MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR

First YEAR, second Trimester EXAMINATIONS

FOR THE DEGREE

OF

BACHELOR OF SCIENCE IN optometry and vision sciences

COURSE CODE: BOV 110

COURSE TITLE: LEARNING STRATEGIES FOR OPTOMETRY

DATE: 26th July, 2018   **TIME:** 2 – 4 Pm

INSTRUCTIONS TO CANDIDATES

Answer all Questions
Sec A: Multiple Choice Questions (MCQ) 20 Marks
Sec B: Short Answer Questions   (SAQ)   (40 marks)
Sec C : Long Answer Questions   (LAQ) (40 marks)

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over.

Moderated 8/7/2018

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SECTION A: MULTIPLE CHOICE QUESTIONS (20marks)

1. Which is a factor that is influencing modern teaching and learning
   A. Research on the brain
   B. Research on learning
   C. Globalisation
   D. All the above

2. How we learn can be explained using learning theories which is not a theory
   A. Behaviorist
   B. Metacognitive
   C. Cognitive
   D. Humanistic

3. During teaching and learning a student a acquires all of the following except
   A. Attitude
   B. Skills
   C. Knowledge
   D. Status

4. What determines students understanding?
   A. Number of lecturers, age, gender
   B. Conceptions of teaching and learning strategies
   C. The number of students, conceptions of teaching and learning
   D. Teachers attitudes, age, teaching context

5. An effective teacher
   A. Imparts knowledge to students
   B. Facilitates learning
   C. Covers the content
   D. Shares personal experiences

6. Learning is an evolutionary process. Meaning it requires?
   A. Skills
   B. Space
   C. Time
   D. Teachers

7. Quadruple strength learning involves
    A. Doing, practicing, reading reviewing
    B. Seeing, saying, hearing, writing
    C. Looking, viewing, practicing
    D. Understanding, practing, writing, hearing

8. An appropriate approach to teach knowledge is by
    A. Facilitation of understanding
    B. Teaching the content and the process
    C. Defining concepts
    D. Emphasizing main points in the notes

9. To facilitate memory retention in learning, it is advisable to encourage the following except
    A. Encourage active interaction
    B. Use multiple contexts
    C. Encourage practice
    D. Encourage cramming

10. Instructional strategies may broadly be classified as
    A. Verbal and modeling
    B. Direct and interactive
    C. Interactive and facilitative
    D. Dialogue and facilitative

11. Examples of characteristics of a learner are
    A. Practical
    B. Inquisitive
    C. Flexible
    D. All the above

12. How does negative reinforcement defer from punishment
    A. Punishment involves administering a positive consequence
    B. Punishment reduces the probability of an undesired behaviour
    C. Negative enforcement increases the probability of an undesired behaviour
    D. Negative reinforcement entails continuing a negative consequence when a desired behaviour occurs

13. A learning set-up that involves simulations?
    A. Bed site
    B. Classroom
    C. Hospital
    D. Skills laboratory

14. Feedback should be encouraged because it
    A. Leads to more learning
    B. Time consuming
    C. May lead to criticism
    D. Demotivating

15. The use of innovative teaching methods encourages
    A. Lifelong learning
    B. Surface processing
    C. Rote learning
    D. Surface and deep processors

16. According to humanistic approach, learning is motivated by needs. Which is not a higher need
    A. Self esteem
    B. Creativity
    C. Food
    D. Achievement

17. For goals to be effective they need to be
    A. Creative
    B. Rushed
    C. Measurable
    D. Discriminatory

18. The use of simulated patients in teaching clinical skills
    A. Controlling the complexity of the learning situation
    B. Act as a bridge between theory and clinical skills
    C. Providing learning guidance
    D. Demonstrating clinical skills

19 . A lesson plan ensures
    A. Connects sections of content
    B. Coverage of the goals and objectives
    C. May lead to independent learning
    D. All the above

20. What statement best gives an example of what a formative assessment is
    A. End of period examinations
    B. Continuous class question
    C. Entrance examinations
    D. Board examinations

