EXERCISE-I

GROWTH

1. Maximum growth in roots occurs
(A) At apex (B) In presence of light
(C) Behind the apex (D) In presence of soil

2. Auxanometer is meant for
(A) Respiratory activity
(B) Photosynthetic activity
(C) Growth activity
(D) The amount of auxins

3. What is the role of light in plants
(A) It is necessary for photosynthesis
(B) It controls growth and movement
(C) It controls the distribution of hormones
(D) All the above

4. Evergreen trees remain green throughout the year on account of
(A) Absence of leaf fall
(B) Leaves falling in small numbers at intervals
(C) Supply of the moisture throughout the year
(D) Cold climate

5. The growth involves
(A) Cell division (B) Cell enlargement
(C) Cell maturation (D) All the above

6. Plant growth in length is increased by
(A) Apical meristem (B) Lateral meristem
(C) Dermatogen (D) Periblem

7. Growth is
(A) Unidirectional backward
(B) Reversible
(C) Unidirectional forward
(D) None of the above

8. The rate of growth of any organism follows
(A) Hyperbola curve (B) J-shaped curve
(C) Sigmoid curve (D) Parabola curve

9. Dendrochronology is
(A) Secondary growth
(B) Apical growth
(C) Seasonal variation
(D) Determination of age of tree

10. To remove seed dormancy by mechanical removing of seed coat is called
(A) Stratification (B) Scarification
(C) Venalization (D) Photoperiodism

11. The growth in plants is
(A) Limited (B) Unlimited
(C) Unlocalised (D) None of these

12. The correct sequence of cellular growth stages is
(A) Division → differentiation → elongation
(B) Division → elongation → differentiation
(C) Differentiation → division → elongation
(D) Elongation → differentiation → division

13. Energy for the early growth of a developing bean embryo comes from
(A) Sunlight (B) Water in the soil
(C) Food in the soil (D) Leaves in the seed

14. The natural plant hormones were first isolated from
(A) Corn germ oil and human urine
(B) Cotton fruits spinach leaves and rice plants
(C) Avena coleoptile spinach leaves and the fungus gibberlla
(D) Human urine and rice seedlings

15. Who used the term phytohormones for plant hormone
(A) Balis (B) Morgan
(C) Went (D) Thimann

16. In which of the following respect the plant hormones differ from enzymes
(A) Required in less quantity
(B) They are expended in the process
(C) They release some energy
(D) None of the above

