(Answer key at the bottom)

- 1. Which of the following is monocot
 - a. date palm
 - b. mango
 - $c. \ cashewnut$
 - d. pecanut
- 2. Fruit type of fig is
 - a. sorosis
 - b. hisperidium
 - c. synconus
 - d. balusta

3. Which of the following is known as king of fruits

- a. Apple
- b. Jackfruit
- c. Banana
- d. Mango
- 4. The most popular mango variety of India, susceptible to spongy tissue is a. Dashehari
 - b. Alphonso
 - c. Amrapalli
 - d. Neelum
- 5. The leading commercial cultivar of banana is
 - a. Nendran
 - b. Poovan
 - c. Grand Naine
 - d. Dwarf Cavendish
- 6. Papain is extracted from
 - a. Stem
 - b. Leaves
 - c. Immature fruits
 - d. Ripe fruits
- $7. \hspace{0.1 cm} Best \hspace{0.1 cm} N_2 fertilizer \hspace{0.1 cm} for \hspace{0.1 cm} Pineapple \hspace{0.1 cm} is$
 - a. Aluminium Sulphate
 - b. Urea
 - c. DAP
 - d. Aluminium Phosphate
- 8. Custard apple belongs to the family
 - a. Annonaceae
 - b. Anacardiaceae

(Answer key at the bottom)

- c. Myrtaceae
- d. Sapindaceae
- 9. Cauliflorus bearing habit is not seen in which of the following a. Jackfruit
 - b. Mango
 - c. Fig
 - d. Cocoa

10. Which of the following is Mandarin

- a. Citrus sinensis
- b. C. paradisi
- c. C. grandis
- d. C. Reticulate

11. Most winter hardy clonal rootstock of apple is

- a. M-9
- b. MM-104
- c. M-27
- d. M-7
- 12. In India, Date is harvested at
 - a. DOKA Stage
 - b. DANG Stage
 - c. PIND Stage
 - d. RUTAB Stage
- 13. Richest source of iron is
 - a. Jamun
 - b. Ber
 - c. Karonda
 - d. Aonla
- 14. Which of the following is a man made hybrid
 - a. Pecanut
 - b. Loquat
 - c. Avocado
 - d. Strawberry
- 15. CNSL is obtained from
 - a. Neem
 - ${\tt b.}\,Aloe\,vera$
 - c. Cocoa
 - d. Cashewnut

(Answer key at the bottom)

- 16. CTC method is associated with
 - a. Arecanut
 - b. Coffee
 - c. Rubber
 - d. Tea
- 17. Betel vine belongs to the family
 - a. Umbelliferaceae
 - b. Rubiaceae
 - c. Piperaceae
 - d. Euphorbiaceae
- 18. Edible part of Asparagus is
 - a. roots
 - b. Corms
 - c. Tubers
 - d. Spears
- 19. Detaching the vegetative part of potato plant found above the ground from the root tubers before harvesting is known as
 - a. Dehaulming
 - b. Topping
 - c. Dehauling
 - d. Detopping
- 20. Pungency in radish is due to
 - a. allyl disulphide
 - b. allyl propyl disulphide
 - c. Thioisocyanates
 - $d. \ all \ of \ these$
- 21. 'Best of all' is a variety of
 - a. tomato
 - b. cucumber
 - c. chilli
 - d. carrot
- 22. India is the ____ largest producer of vegetables.
 - a. 1^{st}
 - b. 2nd
 - c. 3^{rd}
 - d. 4^{th}
- 23. Which of the following is not a cole crop
 - a. radish
 - b. cabbage

(Answer key at the bottom)

- c. brussel's sprout
- d. cauliflower

24. The botanical name of garlic is

- a. Cucumis cepa
- b. Cucumis sativus
- c. Allium sativum
- d. Allium cepa

25. Khufri Alankar & Khufri Kanchan is a variety of

- a. Potato
- b. tomato
- c. radish
- d. cabbage

26. Centre of origin of brinjal is

- a. China
- b. Iran
- c. Brazil
- d. India

27. Queen of spices is

- a. black pepper
- b. Nutmeg
- c. cardamom
- d. clove

28. National Aromatic and Medicinal Plant Board is located at

- a. Odisha
- b. New Delhi
- c. Gujarat
- d. Uttarpradesh

29. The first International Flower Auction Company in Asia is situated in

- a. NTC Delhi
- b. Bangalore
- c. Kolkata
- d. Chennai
- 30. Single pinch, A pinch and a half & Double pinching is practiced in which flower crop
 - a. Chrysanthemum
 - b. Marigold
 - c. Carnation
 - d. Rose

