

MARKING SCHEME BIOLOGY FORM 1 END TERM 3 2019

- 1.i) Light stage : **Photolysis** (1mk)
Dark stage: **Carbon (IV) fixation** (1mk)

- ii) Hydrogen ions

Adenosine triphosphate /energy rej; ATP

Oxygen

c)

2. In plants- Guard cells; root hair cells; palisade cells

In animals- sperm cell; white blood cells; Red blood cells; nerve cells.

3. (i) pair of forceps';

(ii) picking up small stinging crawling animals;

4. Mag. = image size ; 1mm = 100 μ m

$$\frac{\text{Actual size}}{40000} = \frac{1 \times 1000\mu\text{m}}{40000}$$

$$\frac{\text{Actual size}}{40,000} = \frac{1000}{40,000} \mu\text{m} ; = \frac{1}{40} = 0.015\mu\text{m}$$

5. (i) Hypertonic solution; acc. Highly concentrated solution (1mk)

(ii) Hypotonic solution; acc. More dilute solution;

6. - (i) Cellulose; (ii) Glycogen;

7. Glucose and fructose;

Glucose and galactose;

Glucose and glucose;

- 8 (a) Nutrition; Growth and development;
 Respiration; Reproduction;
 Gaseous exchange; Irritability;
 Excretion; Movement;

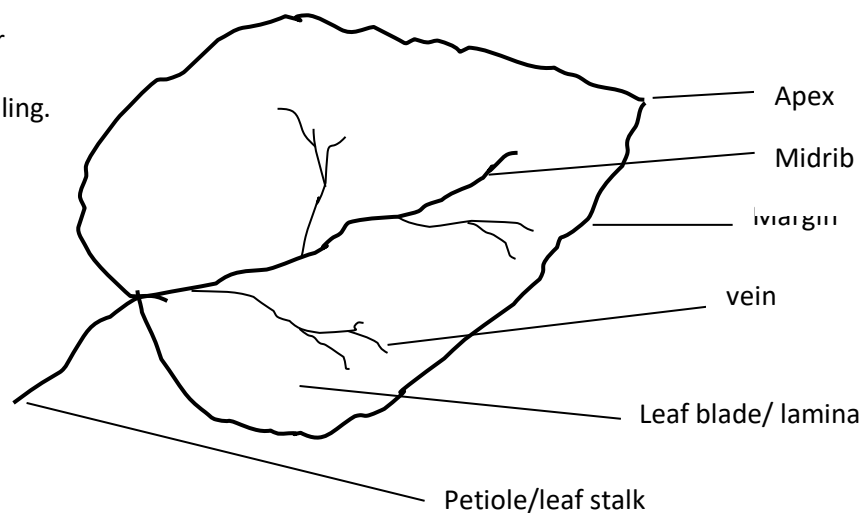
Mark the 1st 3

- (b) Monera;
 Protocista;

Fungi;

Rej: If the name doesn't begin with
 capital letter
 wrong spelling.

9.



Mark any four correct

Drawing 2mks

10. (Two names used) first name – generic, second name species;
Two names italicized /underlined
Separately / first names capital, second; name small letter;

11. (a) Structural differentiation / modification of cells to perform specific function;

(b) Epithelial tissue;

Skeletal;

Blood;

Connective tissue;

Mark the 1st 3

c) - Condenser lens

- Objective lenses

- Eye piece lens

12.a) K – Liver

L- Oesophagus/gullet

S – ileum rej. Small intestines

M – Sublingual salivary glands

P- parotid salivary gland

b) - gastrin

- Secretin

- Cholecystokinin

Light Microscope	Electron Microscope
Low magnification power	High magnification power
Low resolving/resolution power	High resolving/resolution power
Uses light rays to illuminate specimens	Uses a beam of electrons to illuminate specimens
Can be used to view both live and dead specimen	Used to view only dead specimen

14. basal metabolic rate

Age

S.A to volume ratio/ body size

15. Define the following branches of Biology. (2 marks)

i) Genetics

Study of inheritance and variation

ii) Entomology

Study of insects

16. a) Production of ribosomes.

- b) Packaging and transport of glycoprotein's
Secretion of synthesized proteins and carbohydrates.
Production of lysosomes.

17. (a) Molar; accept pre-molar.

(b) Presence of two roots; presence of cusps; accept any one.

(c) chewing/crushing food;

(d) Detect stimuli;

e. enamel
nerve fibre
blood capillaries
pulp cavity