17. Climacteric is

(A) A phenomenon related to fruit ripening

(B) The condition of a plant when all of its fruits are almost ripe

(C) The condition of a plant when most of its leaves have turned yellow

(D) None of the above

18. Plant hormones are usually

(A) proteins

(B) Lipids

(C) Carbohydrates

(D) Aromatic compounds

19. Leaf fall occurs as abscission layer is formed when the content of

(A) Auxin increases

(B) Auxin decreases

(C) Abscisic acid decreses

(D) Gibberellic acid decreses

20. Apical dominance in higher plants is due to

(A) Balance between auxin and cytokinin

(B) Enzyme activity and metabolism

(C) Carbohydrtes

(D) Photoperiodism

21. Indole –3–acetic acid called as auxin was first isolated from

(A) Human urine (B) Corn germ oil

(C) Fusarium (D) Rhizopus

22. Parthenocarpy is included by

(A) ABA (B) Auxins

(C) Zeatin (D) Cytokinin

23. Highest concentration of auxins exist in

(A) At the base of various plant organs

(B) Growing tip plants

(C) In leaves

(D) In xylem and phloem cells only

24. The primary precursor of IAA is

(A) Phenyl alanine (B) Tyrosine

(C) Tyrptophan (D) Leucine

25. Which of the following prevents falling of fruits

(A) GA_3 (B) NAA

(C) Ethylene (D) Zeatine

26. The movement of auxin is largely

(A) Basipetal (B) Acropetal

(C) Centripetal (D) Centrifugal

27. Bioassay for auxin is

(A) Avena curvature test (B) Green leaf test

(C) Dwarf maize test (D) Cell division test

28. IAA Stands for

(A) Indole–3–acetic anhydride

(B) Indole–3–acetic acid

(C) Indole–3–acetic acetate

(D) Indole–3–acetoacetic acid

29. Auxin – B was first isolated by

(A) Kogl and Erxlaben

(B) Kogl, Erxlaben and Haagen – smith

(C) Miller and Skoog

(D) Yabuta and Sumiki

30. Flowering in pineapple is promoted by

(A) NAA (B) GA_3

(C) Short days (D) Cytokinin

31. The presence of auxins in a solution could be tested by

(A) Avena sativa stem tip test

(B) Carbon tetrachloride test

(C) Iodine test

(D) Defoliation test

32. During germination, stem grows upward and root goes downward because

(A) It depends upon light

(B) Of auxin

(C) It does not depend on light

(D) Of epinasty and hyponasty

33. Specific property attributed to gibberellins is

(A) Shortening of genetically tall plants

(B) Elongation of genetically dwarf plant

(C) Promotion of rooting

(D) Yellowing young leaves

34. α – amylase synthesis is induced by
(A) IAA (B) G.A.
(C) Cytokinin (D) All of these

35. Cell elongation in internodal region takes place due to
(A) Gibberellins (B) Ethylene
(C) Cytokinins (D) Indole acetic acid

36. Gibberellins differ from auxins since they produce
(A) Cell division
(B) Stem elongation
(C) Root initiation
(D) Shortening internodes

37. The hormone which was discovered through 'foolish seedling' disease of rice is
(A) Indole–3–acetic acid (B) Ethylene
(C) Gibberellic acid (D) Kinetin

38. Bakane disease in paddy is caused by
(A) Abscisic acid
(B) Gibbererllic acid
(C) Phenyl acetic acid
(D) Naphthalene acetic acid

39. The chemical nature of gibberellins is that they are
(A) Acidic (B) Alkaline
(C) Proteinaceous (D) Amines

40. Genetic dwarf ness can be overcome by treating with
(A) Cytokinin (B) Auxins
(C) Gibberellins (D) Ethylene

41. The hormone involved in metabolism of food material in cereal grain during germination is
(A) Auxin (B) CK
(C) G A (D) None of these

42. Cytokinin is a hormone whose main function is
(A) Induction of cell division and delay in senescence
(B) To take part in cell division
(C) Refers to cell movements
(D) To cause dormancy

43. Leaf fall can be prevented by
(A) Florigen (B) Auxin
(C) Cytokinins (D) Abscisic acid

44. Which of the following is a coconut milk factor
(A) Auxin (B) Cytokinin
(C) Morphactin (D) None of these

45. Cytokinins are formed in
(A) Roots (B) Leaves
(C) Fruits (D) Stems

46. RNA formation is induced by
(A) Phyllocalins (B) All calins
(C) Kinetins (D) Florigens

47. Name 'Zeatin' was given by
(A) Skoog (B) Miller
(C) Letham (D) Melver

48. All the cytokinins are
(A) Acidic (B) Aminopurines
(C) Phenol (D) Glucosides

49. Which of the following induces flowering in short day plant
(A) Gibberellins (B) Cytokinin
(C) Auxins (D) Ethylene

50. A plant hormone used for inducing morphogenesis in plant tissue culture is
(A) Abscisic acid (B) Gibberellins
(C) Cytokinins (D) Ethylene

51. Ethylene gas
(A) Is a saturated hydrocarbon
(B) Slows down the ripening of apples
(C) Retards ripening of tomatoes
(D) Speeds up maturation of fruits and early ripening of some fruits

