(BOTANY)

SECTION - A

- **101.** Taxonomic aid monograph is
 - (1) Taxonomic aid with preserved dead plant specimen
 - (2) Contain pair of contrasting statements
 - (3) Carry detail of single taxon
 - (4) Live plant specimen are kept for study
- **102.** The number of species that are known and described ranges between
 - (1) 1.7-1.8 million (2) 1 million
 - (3) 50 million
- (4) 2 million
- 103. Mark the correctly matched-
 - (1) Family of cat Felidae
 - (2) Botanical Garden-Dead plant specimen
 - (3) Herbarium
- Storage of live plant
 - specimen
- (4) Museum
- Live animal specimen
- **104.** Mark the **correctly** matched
 - (1) Dog Canis
 - (2) Leopard Felis
 - (3) Potato Fabaceae
 - (4) Wheat Dicotyledonae
- **105.** Correct biological name of House fly is:
 - (1) Musca indica
- (2) Musca Domestica
- (3) Musca domestica (4) Apis Domestica
- **106.** Each statement in taxonomic key is known as
 - (1) Couplet
- (2) Lead
- (3) Manual
- (4) Flora
- **107.** National Botanical Research Institute is located at
 - (1) Lucknow
- (2) Delhi
- (3) Kanpur
- (4) Howrah
- **108.** From the following example which of the following use for *ex-situ* conservation?
 - (1) Botanical garden (2) Museum
 - (3) Flora
- (4) Monograph
- 109. Term Mangifera and Anacardiaceae is respectively:
 - (1) Order and Genus
 - (2) Division and family
 - (3) Genus and family
 - (4) Division and sub family
- 110. Which of the following taxonomic category to which Datura belong
 - (1) Mangifera
- (2) Mammalia
- (3) Diptera
- (4) Solanaceae

111. How many of the following taxa represents hierarchy above family?

> Canidae, Polymoniales, Hominidae, Diptera, Poales, Anacardiaceae

- (1) Two
- (2) Three
- (3) Four
- (4) Five
- 112. Study the three statements (A-C) given below and select the correct option
 - (A) Key is taxonomic aid for identification of plants and animals specimens
 - (B) Herbarium has dried. pressed and preserved plant specimens
 - (C) The concept of biological species was given by Linnaeus
 - (1) (A) and (B)
- (2) (A) and (C)
- (3) (B) and (C)
- (4) Only (B)
- 113. Which of the following is **not** a defining property of living organisms?
 - (1) Cellular organisation of the body
 - (2) Consciousness
 - (3) Growth by accumulation of material on the surface
 - (4) Metabolism
- 114. Assertion (A): Reproduction is not defining feature of all life forms

Reason (R): Many living organisms like mules, workers bees, infertile human couple do not reproduce.

- (1) Both Assertion & Reason are true and the reason is the correct explanation of the assertion.
- (2) Both Assertion & Reason are true but the reason is not the correct explanation of the assertion.
- (3) Assertion is true statement but Reason is false.
- (4) Both Assertion and Reason are false statements
- 115. Select the **incorrect** match w.r.t. taxonomical aids?
 - (1) Flora → Actual account of habitat and distribution of plants of a given area
 - (2) Manual → Contains information on any one taxon
 - (3) Herbarium → Serve as quick referral system
 - (4) Museums → Contains insects in insect box
- **116.** What is the prime source of taxonomic studies?
 - (1) Collection of actual specimens of organisms
 - (2) Identification of actual specimen of organisms
 - (3) Both (1) and (2)
 - (4) None of the above

