University of Fort Hare
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EXAM PAPER 1

PERCEPTUAL MOTOR DEVELOPMENT

(HUS 226)

PROGRAMME:	Bachelor of Health Science in Human Movement Science
DATE:	October, 2024
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INTERNAL MODERATOR:	Ms. Avela Mathe
DURATION:	3 hours
MARKS:	100

INSTRUCTION

Student answers all the questions in Sections A, B and C.

SECTION A [35]

Question 1 [10]

Multiple choice. Choose the correct answer to the following questions

1.1 Which of this perceptual-motor process makes internal motor decisions based on both present and past data.

a. Sensory input
b. Movement activation
c. Motor interpretation
d. Sensory integration

1.2 According to the Snellen chart, children's visual acuity must be ---------- to confirm no correction required.

a. 20/400
b. 20/20
c. 20/200
d. 20/90

1.3 The location of an object can sometimes be determined by its sound, but the sensory input can easily be modified or altered. However, various sensory systems are seen to interpret our perception. Which of these sensory systems is the most reliable.

a. Auditory
b. Tactile
c. Kinesthetic
d. Visual

1.4 Gross motor development is said to be the development of the big muscles of the body that are used during fundamental skills such as ---------- and ----------.

a. Writing and drawing
b. Eating and drinking
c. Cutting and painting
d. Running and jumping

1.5 The primary use of the Test of Gross Motor Development – Third Edition (TGMD-3) can be all of these except ----------

a. Diagnose a problem
b. Identify and observe children who are behind peers with regards to gross motor skills.
c. To assess individual progress for gross motor development.

d. To plan a program for gross motor development.

1.6 If you are driving down the street and you see half a bicycle tyre protruding from a row of parked cars and a child's head above it, you are not puzzled. You immediately perceive that a child on a bicycle is pulling into your path, and you slow down. This example simply depicts

a. Figure-ground perception
b. Whole and part perception
c. Visual figure ground perception
d. Perception of patterns and forms

1.7 The vestibular system is said to be an internal GPS system for the body. Which of this system can sense objects and interpret messages.

a. Motor planning
b. Tactile
c. Proprioception
d. Auditory

1.8 Research describes the visual system as an interaction between hardware and software variables. Which of the following is not a part of the software system.

a. Visualization
b. Visual perception
c. Visual acuity
d. Visual concentration

1.9 There are various phases of motor development. However, a new born baby is said to exhibit a phase of this movement. Choose the correct movement phase for a new born baby.

a. Sport specific skills
b. Rudimentary phase
c. Fundamental movement phase
d. Reflexive phase

1.10 During learning to write, a child must not only know the alphabet and understand how the words are formed by combining letters but also translate that knowledge to action by gripping the pen, stabilizing it while using perception (sight) to adjust the movements to create the correct pattern. This means the ..... and the ..... must work together for learning to take place.

a. Mind, body
b. Eyes, hands

c. Brain, body
d. Heart, hands

Question 2 **[15]**

Indicate whether the following statements are true or false. Provide the correct answer if the statement is false. If no reason is provided, no marks will be awarded.

2.1 According to the manual, it takes approximately 15-20 minutes to administer the complete form of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2).

2.2 The cutaneous receptors are located in the skin and in the underlying tissues of the body.

2.3 Genetic disorder is the cause for about 25% of mental disability cases.

2.4 The efferent or receiving mechanism is the first biological mechanism in the hardware system.

2.5 Perceptual motor process is the monitoring and interpretation of sensory information resulting from the interaction between sensory and CNS processes occurring at the cognitive level (brain) that enables the individual to derive meaning from the information.

2.6 Multisensory integration is necessary for almost every activity that we perform because the combination of multiple sensory inputs is essential for us to make sense about our surroundings, decision-making on what is necessary and move in an intelligent way.

2.7 Fundamental and specialized movement skills during preschool and elementary school years are crucial to mastering movement in adolescence and adulthood.