SECTION B: SHORT ANSWER QUESTIONS (40 MARKS)

1. Explain the following (6 marks)
    a. Contiguity Principle
    b. A negative reinforcement
    c. Positive reinforcement

2. ~~Outline~~ State the 5 keys to effective feedback (10 marks)

3. Contrast between intrinsic motivation and extrinsic motivation (4 marks)

4. What are learning objectives and give 2 reasons of their importance in teaching

   (6 marks)

5. What are instructional strategies? Explain 5 factors that may determine which method/strategy is to used (10 marks)

6. Name 4 instructional strategies/ teaching methods (4 marks)

SECTION C: LONG ANSWER QUESTIONS (40 marks)

1. You have been appointed to head the committee designing optometry lecture halls. Describe the 5 aspects would you identity as the foundation of these environments? Discuss the principles that would guide to foster the halls to be conducive environments for teaching and learning. (20 marks)

2. In order to improve outcomes in their education, a university student needs to use student centered approaches. These approaches require the learner to cultivate skills in reading and listening. Describe what a student centered approach is and discuss the skills in reading, the process of effective listening and in each skill give an example/method that may be used. (20 Marks)

BOV 110   LEARNING STRATEGIES FOR OPTOMETRY (2 UNITS/28 HRS)

Purpose:

The module which is based on the cognitive processes and mental structures that allows one to receive new information, process it, retrieve and apply the learnt knowledge in new situations

Course objectives:

By the end of the course the learner should be able to:

1. Define and explain the following concepts:
    (a) Teaching strategies
    (b) Instructional Techniques
    (c) Methods of teaching
2. Identify the broad families of methods of teaching.
3. Define each teaching method, stating its advantages and disadvantages
4. Apply note taking skills appropriately
5. Apply proper reading skills appropriately

Content

Concepts of Teaching and Learning

Teaching: introduction; domains of learning; teacher; learner; education. **Teaching Strategies/Methods:** Lecture; Independent study; Group discussion; Team teaching; Simulation; Demonstration; Role play; Problem based learning .

Factors for choice of Strategy

Skills: Lecturing; Set induction; Stimulus variation; Questioning; Use of examples; Reinforcement; Small group.

Learning

Conditions of Learning: Contiguity; Practice; Reinforcement; Feedback/knowledge of results; Motivation; Distribution of learning periods; Length of periods; Spacing; Organization; Encourage breaks; Whole or part learning; Transfer of learning; Core Areas of Learning; Characteristics of Learners.

Study and Reading Skills: The profile of an efficient student; Designing a Study Location – Lighting; Heating; Noise; Interruptions; Chair and Desk. **Reading Skills (SQ3R):** Independence; Comprehension; Fluency.

Why should students in the university improve reading skills? Reading habits that deserve to be replaced: Head movement; Pointing to words; Vocalization; Regression; Recognition span; Rhythmic eye movement. **Purpose for Reading:** Reading for Pleasure; Reading for General Information or Knowledge; Reading to Get Instructions or Directions; Reading for Academic Purpose. **Types of Reading:** Survey; Skimming and Scanning; Light Reading; Word by Word Reading; Intensive Reading; Extensive Reading. **Listening Skills:** introduction; definitions; levels of listening – Reception; Attention; Definition; Integration; Interpretation; Implication; Application; Evaluation. **Difference between listening and hearing:** reasons for improving listening; aids to good listening; importance of active listening; barriers to listening. **Note Taking Skills:** Important reasons to take notes; guidelines for note-taking; Methods of putting information down: - Finding Major Points in Lectures; Streamlining Notes. **Forms and formats in note taking:** forms of note-taking; formats; Letter and Numeral Format. **Methods of Note Taking:** Cornell Method; Outlining Method; Mapping Method; Charting Method; Sentence Method; note taking skills - from lectures and readings

Core Reading Materials

1. Ayot, H. O and Patel, M.N. (1987): Instructional Methods: General Methods, Kenyatta University of London Institute of Education, Nairobi.2.

