

(i) Printed Pages : 4]

Roll No.

(ii) Questions : 9]

Sub. Code :

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Exam. Code :

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**B.A./B.Sc. (General) 6th Semester
Examination**

1047

BOTANY

Paper – A : Plant Physiology-II

Time : 3 Hours]

[Max. Marks : 36

Note :– Attempt *five* questions in all, selecting at least *one* question from each Unit. Question No. 1 is compulsory.

1. (A) Multiple choice questions.

(i) The flowers of Crocus and Tulipa show :

- (a) Photonasty (b) Hyponasty
(c) Thermonasty (d) None of these

(ii) Which of the following hormone is responsible for degreening of citrus fruits ?

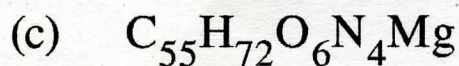
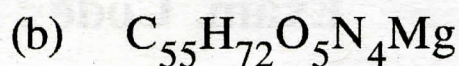
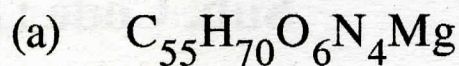
- (a) ABA (b) Cytokinin
(c) Ethylene (d) None of these

N-223

(1)

Turn Over

(iii) The empirical formula of chl a is :



(d) None of these

(iv) is called "Father of plant tissue culture.

(a) G. Haberlandt (b) G. Morel

(c) Skoog (d) None of these

(v) RQ is less than unity in :

(a) Fat & Protein (b) Organic acids

(c) CAM plants (d) None of these

(vi) Which of the following is last electron acceptor in oxidative phosphorylation ?

(a) Hydrogen (b) Oxygen

(c) Water (d) ATP

(B) Fill in the blanks :

(i) acts as a fusogenic agent for somatic hybridization.

- (ii) The rate of respiration increases during the absorption of salt. This increase in rate of respiration is called
- (iii) prevents breakdown of chlorophyll hence delays senescence in plants as hormone.
- (iv) hormone is responsible for the inhibition of lateral buds.
- (v) The cells most commonly used for para-sexual hybridization are
- (vi) The first stable product in C_3 plants is 1×12=12

Unit-I

3 each

2. Write an accounts on :

- (a) Difference between Photosystem I and Photosystem II.
- (b) Hatch-Slack cycle or C_4 cycle.

3. Write an account on :

- (a) Z-scheme of Non-cyclic photophosphorylation.
- (b) Photorespiration.

Unit-II

3 each

4. Write an account on :
 - (a) Glycolysis
 - (b) Difference between aerobic and anaerobic respiration
5. Write notes on :
 - (a) Krebs cycle
 - (b) Importance of fermentation

Unit-III

3 each

6. Write an account on :
 - (a) Physiological role of Cytokinin
 - (b) Photoperiodism
7. Write an account on :
 - (a) Florigen
 - (b) Physiological role of Auxin

Unit-IV

3 each

8. Write an account on :
 - (a) Parasexual hybridization
 - (b) Cell suspension culture
9. Write notes on :
 - (a) Meristem culture
 - (b) Applications of plant tissue culture