52. Ethylene is a
(A) Gaseous hormone (B) Gaseous enzyme
(C) Liquid–gas mixture (D) Solid hormone

53. A higher proportion of ethylene is found is -
(A) Ripening of banana (B) Green banana
(C) Green apple (D) Fresh potato tuber

54. The most efficient precursor of ethylene is

(A) Adenine (B) Thiocarbamate

(C) Zeation (D) Methionine

55. Which combination of gases is suitable for fruit ripening

(A) 80% C_2H_4 and 20% CO_2

(B) 80% CO_2 and 20% CH_2

(C) 80% CH_4 and 20% CO_2

(D) 80% CO_2 and 20% O_2

56. A bifacial organ bends towards, where

(A) Growth is more (B) Growth is slow

(C) Darkness is there (D) None of the above

57. In which of the stage, the enzymatic actions start in plant

(A) Germination

(B) At the time of photosynthesis

(C) At the time of flower establishment

(D) At the time of fertilization

58. In lag phase, growth is

(A) Slowest (B) Fastest

(C) Intermediate (D) No growth at all

59. Grand period of growth is called

(A) Early period

(B) Middle period

(C) Total growth period

(D) Decreasing growth rate

60. The effect of oxygen supply on growth is

(A) Positive

(B) Negative

(C) In some plants it is positive while in others it is negative

(D) None of the above

GROWTH HORMONES

61. Phytohormones control

(A) Growth

(B) Physiological functions

(C) Rooting

(D) Flowering

62. Substances which originate at the tip of stem and root and control the growth of different organs are

(A) Enzymes (B) Hormones

(C) Vitamins (D) Food substances

63. Who for the first time speculated the presence of organ forming substances in plant now called hormones

(A) Darwin (B) Went

(C) Yabuta (D) Sachs

64. Which of the following technique is employed for the separation and identification of phytohormones

(A) Polarizing microscopy (B) Autoradiography

(C) Gas chromatography (D) Cell fractionation

65. Why the newly harvested potato tubers do not germinate even when placed in favourable conditions

(A) Due to dormancy

(B) Due to lack of water absorption

(C) Due to difficulty of light penetration

(D) Due to lack of photosynthetic apparatus

AUXIN

66. Phototropism in shoots is attributed to

(A) Auxin (B) Gibberellins

(C) Cytokinins (D) Abscisic acid

67. In unisexual plants, sex can be changed by the application of

(A) Ethanol (B) Auxins

(C) Cytokinin (D) ABA

68. Most of the information regarding auxins have been obtained from

(A) Rice plant (B) Maize grains

(C) Avena coleoptile (D) Wheat ear

69. The formula of auxin 'a' is

(A) $C_{18} H_{30}$ (B) $C_{18} H_{32}$

(C) $C_{18} H_{32} O_5$ (D) $C_{18} H_{40} O_{10}$

70. Phenyl acetic acid is a

(A) Natural plant hormone

(B) A synthetic growth hormone

(C) Antihormone compound

(D) None of the above

GIBBERELLINS

71. Which of the following exhibits a non-polar movement

(A) Auxin (B) Gibberellin

(C) ABA (D) Auxin and cytokinin

72. The habit of a cabbage or acaulescent plant can be changed drastically by the application of

(A) IAA (B) GA_3

(C) ABA (D) 2, 4-D

73. In some plants, the cold treatment may be replaced by the application of

(A) Ethylene (B) Cytokinin

(C) Gibberellin (D) Abscissic acid

74. Gibberellin is obtained from a

(A) Fungus (B) Alga

(C) Basidiolichen (D) Flowering plants

75. Gibberellin is helpful in

(A) Elongation of plants (B) Inducing dwarfism

(C) Fat hydrolysis (D) Protein synthesis

CYTOKININ

76. Guttman (1957) found a quick increase in the amount of RNA in the nuclei on onion root after

