

FACULTY

Education

DEPARTMENT Educational Psychology

CAMPUS

APK

MODULE

NDL10A1

NEURODEVELOPMENTAL LEARNING NEEDS IN THE

CLASSROOM

<u>SEMESTER</u>

First

EXAM

May 2018

DATE

31 May 2017 **SESSION**

08:30-10:30

ASSESSOR(S) Dr H Dunbar-Krige

<u>MODERATOR</u>

: Dr Jean Fourie

DURATION

2 HOURS

MARKS

100

NUMBER OF PAGES: 4 PAGES

INSTRUCTIONS:

1. Answer ALL THE QUESTIONS

2. Number your answers clearly

QUESTION 1A

Link the concepts in section A to the various quotes in section B. Write the numbers in your examination book with the appropriate alphabetical letter next to the number (11).

	Section A		Section B
1	The Brain	а	The cerebral cortex is the largest and most recognizable part of the brain
2	Frontal lobe	b	Decodes visual signals
3	Amygdala	С	Produces and releases hormones
4	Right Cerebral Hemisphere	d	Integrates information from our senses to focus our attention on important things in the environment
5	Limbic system	е	All the nerve fibres connecting the forebrain, cerebellum and spinal cord pass through this part of the brain
6	Parietal lobe	f	Works with your hippocampus to create long-term memories of specific and emotional events
7	Pituitary gland	g	This lobe houses working memory which keeps relevant material available for a short time in order to make complex decisions
8	Brain stem	h	A large group of brain structures responsible for motivation, emotion, learning and memory
9	Corpus callosum	i	Command centre of the

			human body
10	Occipital lobe	j	Group of brain structures that controls voluntary movements, emotions and behaviour
11	Basal ganglia	k	A thick bridge of white tissue that joins the two hemispheres

QUESTION 1B

Indicate which areas of the brain will be influenced by the following Neurodevelopmental Disorders (12)

- Attention Deficit Hyperactivity Disorder
- Autism Spectrum Disorder
- Specific Learning Disabilities
- Motor Disorders
- Communication Disorder
- Intellectual Disability

QUESTION 1C

Explain the link between the brain, hormones and the adolescent. In your answer also indicate what the influence of social media is on the brain (7)

TOTAL FOR QUESTION 1: 30 marks

QUESTION 2

Harvard University has established a Center on the Developing Child with a wellestablished knowledge base through research and practice. This knowledge base supports the development of new ideas about child development and possible solutions for challenges they may face.

Write an essay in which you explain the 8 aspects that are important to remember about Child Development (25).

TOTAL FOR QUESTION 2: 25 marks

QUESTION 3

Janet Dubinsky is a neurologist who became a teacher. She wrote an article about how Neuroscience can be used by teachers and argues that teachers should have more education and training about the brain to understand better how to teach. Discuss in this question what you think will be the benefits for teachers to get education and training about the brain and how it works (15).

TOTAL FOR QUESTION 3: 15 marks

QUESTION 4

Read the case study and answer the relevant questions. The case study was adapted from Donald, D; Lazarus, S and Moolla, N (2014). Educational Psychology in social context. Cape Town: Oxford.

Thandi is a 14 year old girl in a crowded and poorly equipped Grade 6 classroom in rural Mpumalanga. She started school eight years ago and had to repeat the first two years, after which she was promoted on age to Grade 6. The teacher is worried that she will not reach the expected outcomes at the end of the year. She can read slowly in Ndebele, her first language but she does not understand what she is reading. Her writing is neat and her copying good but she finds it difficult to make up her own sentences. If she has learnt something over and over, she remembers it reasonably well. However, she struggles with any kind of problem-solving or answering questions that require more than rote memory. She has difficulty in remembering number facts and inaccurate mathematical reading. The teacher is aware of her difficulties but does not know how to help her.

- o Identify and describe the NDLN as illustrated in case study (10)
- o Identify and discuss developmental domains which may be primarily affected by the particular NDLN (10)
- o Indicate what you will do to support this learner in the classroom (10)

TOTAL FOR QUESTION 4: 30 MARKS

GRAND TOTAL: 100