Question 1

Which of the following statements are not true?

A. Humans prefer to interact with machines in the same way that they interact with other people.
B. Empathy is the capacity to understand what other humans are experiencing.
C. Presence of empathic responses by AI leads to better, more positive and appropriate interactions.
D. Appearance and function of a product has no significant impact on how people perceive it, interact with it, and build long-term relationships with it.

Question 2

Shimi analyzes the human voice for arousal and performs semantic analysis of spoken language for emotion detection?

A. ~~True~~
B. False

Question 3

The _____ task is a test that psychologists use to gauge development of the theory of mind.

A. False knowledge
B. False belief
C. True belief
D. True knowledge

Question 4

Humans prefer to interact with machines in the same way that they interact with other people

A. True
B. False

Question 5

Tendency to provide human characteristics to non-lifelike artifacts is called as

A. Polymorphism
B. Anthropomorphism
C. Skeuomorphism
D. Neomorphism

Question 6

A human appearance or behavior can make an artificial figure seem more familiar for viewers — but only up to a point is called as

A. Flat-floored valley
B. Waipi'o Valley
C. Empathetic agents
D. Uncanny Valley

Question 7

Agents that respond emotionally to situations that are more congruent with the user's or another agent's emotional situation are known as TYPE-1 agents.

A. True
B. False

Question 8

Empathic agents are

(A) Agents that respond emotionally to situations that are more congruent with the user's or another agent's emotional situation.

(B) Agents that, by their design and behaviors, lead users to respond in a way that is more congruent with the agent's emotional situation.

A. Only A
B. Only B
C. Both A and B
D. None of the above

Question 9

Which of the following robots had a very expressive mechanical face with anthropomorphic features?

A. KISMET
B. Shimy
C. Both A and B
D. None of the above

Question 10

User feedback ratings are the potential methodological metric for evaluating the affective agents.

A. True
B. False

Question 11

What is anthropomorphism primarily concerned with?

A) Creating machines with advanced technological features

B) Developing robots with superhuman abilities

C) Giving non-human artifacts human-like characteristics

D) Exploring human behavior through AI research

Question 12

What is the primary reason for attributing human-like characteristics to non-human artifacts?

A) To demonstrate superiority over human capabilities

B) To simplify interactions and make them more comfortable for humans

C) To challenge traditional notions of human-machine interaction

D) To showcase the advanced capabilities of modern technology

Question 13

What are the two main aspects of anthropomorphism that impact human interaction with robots and agents?

A) Appearance and Intelligence

B) Function and retention

C) Appearance and function

D) Interaction and capabilities

Question 14

What happens when there is a mismatch between the appearance and capabilities of a robot or agent?

A) The robot becomes too complex to manufacture

B) Interaction becomes more interesting because there is uniqueness

C) The robot doesn't look realistic

D) The interaction becomes uncomfortable for users

Question 15

What is identified as a key factor contributing to discomfort in interactions with robots in the Uncanny Valley?

A) The absence of human-like appearance in robots

B) The inability of robots to perform tasks efficiently

C) The mismatch between human expectations and robot capabilities

D) C) The inability of robots to accurately mimic human speech

Question 16

What are the three major sub processes involved in empathy?

A) Emotional recognition, behavior analysis, and cognitive assessment

B) Emotional simulation, perspective taking, and emotion regulation

C) Cognitive simulation, perspective shifting, and emotional adaptation

D) Emotional mirroring, behavior adjustment, and cognitive empathy

Question 17

In context of Therapy session vocal recordings, what prosodic features may be associated with low empathy situations?

A) Medium length segments with low energy and low pitch

B) Medium length segments with high energy and high pitch

C) Short segments with high energy and low pitch

D) Long segments with low energy and high pitch

Question 18

What are the two main methodologies researchers use to generate empathetic behavior in virtual or robotic agents?