2. Bannnars, G. A. et al (1994): Theory and Practice of Education E. A. Educational Publishers Ltd. Nairobi.

3. Bligh, D.A (1972), What Is The Use Of Lecturer? Penguin Books, Hardmondsworth.

4. Bork, A. Walker, D., & Poly, A. (1992). Applications. In Hebernstreit, J. et al. Education and Informatics Worldwide: The state of the Art and Beyond. London: Jessica Kingsley Publisher.

5. Brown, G.A. & Bakhtar, M. (1982): Towards a Typology of Lecturing Styles: University of Notting Ham, Nottingham.

6. Brown J. et al. (1985), A. V Instruction: Technology, Media and Methods McGraw-Hill Book Company Singapore.

7. Brown, K. (1986), Taking Advantage of Media Routledge Kogan Paul. Boston.

8. Connel W. F.: History of teaching Methods in Dunkin (Ed. (1987): The International Encyclopedia of Teaching and teacher Education. Pergamon Press, Oxford.

9. Deutch, M. Co-operation and Trust: Some Theoretical Notes. In M. R. Jones (Ed.), "Nebraska Symposium on Motivation" (Pp. 275 – 319). Lincoln: University of

Nebraska Press, 1982).

10. Encyclopedia – Americans, Britannia

11. Gagne, R. M., & Briggs, L. J. (1979), The Principles of Instructional Design, New York -:Holt, Rinehart & Winston.

12. Hawkins, J., Shienggold, K., Gearhart, M., and Bergrt, C. 'Microcomputers in Schools: Impact on the Social Life of Elementary Classrooms'. Journal Applied Developmental Psychology, 1996.

13. Hawkridge, D., Jaworski, J. & McMahon, H. (1990). Computers in Third World Countries: Examples, experience, and Issues. London: Macmillan.

14. Henebstreit, J., et al. (1992) Education and Informatics Worldwide: The State of the Art

and Beyond,. London: Jessica Kingsley Publishers.

15. Johnson, D. W., and Johnson, R. T. Learning Together and Alone: Co-operation, Competition, and Individualization Eaglewood Cliff, NJ: Prentice-Hall, 1993.

Additional Reading Material

1. Johnson, D. W., and Johnson, R., and Maruyama, G., Interdependence and Interpersonal Attraction `among Heterogeneous and Homogeneous Individuals, 1993.

2. Johnson, D. W., Muruyama, G., Johnson, R., Nelson, C., Skon, L. "The effects of Co-operative, Competitive, and Individualistic Goal Structures on Achievement": Psychological Bulletin, 1991.

3. Knott, M Mutunga, P (1995) "Methods of Teaching and learning". In Matiru, B et-al (Eds).   A Handbook for University Lecturers. Institute of Socio-cultural Studies (ISOS). University of Kassel.

4. Koxhhar, S.K (1992) Methods and Techniques of Teaching; Sterling Publishers Private Ltd, New Delhi

5. Kulik, J. & Bangert – Drowns, R. (1990)."Computer Assisted Learning In Entwistle N." (General Editor) Handbook of Educational Ideas and Practices. London & New York: Routledge.

6. Mbuthia, F. K. (1996): "A Comparative Study of the effects of Two Instructional

Approaches on Students Performance in Kiswahili Poetry in Selected Secondary Schools in Eldoret Municipality". Unpublished M. Phil. Thesis, Moi University, Kenya.

7. Miller, W. R. (1990), Instructors and Their Jobs, American Technical Publishers Illinois.

8. Mukwa, C. W. (1979), "Towards a systematic approach to Educational media Use in the Secondary School Education of the Republic of Kenya. A field Survey of Tools and Technologies for Learning". Unpublished Ph. D. Thesis: Michigan State University. U.S.A.

9. Mukwa, C. W. and Too, J.K. (2002) General Instructional Methods Foto From, Nairobi