117.	Systematics involve. (1) Phylogenetic relationship (2) Identification	126.	Common character from <i>Felis</i> to animalia Increasing Decreasing Increasing and decreasing both
	(3) Classification(4) All of these		(4) All of these
118.	Mark the incorrectly matched? (1) Ernst Mayer – Darwin of 20th century (2) Carolus Linnaeus – Binomial Nomenclature (3) Royal Botanical Garden – England (4) Binomial nomenclature – Greek	127.	ICBN is for (1) Rule for binomial nomenclature of plants (2) Rule for binomial nomenclature of animals (3) Rule for binomial nomenclature of bacteria (4) Rule for binomial nomenclature of virus
119.	In which of the following taxonomic aid insects are preserved in insect box after collecting, killing, pinning?	128.	Indian Botanical Garden is located in (1) Delhi (2) Chennai (3) Howrah (4) Lucknow
120.	 (1) Zoological Park (2) Museum (3) Herbarium (4) Both (1) and (2) Mark the correct from the following 	129.	Which is not true for <i>Triticum?</i> (1) Class is angiospermae (2) Kingdom is plantae (3) Poales is order
120.	 Growth in living organism is from inside Plants grow but only up to a certain age 		(4) Poaceae is family
	(3) Only living organisms show growth(4) All of the above	130.	Families are characterized on which of the following features of plant species? (1) External morphology
121.	Growth and reproduction are mutually exclusive events in which of the following (1) Plants only (2) Animals only		(2) Anatomy of parts(3) Vegetative and reproductive feature(4) Seasonal similarities and variations
	(2) Himman omy(3) Higher animals and plants(4) Lower organisms	131.	In taxonomic hierarchy of mango, which of the following group of taxa will have more number of similarities than the other ones? (1) Appearding and (2) Sapindales
122.	Which of the following taxonomical aids serve as quick referral system in taxonomical studies?		(1) Anacardiaceae(2) Sapindales(3) Mangifera(4) Dicotyledonae
	 Taxonomic key Zoological Park Botanical gardens Herbarium 	132.	Choose the incorrect match: (1) Convolvulaceae – Group of related genera (2) Insecta – Category includes related orders (3) Primata – Assemblage of order
123.	Solanaceae andhave common order polymoniales.	122	(4) Sapindales – Assemblage of families
	(1) Poaceae (2) Anacardiaceae (3) Convolvulaceae (4) Fabaceae	133.	The fundamental taxonomic category or basic unit of classification is (1) Genus (2) Species (3) Sub-species (4) Variety
124.	Which of the following group taxon have minimum similarity? (1) Housefly and dog (2) Cat and lion (3) Human and tiger (4) Monkey and gorilla	134.	Assertion (A): Both the words in a biological name, when handwritten, are separately underlined, or printed in italics Reason (R): To indicate their Latin origin (1) Both Assertion & Reason are true and the reason is the correct explanation of the
125.	Mark the incorrect one (1) Petunia – Monocotyledonae (2) Triticum – Poales (3) Datura – Polymoniales (4) Solanum-Solanaceae		 assertion. (2) Both Assertion & Reason are true but the reason is not the correct explanation of the assertion. (3) Assertion is true statement but Reason is false. (4) Both Assertion and Reason are false statements

- **135.** Which of the following is against the rules of binomial nomenclature?
 - (1) Scientific name are in Latin and should be italics
 - (2) The second word denoting the genus starts with a small letter
 - (3) Every species should have generic name and specific epithet
 - (4) Each organism is given only one name consisting of two parts

SECTION – B

- **136.** Which of the following is **incorrect** about zoological park?
 - (1) Wild animals are kept in protected environment
 - (2) Study of food habits and behaviour
 - (3) Condition not similar to natural habitat
 - (4) Ex situ conservation
- **137.** A student prepared a herbarium sheet then this does not provide the information of
 - (1) Species of specimen
 - (2) Genus of specimen
 - (3) Family of specimen
 - (4) Division of specimen
- **138.** State True **(T)** or False **(F)** for the following statements and select the **correct** option.
 - **P.** Property of tissue are present in the constituents cells
 - **Q.** Property of cellular organelles are not present in the molecular constituents of the organelle
 - **R.** Only eukaryotes can sense and respond to environmental cues

	P	Q	R
(1)	F	T	F
(2)	F	F	T
(3)	F	T	T
(4)	T	F	F

- **139.** A museum does not have
 - (1) Dry specimens of plants
 - (2) Skeleton of some larger animals
 - (3) Specimens of insects
 - (4) Photographs of both plants & animals
- **140.** Datura, Makoi and Mango belong to
 - (1) Same order
- (2) Same class
- (3) Same family
- (4) Same genus
- **141.** Identify the **correct** sequence of taxonomic Categories
 - (1) Genus species order family class
 - (2) Genus species family order class
 - (3) Species genus family order class
 - $(4) \quad Species-genus-order-family-class$

- **142.** Taxonomic category, which is the assemblage of families exhibiting a few similar character is
 - (1) Class
- (2) Division
- (3) Order
- (4) Sub class
- **143.** Which of the following option have **incorrectly** matched details?
 - (1) ICZN International Code of Zoological Nomenclature
 - (2) ICBN International Code for Botanical Nomenclature
 - (3) ICBN International Code for Biological Nomenclature
 - (4) Herbarium Repository of herbarium sheet
- **144.** Consider the following statements for taxonomic aid "key" and select the **correct** option
 - (A) Key based on similarities and dissimilarities
 - (B) Same key can be used for all taxonomic categories
 - (1) Only (A) correct
 - (2) Only (B) correct
 - (3) Both correct
 - (4) Both wrong
- **145.** Man (*Homo sapiens*) belong to family
 - (1) Hominidae
- (2) Primata
- (3) Mammalia
- (4) Chordata
- 146. Taxonomic studies are useful in -
 - (1) Agriculture and forestry
 - (2) Industry
 - (3) Knowing our bioresources
 - (4) All of the above
- **147.** Which of the following is the highest rank?
 - (1) Class
 - (2) Kingdom
 - (3) Family
 - (4) Sub species
- **148.** A specialized place has collections of living plants for reference is
 - (1) Herbarium
- (2) Museum
- (3) Flora
- (4) Botanical Garden
- 149. Name of author appear in biological name after-
 - (1) Genus
- (2) Specific epithet
- (3) Family
- (4) None of these
- 150. Tiger, dog and cat are placed in order of
 - (1) Insectivora
- (2) Carnivora
- (3) Primata
- (4) Diptera