(Answer key at the bottom)

31. National flower of India is

a. Rose

- b. Jasmine
- c. Marigold
- d. Lotus
- 32. In which of the following flowers, the showy part is not the flower
 - a. Bougainvillea
 - b. Poinsettia
 - c. Euphorbia mili
 - $d. \ all \ of \ these$
- 33. Alsmeera is a variety of
 - a. Marigold
 - b. Rose
 - c. Tuberose
 - d. Gerbera

34. Which flower is known a Queen of East

- a. Chrysanthemum
- b. Rose
- c. Carnation
- d. Orchid
- 35. Which of the following is not a climber
 - a. Bougainvillea
 - b. Philodendron
 - c. Sweet pea
 - d. Amaryllis

36. Calyx splitting is a disorder associated with

- a. Rose
- b. Gladiolus
- c. Chrysanthemum
- d. carnation

37. Which of the following is used as colouring agent

- a. BHT
- b. Titanium Oxide
- c. Monosodium Phosphate
- d. Monosodium Glutamate
- 38. Blanching is done in
 - a. Fruits
 - b. Vegetables
 - c. Spices

(Answer key at the bottom)

d. MAPs

- 39. Which of the following is known as 'Heart of Garden'
 - a. Running Water
 - b. Pergolas
 - c. Arch
 - d. Lawn

40. Japanese flower arrangement is known as

- a. Hiraniwa
- b. Tsukiyama
- c. Ikebana
- d. Hikaie
- 41. Major genes contribute disease resistance in the form of
 - a. Vertical resistance
 - b. horizontal resistance
 - c. both
 - d. none
- 42. Chief enzyme found in yeast cell is
 - a. Zymase
 - b. Amylase
 - c. Pectin
 - d. Pectinase

43. Inverted V-Shaped chlorosis from tip is due to deficiency of

- a. Fe
- b. Mg
- c. Mn
- d. N

44. Who described the 1st plant nematode disease, the seed gall caused by Anguinatritici

- a. Anton de Bary
- b. Needham
- c. Luthra & Sattar
- d. P. Micheli
- 45. Which of the following are true about ${\rm CaMV}$
 - a. 3 discontinuities
 - b. 8packed genes
 - c. dsDNA
 - $d. \ all \ of \ these$

(Answer key at the bottom)

- 46. Alternate host of black stem rust of wheat is
 - a. Barberry
 - b. Oats
 - c. Wild wheat
 - d. Lantana
- 47. Quality of Bt Maize is considered as superior to that of non-Bt maize due to a. Level of fungal (Fusarium) damage is less
 - b. Lower Mycotoxin contamination
 - c. Both a & b
 - d. none of these

48. Trichoderma viride is used to control

- a. Virus
- b. Bacteria
- c. Fungus
- d. Nematode
- 49. 'Fungi And Diseases in Plants' was written by
 - a. Mundkur
 - b. E.J Butler
 - c. Anton de Bary
 - d. P. Micheli

50. Karnal Bunt was 1st reported by Mitra in

- a. 1930
- b. 1931
- c. 1932
- d. 1933

51. Which of the following is the symptom of Bacterial blight of cotton

- a. Black arm
- b. Angular leaf spot
- c. Boll rot
- d. all of these

52. Which of the following diseases is known as Kresek of Rice

- a. Brown spot
- b. Bacterial leaf streak
- c. Bacterial leaf blight
- d. Khaira

53. Ralstonia solanacearum causes _____ in potato

- a. Brown rot
- b. Soft rot
- c. Black leg

(Answer key at the bottom)

- d. Scab
- 54. Little leaf of brinjal is caused by
 - a. Fungi
 - b. Bacteria
 - c. Virus
 - d. Phytoplasma