(A) Auxin treatment (B) Kinetin treatment

(C) Gibberellin treatment (D) All the above

77. Cytokinin firstly synthesized by

(A) Skoog and Miller (B) Letham

(C) Bensan and Calvin (D) Thimman and Went

78. Name 'zeatin' was given by

(A) Skoog (B) Miller

(C) Letham (D) Melver

79. 6-furfuryl adenine is

(A) An auxin (B) A gibberellin

(C) A cytokinin (D) A vitamin

80. Which of the following exerts Richmond-Lang effect i.e. prevents loss of chlorophyll

(A) Kinetin/BA

(B) Auxin/AA

(C) Light

(D) Gibberellin/Prophyrin

ETHYLENE

81. Ripening of banana is accompanied with

(A) Sudden rise in cytokinin

(B) Sudden rise in auxin

(C) Sudden rise in ethylene

(D) Sudden rise in gibberellin

82. The ripening of fruits can be hastened by treatment with

(A) Gibberellic acid (B) Indole acetic acid

(C) Florigen (D) Ethylene gas

83. Which of the following is called as phytogerontological hormone

(A) Ethylene (B) Auxin

(C) Gibberellin (D) Cytokinin

84. Which one of the following responses of plants to growth hormones is true for ethylene

(A) Increase in cell elongation

(B) Decrease in the formation of female flowers

(C) Increase in ripening of fruits

(D) Decrease in abscission of flowers

85. Artificial ripening of which of the following fruits is useless

(A) Mango

(B) Banana

(C) Grapes

(D) Pomegranate/Coconut

ABA AND OTHER GROWTH REGULATORS

86. The following is a naturally occurring growth inhibitors-
(A) IAA (B) ABA
(C) NAA (D) GA

87. Wound hormone is called
(A) Necrohormone (B) Hormone only
(C) Auxins (D) Phyllocaline

88. Elongation of internodes is inhibited by
(A) Gibberellins (B) Morphactins
(C) Both (A) and (B) (D) None of these

89. Bud dormancy is induced by
(A) ABA (B) IAA
(C) Ethylene (D) Gibberellic acid

90. This hormone affects opening and closing of stomata
(A) GA (B) Kinetin
(C) ABA (D) IBA

91. Which of the following factors influence the process of flowering
(A) Acidity of soil
(B) Water in the soil
(C) Amount of green pigment
(D) Photoperiod

92. The red absorbing form of phytochrome gets converted to the far red absorbing form after getting irradiated at
(A) 660 nm (B) 730 nm
(C) 530 nm (D) 660 nm to 730 nm

93. Effect of length of day (light duration) on flowering is called
(A) Phototropism (B) Photoperiodism
(C) Photo respiration (D) None of these

94. Which of the following is a short day plant
(A) Wheat (B) Barley
(C) Larkspur (D) Dahlia

95. The movement of organs in response to light is called
(A) Hydrotropism (B) Thigmotropism
(C) Phototropism (D) Geotropism

96. Name 'Phytochrome' was given by
(A) Mothes
(B) Borthwick and Hendrick
(C) Sorokin et al
(D) Wickson and Thimman

97. If the seedlings are grown in darkness
(A) They are of the same size as those grown in light
(B) They are much healthier than those grown in light
(C) They are similar to those grown in light
(D) They are taller than those grown in light

98. Florigen is synthesized in
(A) Stem (B) Leaves
(C) Root (D) Fruits

99. Phytochrome becomes active in
(A) Green light (B) Blue light
(C) Red light (D) None of these

100. Which of the following is absolutely necessary for germination
(A) Light (B) Water
(C) Low temperature (D) mineral salts

101. During seed germination
(A) heat is liberated (B) Starch is synthesized
(C) Fat is synthesized (D) Light is absorbed

102. Legume seeds exhibit dormancy because of
(A) Undeveloped embryos
(B) Hard seed coat
(C) Absence of cytokinins
(D) Absence of gibberellic acid

