UNIVERSITY OF FORT HARE

BIO 121 F

SUPPLEMENTARY EXAMINATIONS

JANUARY 2019

TIME: 2 HOURS **MARKS: 100**

SUBJECT: **BIOLOGY 121 F**

THIS PAPER CONSISTS OF FOUR (4) PAGES INCLUDING THE COVER PAGE

Internal examiner: Ms B. Bara

Instructions to candidates:

1. Answer all questions .
2. Number clearly, using the same numbering as on the question paper.

QUESTION 1

a) **Fill in the blanks on the table below: Provide only the number and the correct corresponding answer.**

	Tissue type	**Function**	**Location**
Cuboidal	1...	2...	3... ... ...
Tendons	4...	5...	6... ... ...
Skeletal	7...	8...	9... ... ...
Interneuron	10...	11...	12... ... ...
Elastic cartilage	13...	14...	15... ... ...

(15)

b)

i) What is histology? (1)

ii) Define a **tissue** and give two (2) examples of tissues (4)

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QUESTION 2

a) Name 7 categories which all organisms are classified according (7)
b) Fill in the missing words (10)

... ...(1)... ...is different than other protozoans it has chlorophyll. The amoeba is possess false feet, that are called... ... ...(2)... ... .Cnidarians all possess stinging cells called ... ...(3)... ... ..., they practise polymorphism, some species exist both as ... ...(4)... ..... and... ... ...(5)... ... ...Collections of amoebocytes within a hard, protective outer layer of sponges are... ... ...(6)... .....Most mussels are ... .(7)... ...feeders. Most mussels have a single pair of large ... .(8)... ....used for respiration.Members of the order Protobranchia use another structure, the ... .(9)... ... ..., to feed on bottom detritus. Tubellaria possess several nerve cords with a centralized... ....(10)... ... ... for sensory system.

c) State whether the following questions are **true** or **false (3)**

i. Fragments that break off from the parent animal may become new sponges
ii. Flatworms exhibit bilateral symmetry, Pseudocoelomates, and are diploblastic
iii. Parasitic nematodes are important because they add organic matter to the soil

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QUESTION 3

a) Complete the following table to show the full classification of both, the man and the cat

Taxon	**Man**	**Cat**
Kingdom	... ...(4)...	Animalia
... ...(1).....	Chordata	... ...(8)... ... ...
Class	... ...(5)...	Mammalia
... ...(2)...	Primates	... ...(9)... ... ..
Family	... ...(6)...	Felidae
... ...(3)... ...	Homo	... ...(10)... ... ...
Species	... ...(7)...	cattus

(10)

b) Animals exhibit high complexity of organisation with reference to cellularity, germ layers, symmetry and the nature of body cavity, which all are considered for classification.

1. Name types of body cavity (3)
2. List 3 germ layers (3)
3. Give 3 types of symmetry (3)
4. Mention 1 type of cellularity (1)

(10)

QUESTION 4

a) Write short explanatory notes on the adaptations of early amphibians to terrestrial life (10)
b) Mention 5 characteristics of Aves(birds) (10)

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QUESTION 5

1. Mention and describe the main distinguishing features of chordates (10)
2. Provide the functions of the following found in fish:
   a) Lateral line
   b) Operculum
   c) Gill filaments
   d) Swim bladder
   e) Fins

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