55. Club root is a serious disease of

- a. Cucurbits
- b. Crucifers
- c. Tubers
- d. Pulses

56. Bordeaux mixture was discovered by____ in 1885.

- a. P. Michelli
- b. Mundkur
- c. H.D Olmo
- d. P. Milardett

57. Which of the following is also known as club fungi

- a. Zygomycota
- b. Ascomycota
- c. Basidiomycota
- d. Deuteromycota

58. Foot rot/ stem rot of papaya is more common in

- a. young plants
- b. Mature plants
- c. hybrid plants
- d. all of these

59. Oozing of amber coloured exudation from the bark of citrus is a symptom of

- a. Citrus greening
- b. Huanglongbing
- c. Gummosis
- d. Tristeza

60. Which of the following diseases affects floral parts

- a. White rust of crucifers
- b. Early blight of potato
- c. cottony leak
- d. damping off

61. Powdery mildew of grapevine is caused by

a. Plasmoporaviticola

(Answer key at the bottom)

- b. Pseudoperonosporacubensis
- c. Uniculanecator
- d. Erysiphe viniferis

62. Rust is effectively controlled by

- a. Vitavax
- b. Plantvax
- c. Sulphur Fungicides
- d. Copper fungicides

63. Powdery mildew is effectively controlled by

- a. Vitavax
- b. Plantvax
- c. Sulphur fungicides
- d. Copper fungicides

64. Gram staining is done for

- a. fungi
- b. bacteria
- c. virus
- d. mycoplasma
- 65. Leaf spot / Tikka disease of groundnut is caused by
 - a. Cercosporaarachidicola
 - b. Cercosporapersonata
 - c. Cercosporaparasitica
 - d. Both a&b

66. Coop 12 & Red Free are scab resistant varieties of

- a. Potato
- b. Apple
- c. Tomato
- d. Cherry

67. Who discovered the disease cycle of cereal rust in India

- a. K.C Mehta
- b. Anton de Bary
- c. B.B. Mundkur
- d. Luthra & Sattar
- 68. Leaf rust of coffee is caused by
 - $a. \ Hemiliae vastatrix$
 - b. Uromyces phaseoli
 - c. Puccinia striformis
 - d. none of these

(Answer key at the bottom)

- 69. Race specific resistance is called
 - a. Horizontal resistance
 - b. Vertical resistance
 - c. Total resistance
 - d. none of these

70. Soil microorganism is most active at

- a. 18-22°C
- b. 22-28°C
- c. 28-34°C
- d. 34-36°C
- 71. Loose smut of barley is
 - a. Internally seed borne
 - b. Externally seed borne
 - c. Soil borne
 - d. all of these
- 72. Which of the following is not a symptom of anthracnose of chilli
 - a. root rot
 - b. dieback
 - c. fruit rot
 - d. none of these
- 73. The most serious disease of banana is
 - a. sigatoka
 - b. panama wilt
 - c. bunchy top
 - d. none of these
- 74. Vector of bunchy top of banana is
 - a. Bemesiatabaci
 - b. Pentalonianigronervosa
 - c. Myzuspersicae
 - d. Nephotettixvirescens

75. Which of the following parasite is commonly associated with sorghum

- a. Cuscuta
- b. Loranthus
- c. Orobanche
- d. Striga

76. A semi-parasite of trunks and branches is

- a. Cuscuta
- b. Loranthus
- c. Orobanche

(Answer key at the bottom)

- d. Striga
- 77. Hollow stem in cauliflower is due to deficiency of
 - a. B
 - b. Ca
 - c. Zn
 - d. Mo

78. Bitter pit is a serious disorder of

- a. Carrot
- b. Radish
- c. Apple
- d. Tomato

79. Which of the following is considered as the oldest among the synthetic fungicides

- a. Copper fungicides
- b. Sulphur fungicides
- c. Mercurial fungicides
- d. Organo-Tin
- 80. The main disadvantage of using antibiotics for disease management is
 - a. Costly
 - b. Phytotoxicity
 - c. Requires large amount
 - d. Difficult to use
- 81. Which of the following causes maximum losses in crops
 - a. weeds
 - b. pathogens
 - c. Insects
 - d. rodents

