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ACADEMY

# I: True or False (10 points)

1. Nanotechnologies are best known for enlarging things.
2. Narrow AI is the most common type of AI that performs a dedicated task with
3. Interoperability challenge is not an issue in the Internet of things.
4. Augmented reality enables to superficially interact with the environment in re
5. Video see-through device uses an HMD (head-mounted-device) that employ merge the images within an open-view HMD.
6. Today many insurance companies are installing black boxes in customer car behavior and adjusting premiums accordingly.
7. Information security is broader than cyber security in that it protects inform representation as well.
8. Ambient Intelligence poses a serious privacy concern.
9. Vulnerability is the protection of computer systems from theft of or software, or electronic data.
10. The Internet boom has provided many benefits for society and   Intern negative aspects.

# rt II: Multiple Choice (20 points)

1. Brewing and baking bread are examples of processes that fall within the
   A. Genetic Engineering
   B. Biotechnology
   C. Blockc
   D. Nanote

. Of the following is NOT among the technological enablers of IoT.
   A. RFID used for tagging
   B. Securing techniques like SSL
   C. Nano technology used for shrinking things
   D. smart technology used for thinking the things

All of the following belong to types of IoT systems except_____.
   A. Wearable devices
   B. Smart Phones
   C. Wir
   D. Leg

All of the following are IoT cloud development platforms except
   A. Microsoft Assure
   B. Salesforce
   C. IBN
   D. Te

. Which of the following is not the advantage of IoT?
   A. Improved Customer Engagement
   B. IoT provides real-world information leading to the more effective management of resources.
   C. Enhanced data collection.
   D. If there's a bug in the system, it's likely that every connected device will become corrupted.

6. Which layer of the IoT architecture is responsible to take measurements such as temperature, air quality, speed, humidity, pressure, flow, movement and electricity etc.?
   A. Application Layer
   B. Management Service Layer
   C. Gateway and Network Layer
   D. Smart Devices/Perception Layer

7. Which of the following is wrong about IoT?
   A. It is about intelligent network of devices which are capable of sensing, accumulating and transferring data autonomously and automatically.
   B. There are fewer number of IoT devices today than the size of the global human population.
   C. Network of smart objects with inherent constraints such as power, bandwidth, storage etc.
   D. Machine to machine (M2M) offers the connectivity that enables IoT.

8. Of the multi-tier augmented reality (AR) system architecture_____ is concerne about managing process workflows, access controls, and fetching and storing data.
   A. AR Client
   B. AR Middle tier
   C. AR Database Server
   D. AR System Server

9. In which type of reality can you interact with and manipulate both physical and virtual items and environments, using next-generation sensing and imaging technologies?
   A. Variable Reality
   B. Mixed Reality
   C. Virtual Reality
   D. Augmented Reality

10. Of the components in an AR system architecture _____ is responsible for proper alignm the real and virtual objects.
    A. Display System
    B. Tracking system
    C. Scene generator
    D. None of the above

11. Which of the following is a not characteristic of Augmented Reality?
    A. Combines Virtual and Real
    B. Visual contact with the physical world
    C. 3D-Display of Virtual Object
    D. Real-time-user interaction

Clarity and transparency in the type and purpose of data collected.

...e of the following cannot be considered as General Ethical Principles
A. Avoid harm.
B. Biasness
C. Respect privacy
D. Honor confidentiality

16. One of the following cybersecurity threats is designed to extort money by blocking access to computer files or systems.
A. Phishing
B. Ransomware
C. Adware
D. Malware

17. One of the following types of computer vision is used to determine the identity of individuals in an image.
A. Object Detection
B. Edge detection
C. Facial recognition
D. Pattern recognition

18. Which digital privacy principle dictates to collect the minimal amount of information necessary from individuals and businesses consistent with the organization's mission and legal requirements?
A. Transparency
B. Data minimization
C. Accuracy
D. Security

19. One of the following is not a part of embedded system advantages
A. High development effort
B. Enhanced performance
C. Easily customizable
D. Low cost

20. One of the following type of data forms is known to be important in big data systems for performing preliminary analytics
A. Unstructured data
B. Semi-structured data
C. Metadata
D. Structured data

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