



**ELIZADE UNIVERSITY,
ILARA-MOKIN,
ONDO STATE**

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

SECOND SEMESTER EXAMINATION

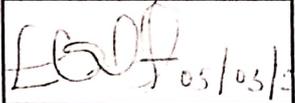
2019/2020 ACADEMIC SESSION

COURSE CODE: BIO 101

COURSE TITLE: GENERAL BIOLOGY I

COURSE UNIT(S): 3 UNITS

DURATION: 2hours


05/05/2020

HOD's SIGNATURE

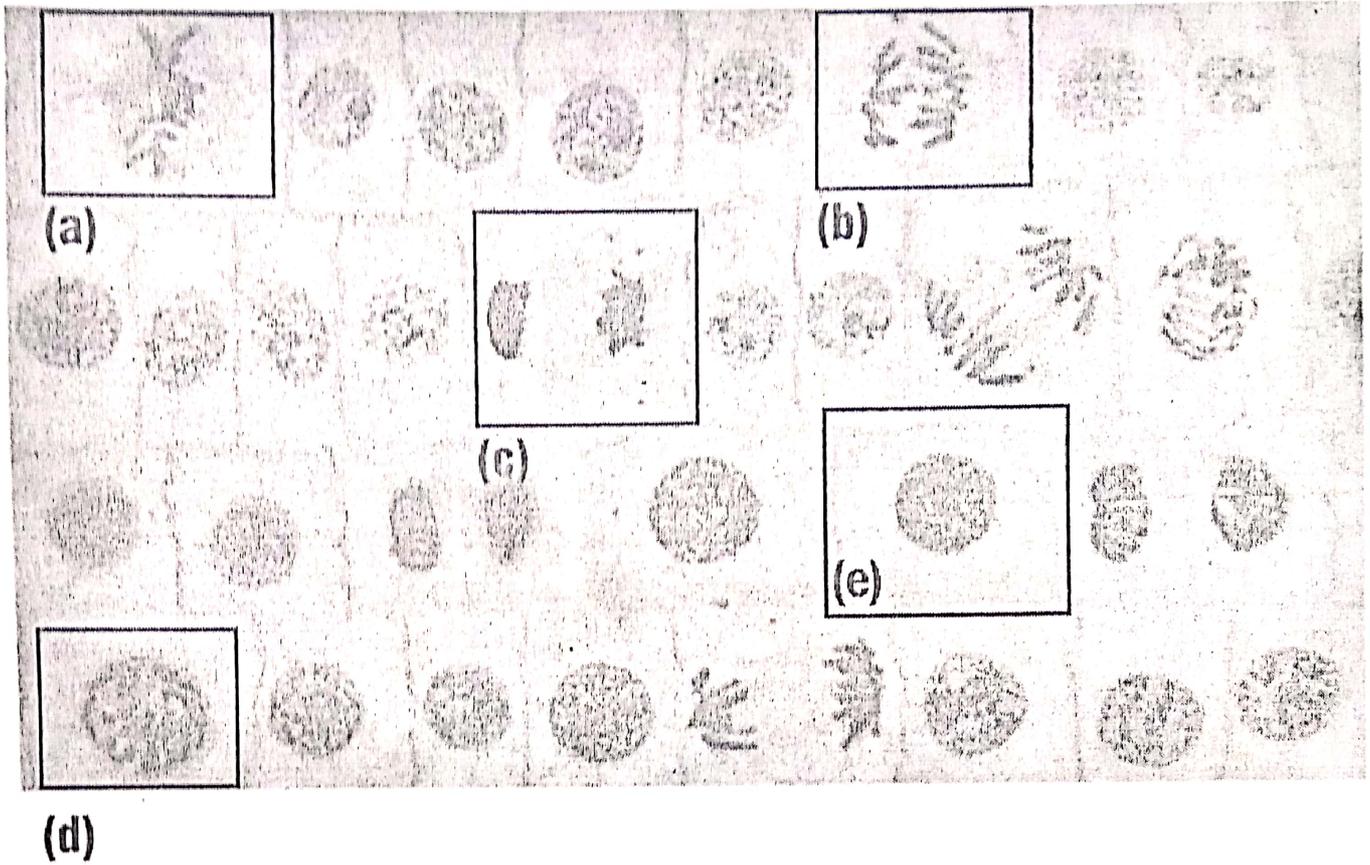
NAME:.....MAT. No:.....

**INSTRUCTIONS
Answer all questions**

1. a. Describe the characteristics of living things

b. Draw a well labelled diagram of a plant cell and describe the functions of five (5) organelles of the plant cell

c. Identify the different stages of mitosis as shown (boxes) in the slide below:



- A _____
- B _____
- C _____
- D _____
- E _____

d. Differentiate between mitosis and meiosis

2a. State three (3) reasons why angiosperms and gymnosperms successfully adapt to life on land

b. Fill in the space below in option "A to J" with appropriate answers to differentiate monocots from dicots

FEATURE	MONOCOTYLEDON	DICOTYLEDON
A	1	2
Leaf venation	B	C
Root system	D	E
Position of Vascular bundle	Scattered	F
G	H	In 4's or 5's
Woody or herbaceous	I	J

c. In the following classification of plant diversity, fill in the best two (2) answers that describe any of the questions (1-5) by choosing from option a-j. Write letters only:

a. bryophyte b. pteridophyta c. vascular d. seedless e. conifers f. hornworts g. Gymnosperm h. flowering Plant i. liverwort J. Non-vascular Plants

Division -----1----- (Mosses) Bryophyte -----2----- Division _____3_____ (ferns, horsetails)
 Division ----4----- (Non flowering Plant) Angiosperm----5-----

3. What is alternation of generation?

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4. Why are Algae referred to as autotrophic organism?

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5. List any four (4) characteristics of Algae you have studied and name any two (2) groups

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6. What are the four (4) Nitrogenous bases found in DNA and show their base-pairing properties

7. How many adjacent nitrogenous bases found in mRNA will code for an amino acid?

8. What is the term "Transition" refers to in protein synthesis

9. What are the three (3) components of a nucleotide

10. The male reproductive organ/cell in bryophytes is calledwhile the

female organ/cell is called

11. What is the main feature that distinguishes angiosperms from gymnosperms?

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12. List the components of the male and female reproductive organs in flowering plant.

Male.....
.....

Female.....
.....

13. What is a gene?

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14 State the methods of conduct of nutrients by Bryophytes and Pteridophytes

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15. What is the term "Translation" refers to in protein synthesis

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16. Mention the two (2) types of Nucleic acids

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17. The male and female organs in flowering plants are and