82. The density of pest population which needs control measures is known as

- a. Economic Injury Level (EIL)
- b. Economic Threshold Level (ETL)
- c. Economic Control Level (ECL)
- d. All of these

83. In Class Hexapoda, body is divided into _____ Segments

- a. 2
- b. 3
- c. 4
- d. 5

84. Legs and wings of insects are present on the

a. Thorax & Abdomen

(Answer key at the bottom)

- b. Thorax
- c. Abdomen
- d. all the segments

85. Johnston's organ is a sensory organ present in the ____ of insects

- a. Hind legs
- b. Fore legs
- c. Antenna
- d. Wings

86. Sawflies belong to the order

- a. Diptera
- b. Hymenoptera
- c. Hemiptera
- d. Coleoptera
- 87. Which of the following modification of legs is seen in grasshoppers
 - a. Cursorial
 - b. Saltatorial
 - c. Natatorial
 - d. Ambulatorial

88. Complete metamorphosis is known as

- a. Ametabola
- b. Hemimetabola
- c. Holometabola
- d. Hypermetabola
- 89. Apodous larvae is characterized by
 - a. Well developed head capsule
 - b. Abdominal legs in addition to prothoracic legs
 - c. No legs and poorly sclerotized
 - d. all of these
- 90. Alimentary canal is_____ in origin
 - a. Ectoderm
 - b. Endoderm
 - b. Ectoderm & Endoderm
 - d. Mesoderm & Ectoderm
- 91. Which of the following is an excretory organ
 - a. Crop
 - b. oesophagus
 - c. Malphigian tubules
 - d. all of these

(Answer key at the bottom)

- 92. The blood of insect is known as
 - a. Haemocoel
 - b. Haemolymph
 - c. Pylorus
 - d. Leghaemoglobin
- 93. National Bureau of Agriculturally Important Insects is located at
 - a. New Delhi
 - b. Chennai
 - c. Hyderabad
 - d. Bangalore

94. Trichogramma is

- a. Egg parasitiod
- b. Larval parasitoid
- c. Pupal
- d. Adult
- 95. Vadalia beetle (*Rodolia cardinalis*) is one of the earliest examples of successful control of pest using predators. It was used for controlling
 - a. AppleWolly aphid
 - b. Cottony cushion scale
 - c. Brown Plant Hopper
 - d. San Jose scale

96. Rhinoceros beetle is a major pest of

- a. Sugarcane
- b. Coconut
- c. Arecanut
- d. Tea
- 97. Which of the following is an important characteristic of a good fumigant
 - a. Should have high vapour pressure
 - b. Should be toxic to all stages of an insect
 - c. Uniform distribution without settling down
 - d. all of these
- 98. Which of the following is not a factor affecting the penetration of insecticides through the cuticle
 - a. Chemical nature of insecticides
 - b. Thickness of cuticle
 - c. Nature of carriers and solvents
 - d. None of these
- 99. Which of the following is a factor causing Resurgence? a. High Fecundity

(Answer key at the bottom)

- b. Suppression of natural enemies
- c. Accelerated growth of insects
- d. All of these

100. Which of the following is not a mechanism of resistance given by R.H

Painter

- a. Antixenosis
- b. Antibiosis
- c. Resistance
- d. Tolerance
- 101. A chemical factor that triggers social responses and is usually secreted by females to attract males is known as
 - a. Hormones
 - b. Kairomones
 - c. Pheromones
 - d. Allomones

102. Failure of insects to recognize treated crops as food can be achieved by a. Antifeedants

- b. Repellants
- c. Attractants
- d. Chemosterillants

103. Soil solarisation come under which category of IPM

- a. Cultural method
- b. Biological Method
- c. Mechanical method
- d. none of these

104. Import of food grains from USA brought in which of the following weed a. Parthenium

- b. Cynodondactylon
- c. Cyperus rotundus
- d. Hyacinth

105. Main symptom of yellow stem borer is

- a. Silvery shoot
- b. Dead heart
- c. Hopper burn
- d. White chaffy grains

(Answer key at the bottom)

