CPH 102

PART-B

1. Signature of invigilator on answer booklet is compulsory.
2. All answers to the questions IV, V and VI should be written onappropriate pages only.

Q IV. Answer any five (5) of the following questions 5 x 1 mark = 5

1. What is Scarification.
2. What do understand by day neutral plants.
3. What is the significance of vernalization.
4. What do you understand by pinhead drops or post fruit setting drop.
5. What do you understand by apical dominance.
6. What is respiratory climate.
7. What do you understand by growth.

Q V. Answer any five (5) of the following questions 5 x 2 mark = 10

1. Write down the role of auxin as a weedicide.
2. What is de novo synthesis of enzyme α amylase.
3. What do you understand by fruit thining.
4. Describe about stress hormone.
5. Differentiate between climacteric and non climacteric fruits.
6. Describe about source and sink relationship.
7. What do you understand by vernalization.

Q VI. Answer any five (5) of the following questions 5 x 3 mark = 15

1. Explain about growth and growth curve with all phases.
2. Explain in brief about physiological roles of auxin and cytokinin.
3. Define photoperiodism. Also classify plants according to photoperiodism with suitable examples.
4. Discuss in detail about changes occurs during fruit ripening.
5. Define plant growth regulators and its type. Also define biosynthesis of abscisic acid.
6. What do you understand by seed dormancy. Describe the methods to break seed dormancy.
7. Define plant growth hormones and also define physiological roles of gibberellic acid for horticultural crops.

END OF PART – A& B QUESTION PAPER 25 September, 2023

University of Horticultural Sciences Bagalkote UHS Exams
CPH-102 FE UHS22UG AY:2022-23
आज़ादी का अमृत महोत्सव

Set A

Final examination:

CPH-102(1+1): Growth and development of horticultural crops

Date & time of Exam: 31.10.2023 (10:30 ~12:30)

Name of the Student .....ID No. UHS22UG.....

College of Horticulture,.....College Code.....

Instructions to the Students:

Total marks: 50 (Part- A : 20 marks and Part- B : 30 marks)

Part – A Question paper:Answer within 30 min.

All answers should be written only in OMR Sheet.

Write the Correct Part-A Question paper Set Code in OMR sheet.

Get the signature of the invigilator on your Part- A QP.

Please return the OMR sheet after 30 min of start of examination to the invigilator.

Part- A

Q.I. Select the most correct answer A/B/C/D for the following questions. 20 x 0.5 mark = 10 Marks

B 1. Growth is maximum in the zone of-
a) Cell division b) Cell elongation
c) Cell maturation d) All of these

B 2. Flowering in long day plants is favoured by-
a) Ethylene b) Gibberellins c) Cytokinin d) Auxins

D 3. The ripening of fruits can be hastened by treatment of-
a) Gibberellic acid b) Indole acetic acid
c) Florigen d) Ethylene gas

C 4. The factor that has less influence on seed germination is-
a) Temperature b) Water c) Light d) Oxygen

D 5. The pigment which absorbs red and far red light in plants is-
a) Xanthophyll b) Carotene
c) Cytochrome d) Phytochrome

B 6. Seeds of tomato do not germinate in its pulp due to-
a) Presence of excess salts b) Presence of ferulic acid
c) Absence of oxygen d) Presence of ABA

B 7. Dormancy due to hard seed coat can be overcome by -
a) Chilling treatment b) Scarification
c)Light treatment d) None of these

D 8. Parthenocarpic fruits can be produced by the application of which of the following auxin-
a) Indole acetic acid b) Indole butyric acid
c) 2-4dichlorophenoxyacetic acid d) All of the above

B 9. Which of the following hormone replace vernalization-
a) Cytokinin b) Gibberellins c) Auxin d) Ethylene

B 10. Auxanometer is meant for-
a) Photosynthetic activity b) Growth activity
c) Amount of auxin d) Respiratory activity

D 11. Stomata closure in response to leaf stress is mediated by-
a) IBA b) 2,4-D c) IAA d) ABA

A 12. Cutting of seed coat to facilitate the entry of water and oxygen is known as-
a) Scarification b) Culture c) Dormancy d) Scenescence

D 13. Growth of a fruit has following steps-
a) Growth of the pericarp b) Growth of an embryo
c)Growth of a endosperm d) All of the above

C 14. When fruit growth is complete and photosynthates are no longer translocated to fruits, it is known as -
a) Maturity b) Harvestable maturity
c) Physiological maturity d) None of the above

D 15. LAI is between ..... for crops with horizontally oriented leaves - a) 1-2 b) 8-10 c) 6-8 d) 3-4

D 16. Sink activity is increased by-
a) Pruning b) Thining
c) Removal of excess vegetative growth d) All of the above

B 17. Which one of the following is day neutral plant-
a) Chrysanthemum b) Tomato c) Tobacco d) Carrot

C 18. Phytochrome is located in-
a) Ribosome b) Mitochondria
c) Plasma membrane d) Cytoplasm

D 19. Which of the following is naturally occurring growth inhibitor-
a) NAA b) IAA c) GA_3 d) ABA

D 20. Highest concentration of auxin exists in-
a) Leaves b) xylem and phloem only
c) At base of various plant organs d) Growing tips of plants

Q.II.Enter TRUE(T) /FLASE(F) for the following statements in OMR sheet 10 x 0.5 =5 Marks

21. Light sensitive seeds are called as photoblastic seeds.
X 22. Onion is a short day plant.
23. Cell division is favoured by cytokinin.
X 24. Chiiling treatment of seeds to break dormancy is called scarification.
X 25. Coconut milk is used in tissue culture experiments because it contains auxin.
26. Sugars are transported through phloem in the form of sucrose.
27. Green oranges are turned yellow by application of ABA.
28. For maximum crop growth rate sufficient leaf area must be available in canopy
29. Vernalization shortens the vegetative period of plants.
X 30 Avena curvature test is used for bioassay of gibberellins .

22
24
25
30
are false

Q.III. Match column A with column B for correct answer. 10 x 0.5 mark = 05 Marks

Q.No	Column A		Column B
31	Xanthium	A	Antitranspirant
32	Lag phase	B	NAA
33	Natural auxin	C	Long day plant
34	Stationary phase	D	Maximum growth
35	Cytokinin	E	Indole 3 acetonitrite
36	Log phase	F	Bakanae disease
37	Gibberellin	G	Slow growth
38	Synthetic auxin	H	Short day plant
39	Onion	I	Growth stops
40	Abscisic acid	J	Richmond lang effect

J H I F C G B A D E

See next page for Part-B