A production rule consists of _____.

Answer: c) Set of Rule & sequence of steps

6) Which is the best way to go for Game playing problem?

Answer: b) Heuristic approach (Some knowledge is stored)

7) What is Artificial intelligence?

Answer: c) Making a Machine intelligent

8) A.M. Turing developed a technique for determining whether a computer could or could not demonstrate the artificial Intelligence, Presently, this technique is called _____.

Answer: a) Turing Test

9) Semantic Networks is _____.

Answer: a) A way of representing knowledge

10) Which search uses the problem-specific knowledge beyond the definition of the problem?

Answer: a) Informed search

11) Which is used to improve the performance of heuristic search?

Answer: b) Quality of heuristic function

12) Which of the following is not the style of inference?

Answer: d) Modus Ponens

13) Translate the following statement into FOL.

“For every a, if a is a PhD student, then a has a master's degree”

Answer: a) $\forall a \text{ PhD}(a) \rightarrow \text{Master}(a)$

14) Frames is _____.

Answer: c) A way of representing knowledge