- 106. Gundhi bug is a pest of
 - a. Wheat
 - b. Maize
 - c. Rice
 - d. Sorghum

107. Sunflower head borer is

- a. Helicoverpaarmigera
- b. Chilopartellus
- c. Plutellaxylostella
- ${\tt d.}\ Lipaphisery simi$

108. Which of the following is a pest of sugarcane

- a. Gurdaspur borer
- b. Pyrilla
- c. Top shoot borer
- d. all of these

109. Which of the following is polyphagous

- a. red hairy caterpillar & Army worm
- b. White grub & Cutworm
- c. Termites & Locust
- d. all of these

110. Trade name of aluminium phosphide is

- a. Warafin
- b. Celphos
- c. Nemagone
- d. Nemaphos

111. Which of the following is not matched correctly

- a. Pink bollworm-Pectinophoragos sypiella
- b. Spotted bollworm- Eariasvitella
- c. American bollworm- ${\it Helicover paarmigera}$
- d. none of these
- 112. Dwelling place of termites is known as

a. Hill

- b. Mound
- c. Hive
- d. Dome

113. Transgenic crop having maximum area in the world is

- a. Maize
- b. Tobacco
- c. Soybean

(Answer key at the bottom)

d. Cotton

- 114. Malathion and parathion falls under which category of insecticides a. Organo-chlorines
 - b. organophosphates
 - c. carbamates
 - d. pyrethroids

115. Leaf spot or tikka is the disease of

- A. Soybean
- B. Sunflower
- C. Groundnut
- D. none of these

116. Insects come under the Phylum

- a. Hexapoda
- b. Insecta
- c. Arthropoda
- d. Mollusca
- 117. Enhancing the activity or other property of pesticide mixture is achieved by
 - a. Active ingredient
 - b. Adjuvant
 - c. Formulant
 - d. Formulation

118. The mandate of KVK is

- a. Technology assessment and demonstration for its public
- b. Capacity development
- c. Both a&b
- d. none of these

119. Which of the following has its Headquarter in Hyderabad

- a. IIHR
- b. ICRISAT
- c. CFTRI
- d. CRRI

120. Which of the following was launched during ICAR's Golden Jubilee celebration

- a. National seed programme
- b. Kisan call centre
- c. Lab to land programme
- d. Kisan credit card

(Answer key at the bottom)

- 121. Who presented the historical paper entitled 'Experiments in plant hybridization' to the "Brunn society for the study of natural sciences" published in 1866.
 - a. Hugo de Vries, Carl Correns & E. Tschermak
 - b. G.J. Mendel
 - c. Charles Dawrin
 - d. M. Schleiden & T. Schwann

122. Which of the following was contributed by K. Pearson

- a. Sex linkage in drosophila
- b. Chi-Square test
- c. Double helix model of DNA
- d. Cell theory

123. The ratio of Duplicate dominance is

- a. 12:3:1
- b. 9:3:4
- c. 15:1
- d. 9:7

124. The "Primary centres of Origin" was proposed by

- a. Vavilov
- b. De Candole
- c. E. Strausberger
- d. C. Dawrin

125. The progeny of a single plant obtained by asexual reproduction is called as a. Cybrid

- b. Hybrid
- c. Clone
- d. Duplicate

126. Oryza sativa is a diploid species having chromosome number

- a. 22
- b. 24
- c. 26
- d. 28

127. Gene responsible for dwarfing character in rice is

- a. Norin 10
- b. Tift 23 A
- c. Dee-geo-woo-gen

(Answer key at the bottom)

d. Opaque-2

128. The first AICRP was introduced for which crop

- a. Rice
- b. Maize
- c. Mango
- d. Wheat

129. An organism which has acquired heritable variation as a result of sudden change in the hereditary material is called as a

