

## NALANDA V Nalanda Vidyalaya — Colombo 10 da vidyalaya

NALANDA VIDYALA Uni

**Unit Test Project** 

NALANDA VIDYALAYA

Grade 8

Science

Unit: 11 - Main biological processes in plants

## Underline the most suitable answer.

- 1) An internal factor which is affect for the photosynthesis
  - I) Glucose
- II) Starch
- II) Oxygen
- V) Sucrose
- 2) The type of carbohydrate that transport throughout the plant is;
  - I) Transpirations II) Photosynthesis
- III) Guttation
- V) Mass flow

- 3) An indicator used to identify starch is,
  - I) Iodine
- I) Litmus
- II) Phenolphthalein
- IV) Methyl Orange

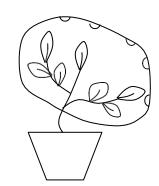
- 4) By product of photosynthesis is,
  - I) Glucose

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- II) Starch
- II) Oxygen
- V) Sucrose

- 5) A method of transportation in plants is
  - I) Transpirations II) Photosynthesis
- III) Guttation
- V) Mass flow

- 6) The incorrect statement about guttation is,
  - I) Occurs through hydathodes
  - II) Mostly occurs during night
  - III) Water release in the form of water vapors
  - IV) Water and salts are released
- 7) Select the answer having correct match between the adaption of transpiration and example for it,
  - I) Fleshy leaves
- Aloe
- II) Leaves reduced to spines
- Rubber
- III) Sunk stomata
- Kasa
- IV) Reducing the size of leaves Sunflower
- 8) The biological process demonstrated by the following figure is
  - I) Photosynthesis
  - II) Mass flow
  - III) Osmosis
  - IV) Transpiration



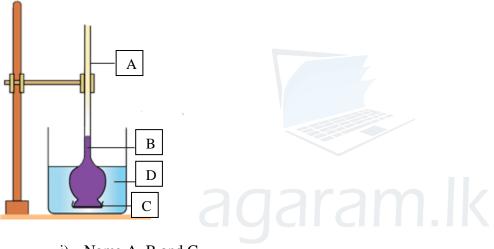


- 9) The group of plants that shows the guttation is
  - I) Acacia, Potato, Temple tree
  - II) Anthurium, Tomato, Acacia
  - III) Cactus, Temple tree, Potato
  - IV) Aloe, Oleander, Pumpkin
- 10) Factor/s affect for rate of transpiration is/are
  - I) Heat
  - II) Strong wind
  - III) Strong light
  - IV) All above

## Part II

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1) Following setup is used to investigate one of the transpirations in the laboratory



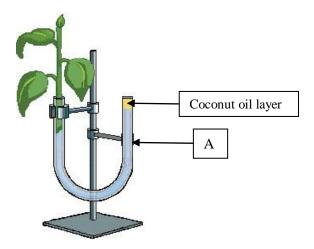
- i) Name A, B and C
- ii) Write one observation after few minutes
- iii) Which type of membranes that egg membranes act as?
- iv) Name another type of membrane that can be used in the above set up
- v) Why do we mix condos with salt solution in this experiment?
- vi) Write the conclusion of this activity
- 2) Photosynthesis is a biological process carried out by the plants
  - i) Name another two biological processes that is carried out by the plants.
  - ii) Fill in the blanks in the following word equation of photosynthesis

Carbodioxide +	———— Clu	0000
t amounoxide +	( i	cose +

- iii) Draw a diagram of an activity that can be done to identify the byproduct of photosynthesis
- iv) Write 3 uses of photosynthesis



3) The following activity can be done to show that plants absorb water to fill the gap of water due to transpiration.



- i) Name 'A' in the above setup
- ii) What is the reason of putting a coconut oil layer?
- iii) Write 2 functions of transpiration
- iv) Write down an observation of this activity
- v) If you need to identify the effect of strong light for the photosynthesis, design an activity for it
- vi) What do you mean by transpiration?
- 4) i) Define the following terms
  - a. Diffusion

b. Osmosis

Guttation

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- ii) Write 2 instances where diffusion takes place.
- iii) Write an instance where osmosis takes place in plants.
- iv) Name the semi permeable membrane in a plant cell.
- v) Name the plant issue that transport water through the plant.