A) Sentiment analysis and emotional space modeling

B) Computational modeling and data-driven approaches

C) Behaviorism and cognitive psychology

D) Neurological simulation and machine learning

Question 19

Which of the following is NOT mentioned as a cue for analyzing empathy in interactions?

a) Lexical cues

b) Vocal cues

c) Visual cues

d) Olfactory cues

Question 20

What does the term "averted mutual gaze" refer to in the context of analyzing gaze patterns?

a) Both participants looking at each other

b) One participant looking at the other

c) Neither participant looking at each other

d) Averted gaze between participants

Question 22

What is one proposed method for evaluating the effectiveness of affective agents?

a) Likert scale analysis

b) Turing test

c) Emotional intelligence assessment

d) Facial expression recognition

Question 21

What is the first step in applying a computational model to generate empathy in an AI chatbot?

a) Modulating empathy response

b) Expressing empathy through messages

c) Understanding the user's emotional state

d) Analyzing user demographic information

Question 23

What types of cues were monitored by the Affective Autotutor to determine the appropriate response?

a) Only facial expressions

b) Facial expressions, conversational cues and body postures

c) Voice data and conversational cues

d) Only body postures and conversational cues

Question 24

Minimal variability in empathetic responses adds complexity to accurately perceiving empathetic behaviors in computational models.

A. True
B. False

Question 25

What is a major challenge in integrating cognitive models of empathy into computational models?

a) Lack of computational resources

b) Lack of interest from computational researchers

c) Inability to collect relevant data for cognitive analysis

d) Limited consensus on cognitive models of empathy

Question 26

Which of the following is NOT one of the elements involved in evoking empathetic responses?

a) Type of behavior

b) Time synchronization

c) Appearance

d) Context

Question 27

What is highlighted as one of the capabilities of the Kismet robot?

a) Its ability to perform complex mathematical calculations

b) Its capability to understand human emotions and respond empathetically

c) Its skill in mimicking human speech patterns perfectly

d) Its proficiency in physical tasks such as lifting heavy objects

Question 28

What type of data does the empathetic companion system analyze to gauge the user's emotional state?

a) Heart rate and blood pressure

b) Skin conductance and electromyography

c) Respiration rate and body temperature

d) Brainwave activity

Question 29

How does Shimi, the personal robot, communicate with humans?

a) Through written messages only

b) Through music, gestures, and verbal responses

c) Through facial expressions only

d) Through abstract symbols

Question 30

Which is NOT correct regarding the false belief test?

1. The False Belief Test is used to assess an individual's theory of mind, particularly in adults.
2. In the test, participants are presented with scenarios where someone holds a false belief about a situation.
3. The test aims to determine whether the participant can understand that others may have beliefs that differ from their own.

A. 1 and 2
B. 2 and 3
C. 1 only
D. 3 only

1) What is empathy primarily about? **1 point**

- ⦿ Understanding and experiencing what others are going through
- ◯ Providing sympathy to others in their times of need
- ◯ Avoiding interaction with those who lack empathy
- ◯ Building relationships based on mutual understanding and support

2) Providing emotionally intelligent components, such as empathetic responses from **1 point** virtual agents, can lead to better, more positive, and appropriate interactions with humans.

- ⦿ True
- ◯ False

3) What is anthropomorphic design primarily based on? **1 point**

- ⦿ Humans prefer machines with human-like properties
- ◯ The belief that machines should mimic human behavior entirely
- ◯ Both A and B
- ◯ None of the above

4) What is the Uncanny Valley effect primarily associated with? **1 point**

- ◯ Increased acceptance of robots in society
- ⦿ A feeling of discomfort towards almost human-like robots
- ◯ Both A and B
- ◯ None of the above

5) What are the three major subprocesses involved in empathy? **1 point**

- ◯ Emotional simulation, personalization, and emotional regulation
- ⦿ Emotional simulation, perspective taking, and emotion regulation
- ◯ Sympathy, perspective taking, and cognitive processing
- ◯ None of the above

6) Physiological and behavioral cues can be applied to understand emotional state **1 point** but not empathy.

- ◯ True
- ⦿ False

7) Vocal cues and voice modalities of humans are reliable indicators of empathetic **1 point** states.

- ⦿ True
- ◯ False

8) Empathetic responses displayed by virtual and robotic agents are truly empathetic. *1 point*

○ True
◉ False

9) What are the primary limitations of the data-driven approach in computational *1 point* modeling of empathy?

○ Lack of computational power
◉ Insufficient quantity and variety/quality of data
○ Ethical issues surrounding data collection
○ None of the above

10) Kismet is not an anthropomorphic robotic head specialized for face-to-face *1 point* interaction with humans.

○ True
◉ False