- a. Mutant
- b. Hybrid
- c. Biotype
- d. Albino

130. Multiple effects of a single gene is known as

- a. polyploidy
- b. heteroploidy
- c. autoploidy
- d. pleiotropy

131. A virus free plant from a virus infected plant can be obtained from

- a. anther culture
- b. stem culture
- c. meristem culture
- d. embryo culture

132. Genetically the most pure seed is

- a. breeder seed
- b. nucleus seed
- c. foundation seed
- d. certified seed
- 133. Who is known as the father of genetics
 - a. GJ Mendel
 - b. Anton De Bary
 - c. Johannsen
 - d. TH Morgan
- 134. Chromosaomal theory of inheritance was given by
 - a. Sutton &Boveri
 - b. Bateson & Punnet
 - c. Watson & Crick
 - d. Johannsen

(Answer key at the bottom)

- 135. Seedless watermelon is
 - a. Diploid
 - b. Triploid
 - c. Tetraploid
 - d. Hexaploid
- 136. The first cotton hybrid was developed in India. It was named as____
 - a. Bollguard
 - b. Pusa Safed
 - c. H4
 - d. Varalaxmi

137. NBPGR is

- a. National Bureau and Pest Genetic Reserves
- b. National Botanicals and Plant Genetic Resources
- c. National Bureau of Plant Genetic Reserves
- d. National Bureau of Plant Genetic Resources

138. Pureline theory was proposed by

- a. Bateson
- b. Johannsen
- c.Yule
- d. Nilsson Ehle

139. Inbred lines in maize are maintained by

- a. self-pollination
- b. Open pollination
- c. Cross pollination
- d. Emasculation
- 140. Triticale is a
 - a. Interspecific cross
 - b. Intraspecific cross
 - c. Intergeneric cross
 - d. Intrageneric cross

141. The progeny of a single homozygous self pollinated plant is called

- a. clone
- b. inbred
- c. pureline
- d. Landrace

142. Which is the correct order of events in the cell?

- a. Transcription, translation & protein synthesis
- b. Translation, transcription & protein synthesis

(Answer key at the bottom)

- c. Protein synthesis, translation & transcription
- d. Transcription, protein synthesis & translation
- 143. Local varieties are also known as
 - a. Advanced varieties
 - b. land races
 - c. Ancestor variety
 - d. pure breed

144. The source of dwarfing gene in wheat is

- a. Norin 10
- b. Dee-geo-woo-gen
- c. Opaque
- d. CSH

145. Shaktiman is a new variety of

- a. rice
- b. wheat
- c. maize
- d. sorghum

146. Highest uniformity is present in

- a. single cross
- b. double cross
- c. Three way cross
- d. multiple cross

147. The concept of vertical and horizontal resistance was given by

- a. Robinson
- b. Russell
- c. H.D Olmo
- d. Van der Plank

148. Superiority of F1 hybrids over a standard commercial variety is known as a. Heterosis

- b. Luxuriance
- c. Economic heterosis
- d. Relative heterosis

149. The first artificial hybrid was made by

- a. Mendel
- b. Beal
- c. Fairchild
- d. Russell

(Answer key at the bottom)

- 150. Law of segregation was given by
 - a. Virchow
 - b. Bateson
 - c. TH Morgan
 - d. Mendel

151. Acquisition of the property of indefinite growth by an animal cell is termed as

a. transformation

- b. immortalization
- c. Malignation
- d. Ligma

152. $3' \rightarrow 5'$ strand of the DNA molecule is known as _____ strand and $5' \rightarrow 3'$ strand of the DNA molecule is known as _____ strand

- a. Leader, Follower
- b. Runner, Lagging
- c. Leading, Lagging
- d. Runner, Follower

153. Which colour tag is found in foundation seeds

- a. Golden yellow
- b. White
- c. Purple
- d. Blue

154. The capacity of the seeds to germinate is known as

- a. Dockage
- b. Viability
- c. Purity
- d. Sprouting

155. Test weight is the weight of

- a. 10 seeds
- b. 100 seeds
- c. 1000 seeds
- d.10000 seeds

156. Which of the following method is known as bio-chemical test

- a. Tetrazolium test
- b. Indigocarmine method
- c. Potassium permanganate method
- d. Embryo culture method

(Answer key at the bottom)

- 157. Isolation distance for maize, mustard & chillies for producing foundation seed is
 - a. 3m
 - a. 511 b. 50m
 - c. 200m
 - d. 400m
 - u. 400m