103. What causes delay in germination of seeds
(A) Mechanical resistance of testa
(B) Impermeability of seed coat
(C) Unavailability of water and O_2
(D) All the above

104. Why the newly harvested potato tubers do not germinate even when placed in favourable conditions
(A) Due to dormancy
(B) Due to lack of water absorption
(C) Due to difficulty of light penetration
(D) Due to lack of photosynthetic apparatus

105. Dormancy of seed is broken by
(A) Auxin (B) Gibberellins
(C) Ethylene (D) Cytokinin

106. Treatment of seed at low temperature under moist conditions to break its dormancy is called
(A) Chelation (B) Stratification
(C) Scarification (D) Vernalization

107. If the stem grows towards sunlight & root grows just opposite to it, The stem movement is called
(A) Negative phototropic movement
(B) Phototropic movement
(C) Positive phototropic movement
(D) None of these

108. Opening of floral buds into flowers, is a type of
(A) Autonomic movement of locomotion
(B) Autonomic movement of variation
(C) Paratonic movement of growth
(D) Autonomic movement of growth

109. Protoplasmic streaming in movements referred as
(A) Autonomic movements of locomotion
(B) Thigmonasy
(C) Photonasty
(D) Movements of curvature

110. Movements of tentacles in Drosera are
(A) Photonastic (B) Thermonastic
(C) Thigmonastic (D) Seismonastic

111. Pneumatophores show
(A) Positive geotropism
(B) Negative geotropism
(C) Thigomotropism
(D) Negative phototropism

112. Jerky lateral movements of Desmodium gyrans are
(A) Negative geotropic movements
(B) Positive geotropic movements
(C) Hydrotropic movements
(D) None of the above

113. On touching the leaves of Mimosa pudica droop down because of
(A) Seismonasty (B) Hydrotropism
(C) Chemonasty (D) Thigmotropism

114. Bulliform cells in grass leaves show
(A) Growth movements (B) Tropic movements
(C) Nastic movements (D) Turgour movements

115. Grasses fold their leaves due to
(A) Bulliform cells (B) Stomata
(C) Hydathodes (D) Transfusion tissue

116. Stimulus for flowering accepted by
(A) Young leaves (B) Mature leaves
(C) Stem tissues (D) None of the above

117. IAA firstly isolated from
(A) corn germ oil (B) Wheat endosperm
(C) human urine (D) None of the above

118. Who discovered cytokinins
(A) Miller (B) Letham
(C) 1 & 2 (D) None the above

119. Mimosa pudica show
(A) Thig motropism (B) Seismonasty
(C) Chemotaxis (D) Geotropism

120. Auxenometer is a apparatus which can be used in the measuring
(A) Rate of photosynthesis (B) Rate of Respiration
(C) Rate of growth (D) Transpiration

121. Hormone used in early ripening of fruits is
(A) Auxin (B) ABA
(C) Ethylene gas (D) Cytokinin

122. Apical dominance is caused by
(A) Auxin (B) Gibberellin
(C) Kinetin (D) ABA

123. Which one of the following plant hormone is known as a stress hormone
(A) Gibberellin (B) Kinetin
(C) Auxin (D) Abscisic acid

124. Genetically dwarf plant can be made tall by
(A) GA (B) ABA
(C) IAA (D) CK

125. Some flowers open during the day time and close at night. It is called
(A) Phototaxy (B) Photoperiodism
(C) Phototropism (D) Photonasty

126. The hormone which has negative effect on apical dominance is

(A) Cytokinin (B) Auxin
(C) Gibberellin (D) Ethylene

127. The movement of hairs of Drosera is an example of

(A) Chemotropism (B) Thigmonasty
(C) Thigmotropism (D) Thermotropism

128. The growth hormones responsible for bolting are

(A) Auxins (B) Kinetine
(C) Coumarins (D) Gibberellins

129. The chemical nature of kinetin is

(A) Butyric acid (B) Indole butyric acid
(C) 6- furfuryl amino purine (D) Indole acetic acid

