



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY & SNE

**FOURTH YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF EDUCATION (SPECIAL NEEDS EDUCATION)**

**ESN 425: ASSISTIVE TECHNOLOGY AND DEVICES FOR LEARNERS WITH PHYSICAL
HANDICAP & OTHER HEALTH IMPAIRMENTS**

DATE: 14/12/2021

TIME: 11.00-1.00 PM

INSTRUCTIONS: Answer Question One and Any Other Two

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain five reasons why persons with motor deviations require assistive devices. (10 marks)
- b) Describe five major neurological disabilities affecting persons with motor deviations (10 marks)
- c) Discuss five risks associated with the use of mobility devices (10 marks)

QUESTION TWO (20 MARKS)

- a) Explain six benefits of using assistive devices for persons with Cerebral Palsy. (12 marks)
- b) Examine four self-advancement technologies to support Activities for Daily Living (ADL). (8 marks)

QUESTION THREE (20 MARKS)

- a) Explain four challenges that must be addressed when prescribing mobility equipment for persons with spina bifida. (4 marks)
- b) Discuss eight factors to consider during the selection of assistive devices for motor deviations. (16 marks)

QUESTION FOUR (20 MARKS)

- a) Describe five mobility devices for persons with lower limb deformities. (10 marks)
- b) Describe five assessment tools that are used during assessment and diagnosis of persons with motor deviations (10 marks)

QUESTION FIVE (20 MARKS)

- a) Identify four academic devices for learners with motor deviations (4 marks)
- b) Describe the roles of eight professionals on the individualized education programme (IEP) for learners with motor deviations. (16 marks)