158. Dormancy can be broken by

- a. chilling
- b. pre-soaking
- c. rubbing/puncturing seed coat
- d. all

159. Seed treatment is done for

- a. controlling disease
- b. to break dormancy
- c. protection against pest
- d. all

160. The SEED ACT was passed on

- a. 1966
- b. 1968
- c. 1975
- d. 1988

161. In India, foundation seed is produced by

- a. SSCA
- b. NSC
- c. Registered growers
- d. all of these
- 162. Seed is a
 - a. immature embryo
 - b. mature embryo
 - c. ripened ovary
 - d. all of these

163. The first private seed company i.e Sutton & sons was established at Kolkata in

- a. 1910
- b. 1912
- c. 1919
- d. 1920

(Answer key at the bottom)

- 164. The first step in seed processing and marketing is
 - a. grading
 - b. pre-cleaning
 - c. storage
 - d. seed drying

165. Process of removal of off plants from the field of an improved variety is called

- a. thinning
- b. denavelling
- c. Rouging
- d. Termination

166. If cotyledons comes above the ground (eg. tamarind, sunflower), it is known as _____ germination

- a. Epigeal
- b. Hypogeal
- c. Apogeal
- d. Heliogeal

167. Father of genetic engineering is

- a. Karl Ereky
- b. Paul Berg
- c. Roengten
- d. Pogba

168. An excised fragment of a tissue or organ used for tissue culture is called a. explant

- b. callus
- c. marker
- c. marker
- d. starter

169. Terminator technology is used for producing

- a. hybrid seeds
- b. cybrids
- c. sterile seeds
- d. T-800

(Answer key at the bottom)

170. Which of the following category of plasmid replicate on their own

- a. Stringent plasmid
- b. Relaxed plasmid
- c. Ti-Plasmid
- d. none of these

171. The diffusion of solvent particles out of a living cell is

- a. Endosmosis
- b. Exosmosis
- c. Imbibition
- d. Deplasmolysis

172. Who proposed root pressure theory

- a. Dixon & Jolly
- b. Stephen Hales
- c. JC Bose
- d. Liebig

173. The final product of CO_2 fixation in C3 plants is

- a. 3PGA
- b. RUBISCO
- c. OAA
- d. PEP Carboxylase

174. Which of the following is not a CAM plant

- a. agave
- b. Kalanchoe
- c. Pineapple
- d. Banana

175. the principal organ of transpiration is

- a. stem
- b. leaf
- c. roots
- d. flowers

176. Fruit ripening can be induced by

- a. auxin
- b. cytokinin
- c. GA
- d. Ethylene

(Answer key at the bottom)

- 177. which of the following is not a growth promoter
 - a. ABA
 - b. Auxins
 - c. Cytokinins
 - d. Gibberellins

178. who is the father of agricultural biochemistry

- a. Justus von Liebig
- b. Stephen Hales
- c. Funk
- d. Louis Pasteur

179. which of the following is also known as corn sugar

- a. Fructose
- b. Glucose
- c. Galactose
- d. Sucrose

180. Macromolecule chitin is

- a. Phosphorous containing polysaccharide
- b. Nitrogen containing polysaccharide
- c. Sulphur containing polysaccharide
- d. Simple polysaccharide

181. chlorophyll is present in

- a. Grana of chloroplast
- b. stroma of chloroplast
- c. surface of chloroplast
- d. dispersed throughout chloroplast
- 182. vitamin A is known as
 - a. Retinol
 - b. Riboflavin
 - c. Ascorbic acid
 - d. Calciferol

183. Which of the following vitamins are Fat soluble

- a. A
- b. B complex
- c. C
- d. none of these

(Answer key at the bottom)

184. Maximum percentage of photosynthesis is carried out by

- a. Trees
- b. Shrubs
- c. Grasses
- d. algae

185. Contribution to photosynthesis is maximum from

- a. Awns
- b. older leaves
- c. flag leaves
- d. stems and branches

186. Stomata open and close due to

- a. Circadian rhythm
- b. genetic clock
- c. pressure of gases in the leaves
- d. Turgor pressure of guard cells

