

OCTOBER 2020

EBS 168J

LEARNING THEORIES FOR TEACHING

COMPUTING

1 HOUR 45 MINUTES

Candidate's Index Number:

Signature:

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
FIRST YEAR, END-OF-SECOND SEMESTER EXAMINATION, OCTOBER, 2020

OCTOBER 26, 2020

LEARNING THEORIES FOR TEACHING
COMPUTING

2:00 PM – 2:45 PM

This paper consists of two sections, A and B. Answer all the questions in Section A and THREE questions from Section B. Section A will be collected after the first 45 minutes.

SECTION A
[40 MARKS]

For items 1 to 20, each stem is followed by four options lettered A to D. Read each statement carefully and circle the letter of the best option on the question paper.

1. In learning theory, the naturally occurring response is called the
 - A. conditioned response.
 - B. conditioned stimulus.
 - C. unconditioned response.
 - D. unconditioned stimulus.
2. Consequences that discourage repetition of a particular behaviour are called
 - A. extinction.
 - B. negative reinforcement.
 - C. operant conditioning.
 - D. positive reinforcement.
3. The process by which individuals learn by associating, pairing automatic responses to new stimuli refers to
 - A. classical conditioning.
 - B. classical response.
 - C. operant conditioning.
 - D. operant response.
4. Learning through interactions with others is called learning.
 - A. constructivism
 - B. project-based
 - C. social
 - D. zone of proximal development

5. A very useful principle of learning an ICT concept is that a new response is strengthened by
- biofeedback.
 - discriminative stimulus.
 - punishment.
 - reinforcement.
6. A 'Skinner Box' is used for
- incidental learning.
 - motor learning.
 - problem solving.
 - sensory learning.
7. Punishment is effective only when it weakens response.
- desirable
 - negative
 - positive
 - undesirable
8. Learning to make new responses to identical or similar stimuli results in a transfer.
- Negative
 - Neutral
 - Positive
 - Zero
9. Who is regarded as the father of the 'Programmed Learning'?
- B. F. Skinner.
 - C. L. Hull.
 - I. P. Pavlov.
 - J. B. Watson.
10. Which type of learning experiments show how the behaviour of animals can be controlled or shaped in a desired direction by making a careful use of reinforcement?
- Classical conditioning.
 - Latent learning.
 - Operant conditioning.
 - Sign learning.
11. An approach to instruction whereby students who have mastered a topic teach those who have **not** is termed
- peer tutoring.
 - PQ4R method.
 - Scaffolding.
 - self-questioning.
12. Which of the following is **not** one of the characteristics of a theory?
- Can be disproven.
 - Invites disagreement, alternative, and better explanations.
 - Predicts results which can be reproduced.
 - Statement of fact, but a not statement of likelihood.
13. Which of the following is the focus of behaviourism?
- Actively constructing or building new ideas or concepts.
 - Brain-based learning.
 - Deeper understanding of phenomenon.
 - Observable aspects of learning.

14. Many computer-based instruction curricula are based upon Skinnerian behaviouristic programming, which in turn is based on assumption that
- A. computers can support a variety of learners construct their own understanding.
 - B. people are psychologically passive in nature.
 - C. technology can help students create concrete expressions of their ideas.
 - D. uses the power of the mind as a computer.
15. Which of the following is the focus of cognitivism?
- A. Learning is the outcome of the relationships between stimuli and responses.
 - B. Observable aspects of learning.
 - C. The environment shapes one's behaviour.
 - D. What happens in the mind such as thinking and problem-solving.
16. A technique in mental processes whereby students look for one correct answer by comparing, contrasting, applying, analysing, synthesize and evaluating is known as
- A. cooperative learning.
 - B. critical thinking.
 - C. metacognition.
 - D. scaffolding.
17. A mentorship in which a teacher and a student work together in order to accomplish a challenging task or solve a difficult problem; in which process, the teacher provides guidance about how to think about the task or problem is known as
- A. cognitive apprenticeship.
 - B. cognitive constructivist.
 - C. cooperative learning.
 - D. cognitive revolution.
18. Which theory believes that students learn by observing or watching and imitating other people?
- A. Social learning.
 - B. Positive reinforcement.
 - C. Unconditioned response.
 - D. Reciprocal determination model.
19. The model which proposes that human memory is like the computer which involves a sequence of three stages: sensory memory, short term memory and long-term memory is
- A. generalization.
 - B. gestalt psychology.
 - C. information processing model.
 - D. insightful learning.
20. Which of the following is a temporary storage facility? Short term memory is also called working memory. It will initially last somewhere around 15 to 20 seconds unless it is repeated (rehearsal).
- A. Long Term Memory.
 - B. Short-term memory.
 - C. Sensory Register.
 - D. Storage

Items 21 to 30 are statements. Indicate whether each corresponding statement under the STATEMENT column is True or False by writing your answer (True or False) under the corresponding ANSWER column.

| | STATEMENT | ANSWER |
|-----|---|--------|
| 21. | Learning is the systematic application of scientific or other organized knowledge to practical task. | |
| 22. | It is important for developers to study children's cognitive development, before attempting to build educational software that could aid their learning. | |
| 23. | The Child Psychologist Jean Piaget's (1823-1952) theory on cognitive development states that from 12 years old and up, people are able to think about abstract relationships. | |
| 24. | The Internet has expanded the learning community beyond the classroom walls. | |
| 25. | The role of the teacher in constructivist learning approach is a classroom administrator. | |
| 26. | Meaningful learning is where you memorize something without full understanding and you do not know how the new information relates to your other stored knowledge. | |
| 27. | Teachers and students who utilize ICTs have a more active and interactive role with technology in society and learning. | |
| 28. | B.F Skinner's work is most often described as the impetus for the current cognitive constructivist movement. | |
| 29. | Learning through the use of ICT, based on the behavioural approach, is achieved when the desired behaviour of the student is strengthened while unwanted student behaviour is weakened. | |
| 30. | To enforce learners constructing their own knowledge, instructors have to provide good interactive online instructions. | |