130. Weedcide 2, 4 - D is

(A) Pesticide
(B) Growth inhibitor hormone
(C) Auxin
(D) Insecticide

131. Movement of pollen tube to wards micropyle of ovule depend on

(A) Thigmotropism (B) Chemotropism
(C) Thermotropism (D) Hydrotropism

132. Which one of the following is growth inhibitor

(A) Ethylene (B) ABA
(C) GA (D) IAA

133. Which one of the following hormone is produced during leaf fall

(A) ABA (B) Cytokinin
(C) Florigen (D) All of these

134. Gibberellin is obtained from

(A) Phytophthora infestans (B) Fusarium indicum
(C) Gibberella fujikuroi (D) Alternaria solani

135. Plant show Tropic movement in response to light is called

(A) Photosynthesis (B) Photolysis
(C) Phototropism (D) Phototaxis

136. Plant movement in diffused light is

(A) Photosynthesis (B) Photolysis
(C) Phototropism (D) Phototaxis

137. Bioessay of IAA (Indole acetic acid) is tested by

(A) α - amylase test
(B) Avena curvature test
(C) Soyabeen callus
(D) Xanthium leaf disc test

138. What will be effect on curvature if gelatin is placed between coleotile tips and the coleoptile and then exposed to unidirectional light

(A) Curvature towards light occurs
(B) Curvature away from light occurs
(C) No curvature occurs
(D) None of the above

139. Went found that curvature of coleoptile is

(A) Directly proportional to concentration of auxin
(B) Inversely proportional to concentration of auxin
(C) Not affected by concentration of auxin
(D) None of the above

140. IAA is synthesized from

(A) Tryptophan (B) Acetyl CoA
(C) Methinonine (D) All the above

141. Which of these is not found as natural auxin but is effective as natural auxin

(A) Phenyl acetic acid (B) Piconilic acid
(C) Both of above (D) None of above

142. What is 2-4 D

(A) 2-4 dichloro napthalene acetic acid
(B) 2-4 dichloro phenoxy acetic acid
(C) 2-4 dichloro napthoxy acetic acid
(D) 2-4 dichloro benzoic acid

143. In plants, how many types of auxins are found at a time

(A) One type (B) Two types
(C) Three types (D) Many types

144. How the polar transport of auxins occurs

(A) From tip towards base
(B) From base towards tip
(C) From centre towards lateral side
(D) From lateral side towards centre

145. Which of these causes root initiation from cut end of stem

(A) NAA (B) IBA
(C) Both of above (D) None of these

146. Which are called the hormone & rootinone

(A) IAA/IBA (B) NAA/IAA
(C) NAA/IBA (D) IBA/NAA

147. Dormancy in potato can be induced by

(A) IBA (B) NAA
(C) Malic hydrazide (D) All the above

148. Parthenocarpy can be induced by

(A) IAA (B) NAA
(C) IBA (D) All the above

149. What is used to control lodging in wheat etc.

(A) $\propto$ -naphthalene acetic acid
(B) IAA
(C) $\propto$ -naphthyl acetamide
(D) all the above

150. The sweetness of sugarcane can be increased by

(A) 2-4D (B) IBA
(C) Malic hydrazide (D) All the above

151. More flowering and fruiting in pineapple occurs due to

(A) NAA (B) 2-4D
(C) Both of above (D) None of above

152. Why the fruits become sweeter due to effect of auxins

(A) By formation of more sugars
(B) By conversion of starch to sugar
(C) Both of above
(D) None of above

153. Why more fruits appear in apple due to auxins

(A) By formation of more flowers
(B) By formation of more spurs
(C) By reducing the time of fruit formation
(D) All the above

154. Testing of biologically active substances on living beings is called

(A) Biological testing (B) Utility testing
(C) Bio-assay (D) Active assay

155. What happens during the formation of abscission layer

(A) Auxin synthesis increases
(B) Auxin synthesis decreases
(C) Ethylene amount increases
(D) Both 2 & 3