187. Which of the following will have minimum transpiration

- a. cactus
- b. hydrilla
- c. Mango
- d. banana

188. Which of the following is not a function of root hairs

- a. water uptake
- b. oxygen uptake
- c. mineral uptake
- d. none of these

189. The hormone reducing transpiration by inducing stomatal closure is

- a. ABA
- b. ethylene
- c. cytokinin
- d. auxin

190. Effects of low temperature which shortens vegetative period and hastens flowering is known as

- a. photolysis
- b. photoperiodism
- c. heliotropism
- d. vernalization

(Answer key at the bottom)

191. Who discovered electron microscope

- a. Robert Koch
- b. Robert hooke
- $c.\ leeuwenhoek$
- d. knoll &Ruska

192. The region of leaf influenced by microorganism is known as

- a. Microsphere
- b. Phyllosphere
- c. Microplane
- d. Phylloplane

193. Viroids were discovered by

- a. Beijerinck
- b. Ivanowsky
- c. TO Diener
- d. Singer & Nicholson

194. Which of the following worked on breeding of drought resistant/tolerance crops

- a. RD Asana
- b. CM Donald
- c. VH Blackmann
- d. Paul Scholes

195. The main function of leghaemoglobin is

- a. Fe supply
- b. Oxygen supply
- c. water supply
- $d. \ all \ of \ these$

196. Brassino steroid is present in

- a. Mustard
- b. Cotton
- c. Sunflower
- d. Gourd

197. Apical dominance is the result of

- a. GA
- b. Ethylene
- c. Auxin

(Answer key at the bottom)

d. cytokinin

198. General starvation in plants is the deficiency of which element

- a. N
- b. P
- c. K
- $d.\ Mg$

199. Total amount of water content present in soil is called

- a. Holard
- b. Chresard
- c. Echard
- d. Water table

200. Which gas is considered as antagonist to ethylene action

- a. O₂
- $b.\ N_2$
- $c.\ \mathrm{CO_2}$
- $d. \ CH_4$

Q.no	Ans	Q.no	Ans	Q.no.	Ans	Q.no	Ans	Q.no	Ans
1	А	41	А	81	А	121	В	161	В
2	С	42	А	82	В	122	В	162	В
3	D	43	D	83	В	123	С	163	В
4	В	44	В	84	В	124	А	164	D
5	D	45	D	85	С	125	С	165	С
6	С	46	А	86	В	126	В	166	А
7	А	47	С	87	В	127	С	167	В
8	А	48	С	88	С	128	В	168	А
9	В	49	В	89	С	129	А	169	С
10	D	50	В	90	В	130	D	170	D
11	В	51	D	91	С	131	С	171	В
12	А	52	C	92	В	132	В	172	В
13	С	53	А	93	D	133	А	173	А
14	D	54	D	94	А	134	А	174	D
15	D	55	В	95	В	135	В	175	В
16	D	56	D	96	В	136	С	176	D
17	С	57	C	97	D	137	D	177	А
18	D	58	А	98	D	138	В	178	А
19	А	59	С	99	D	139	А	179	В
20	С	60	А	100	С	140	С	180	В
21	А	61	C	101	С	141	С	181	А
22	В	62	В	102	А	142	А	182	А
23	А	63	С	103	А	143	В	183	А

24	С	64	В	104	А	144	А	184	D
25	А	65	D	105	В	145	С	185	С
26	D	66	В	106	С	146	А	186	D
27	С	67	А	107	А	147	D	187	А
28	В	68	А	108	D	148	С	188	D
29	В	69	В	109	D	149	С	189	А
30	С	70	D	110	В	150	D	190	D
31	D	71	А	111	D	151	В	191	D
32	D	72	А	112	В	152	С	192	В
33	D	73	В	113	С	153	В	193	С
34	А	74	В	114	В	154	В	194	А
35	D	75	D	115	С	155	С	195	В
36	D	76	В	116	С	156	А	196	А
37	В	77	А	117	В	157	D	197	С
38	В	78	С	118	С	158	D	198	А
39	D	79	В	119	В	159	D	199	А
40	с	80	В	120	С	160	А	200	С

(Answer key at the bottom)