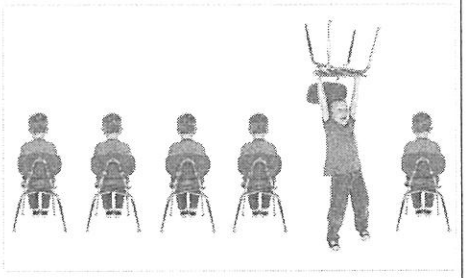
2.8 The Test of Gross Motor Development-Second Edition (TGMD-2) entails 3 trials.

2.9 The Movement Assessment Battery for Children- Second Edition (MABC-2) consists of 10 items that are slipped up between three divisions.

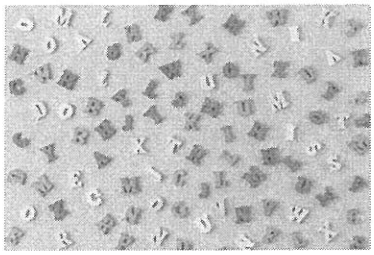
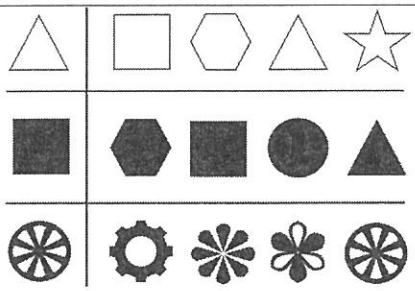
2.10 Some children have more difficulty than others in separating auditory figures from the background.

Question 3 **[10]**

Make use of Column A and B. Match the correct word in Column A with the appropriate activity in Column B. Write only your answer in the answer book that is provided, e.g 3.1 C.

COLUMN A		**COLUMN B**	
3.1	Locomotor activity	A	
3.2	Tactile discrimination	B	
3.3	Cerebral pasly	C	

3.4	Shape and orientation perception	D	
3.5	Autism spectrum disorder	E	
3.6	Batting tee	F	
3.7	Spatial awareness	G	

3.8	Attention deficit and hyperactivity disorder (ADHD)	H	
3.9	Dynamic balance	I	
3.10	Visual figure ground perception	J	

SECTION B **[20]**

Question 4 **[10]**

4.1 Indicate which form of cerebral palsy the following people will have: [5]

i. Both arms and legs of Simakele equally affected.

ii. Sibongile's right arm is affected.

iii. Pumela's left side of the body i.e both the arm and the leg are affected.

iv. Partial paralysis of the lower half of Luvo's body i.e both legs are affected.

v. Thembela's both arms are affected.

4.2 Indicate the gross motor deficiencies and learning disability of the following set of persons:

[5]

i. Peter is unable to write coherently.

ii. Sima lacks balance, coordination and trouble in walking.

iii. Paul has an impairment in the production of speech.

iv. Zizipo finds it difficult to read.

v. Vuyo is unable to perform learned movements on command, even though the command is understood.

Question 5 **[10]**

Inputs from different sensory organs are processed in different areas of the brain.

5.1 Mention the 4 major lobes of the brain with their functions. [8]

5.2 Mention any 2 parts of the brain apart from the lobes. [2]

SECTION C **[45]**

Question 6 **[13]**

6.1 As a newly employed kinderkineticist, identify any 10 symtoms of perceptual motor skill delays in your patient and mention 3 teaching tips on how you can assist your patient.

Question 7 **[26]**

7.1 The TGMD-3 is one of the assessments that measures the gross motor skills of children from 3 – 10 years of age. Explain briefly the two subtests of the TGMD-3 and mention all the skills in each subtest. [18]

7.2 Siphokazi was born on the 26th October 2016. She was tested on the 10th June, 2024. Calculate Sibongile's chronological age. Outline your calculation steps. [3]

7.3 Mention atleast 3 pros (advantages) and 2 cons (disadvantages) of the TGMD-3 assessment test. [5]

Question 8 **[6]**

As a physical educator, your school where you are employed was invited to participate in an athletic competition. How can you explain 'VISION' as a fundamental component to win the athletic competition.

TOTAL = 100