156. It is essential for synthesis of auxin

(A) Mn (B) Zn
(C) Ca (D) Mg

157. Which is the most important gibberellin

(A) GA_1 (B) GA_2
(C) GA_3 (D) GA_4

158. Where is gibberellin found in maximum concentration

(A) In young leaves and seeds
(B) In root, rhizome apex
(C) In mature leaf
(D) All the above

159. Gibberellin is formed from

(A) Acetyl Co~A (B) Methionine
(C) isoprene (D) None of these

160. What is the sudden growth in very reduced stem in biennials called

(A) Bolting (B) Cell elongation
(C) Internode elongation (D) None of the above

161. Parthenocarpy can be induced in apple and pear by

(A) Auxins (B) Gibberellins
(C) Both of above (D) None of these

162. Which enzyme is syntheized de-novo in aleurone layers of germinating seeds due to the effect of gibberellins

(A) α-Amylase (B) Protease
(C) Lipase (D) None of these

163. Generally which sex develops due to the effect of gibberellins

(A) Maleness (B) Femaleness
(C) Bisexuality (D) None of these

164. In which plants, gibberellins induce flowering

(A) In LDP (B) In SDP
(C) In DNP (D) All the above

165. What is the chemical name of Kinetin

(A) 6-(4 hydroxy 3-methyl trans 2-butene aminopurine)

(B) 6-furfuryl aminopurine

(C) Dimethyl allyl adenine

(D) None of the above

166. Which is the most effective cytokinin

(A) Kinetin (B) Kinin

(C) Zeatin (D) All these

167. Cytokinin is mainly found in

(A) Stem (B) Root

(C) Leaf (D) All the above

168. By which experiment cytokinin is bioassayed

(A) Induction of growth in soybean cotyledon culture

(B) Induction of growth in tobacco cortex culture

(C) Both of the above

(D) None of the above

169. Delay of senscence is due to the effect of

(A) Auxin (B) Cytokinin

(C) Both of above (D) None of the above

170. Cytokinins cause increase in resistance against

(A) Effect of high temperature

(B) Effect of low temperature

(C) Diseases

(D) All the above

171. The most abundant cytokinin in plants is

(A) DMAA (Dimethyl allyl adenine)

(B) IPA (Isopentynyl adenine)

(C) BA (Benzyl adenine)

(D) EEA (Ethoxy ethyl adenine)

172. What is the precursor of ethylene

(A) Tryptophan (B) Ethene

(C) Methionine (D) None of these

173. Ethylene can be used artificially in the forms of

(A) Ethene (B) Ethephone

(C) Both of above (D) None of the above

174. Which is not the character of ethylene

(A) Fruit ripening

(B) Isodiametric growth

(C) Growth in length of stem

(D) None of the above

175. Synthesis of abscisic acid occurs in

(A) Leaves (B) Stem

(C) Seeds and fruits (D) All the above

176. Which effect is due to abscisic acid

(A) Induction of dormancy in buds or seeds

(B) Inhibition of growth

(C) Senescence

(D) All the above

177. In which plants inhibitory effect on flowering occurs due to abscisic acid

(A) In LDP (B) In SDP

(C) In DNP (D) None of these

178. To which chemicals, antherozoids of Marchantia & Moss are attracted respectively

(A) Protein/sugar (B) Protein/Malic acid

(C) Sugar/Protein (D) malic acid/ sugar

179. Closed state of floral bud, circinate vernation in leaves of fern, straingthening of floral axis of opium is due to

(A) Epinasty (B) Nutation

(C) Hyponasty (D) None of these

180. What is the reason of phototropism

(A) More distribution of auxin

(B) Less distribution of auxin

(C) Uneven distribution of auxin

(D) Rapid synthesis of auxin