

EASTERN UNIVERSITY, SRI LANKA
FACULTY OF SCIENCE

First Year First Semester Examination in Science – 2016/2017 (Aug./Sep. 2018)
Practical Examination in Science

BT 1021 - Plant Cell

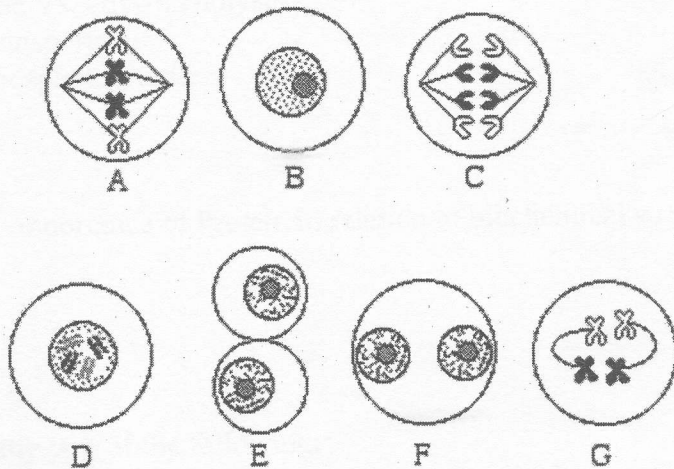
Answer **all** questions

Time: **02 hours**

1. You have been provided with Specimen "X" and all necessary materials.
 - a. Take an epidermal peel of specimen X and draw a fully labeled diagram under **high power** of the microscope
 - b. Calculate the stomata density of the epidermal peel under **medium power**

(35 Mins)

2. a. Which part of the plant is chosen for study the mitosis and meiosis? and Why?
- b. How does cytokinesis take place in plant cells?
- c. Name the stain which used to stain the above mentioned in "a" part of the question? Give the reason.
- d. The following photographs show a group of cells, which are replicating by mitosis.



The letters **A to G** indicate cells that are at different points in the cell cycle. Starting with the cell closest to the beginning of mitosis, arrange the letters **A to G** in the order in which they would occur during the cell cycle.

- e. Name the phases of the above mention diagrams **A, B, C, D & E**

(25 Mins)

3. Identify and Comment on the following **K, L, M, N** and **P**

(40 Mins)

4. Match the given table "Y"

(20 Mins)