(ZOOLOGY)

SECTION - A 158. The supportive skeletal structures in the human **151.** Compound epithelium is found in external ears and in the nose tip are examples of (1) Stomach (2) Intestine (2) areolar tissue (1) ligament (3) Fallopian tube (4) Pharynx (4) cartilage (3) bone **152.** Which of the following type of cell junction is not 159. Match the types of connective tissue given in found in animal tissues? column-I with their examples given column-II and (1) Adhering junction choose the correct option. (2) Tight junction Column-I (Types Columns II (3) Gap junction of connective) (Examples) (4) Plasmodesmata A. Loose connective T. Tendons and 153. Chondrocytes are found in ligaments tissue (1) Cartilage (2) Areolar Dense regular tissue Skin (3) Bone (4) Adipose C. Dense irregular III. Cartilage, **154.** Neuroglia are tissue bones, blood (1) Excitable cells of neural tissue. Specialized Fibroblasts, D. (2) Supporting and non-excitable cells of neural connective tissue macrophages tissue. and mast (3) Less than 1/3 the volume of neural tissue. cells (4) Protective and excitable cells of neural B \mathbf{C} D A tissue. (1) I IV II III (2) I IV Ш II 155. In all connective tissues, except which of the (3) IV II Ш Ι following, the cells secrete fibres of collagen or I Ш (4) IV П elastin protein? (1) Bone **160.** The fibres of which of the following muscles are (2) Cartilage (3) Areolar connective tissue fusiform and do not show striations (4) Fluid connective tissue (1) Skeletal muscles (2) Cardiac muscles **156.** Which of the following type of tissue is being (3) Both (1) and (2) described by the given statements? (4) Smooth muscles (i) They are named because of their special function of linking and supporting other 161. Which of the following gland releases both tissues/organs of the body. exocrine and endocrine secretions? (ii) They include cartilage, bone, adipose and (1) Pancreas blood. (2) Adrenal gland (iii) They provide strength, elasticity and (3) Pituitary gland flexibility to the tissue. (4) Thyroid gland (iv) They also secrete modified polysaccharides, which accumulate between cells and fibres and act as matrix. 162. Which of the following is involved in the production of new blood cells? (1) Epithelial tissue (2) Connective tissue (3) Muscle tissue (4) Neural tissue (1) Adipose cell (2) Bone marrow (3) Liver (4) Matrix 157. Which of the following statement is incorrect regarding cuboidal epithelium? 163. Non-ciliated simple columnar epithelium often (1) It is an epithelial tissue. contains_____, which increase the surface (2) It is composed of a single layer of cube-like area for secretion and absorption. (1) flagella (3) They are found in the walls of blood vessels

and air sacs of lungs.

functions of these tissue.

(4) Secretion and absorption are the main

(2) collagen fibres

(3) microvilli

(4) all of these

- **164.** What are the three basic components of connective tissues?
 - (1) Ground substance, cells and basement membrane
 - (2) Intercellular matrix, myofibrils and sarcolemma
 - (3) Cells, protein fibers and ground substance
 - (4) Collagen, elastin and reticular fibers
- **165.** Simple epithelium is
 - (1) One cell layer thick
 - (2) Two cell layers thick
 - (3) Two or three cell layers
 - (4) All are correct
- **166.** The secretions of endocrine glands are released directly
 - (1) Into the skin surface
 - (2) Into the blood stream
 - (3) Into a gland duct
 - (4) Into the cavity of stomach
- **167.** Mast cells are associated with
 - (1) exocrine glands
 - (2) endocrine glands
 - (3) areolar connective tissue
 - (4) neural tissue
- **168.** Muscle tissue cells are contractile, which means they
 - (1) are responsible for the production and secretion of enzymes.
 - (2) are specialized in contraction and relaxation.
 - (3) help in the movement of involuntary organs only.
 - (4) all of the above
- **169.** Which of the following statement(s) regarding cell junctions is/are correct?
 - (1) Tight junctions help to stop substances from leaking across a tissue.
 - (2) Adhering junctions perform cementing to keep neighbouring cells together.
 - (3) Gap junctions facilitate the cells to communicate with each other by connecting the cytoplasm of adjoining cells, for rapid transfer of ions, small molecules and sometimes big molecules.
 - (4) All of the above
- **170.** On the basis of structures and functions animal tissues are classified into
 - (1) 3 types
- (2) 2 types
- (3) 1 type
- (4) 4 types

- **171.** Find the incorrectly matched pair.
 - (1) Unicellular glandular cells Goblet cell
 - (2) Saliva Exocrine secretion
 - (3) Fusiform fibres Smooth muscle
 - (4) Cartilage Areolar tissue
- **172.** The major functions of loose connective tissue include
 - (1) occupying spaces between organs and supporting epithelia.
 - (2) supporting and surrounding blood vessels and nerves
 - (3) cushioning organs, storing lipids and facilitating diffusion.
 - (4) All of the above
- **173.** A group of similar cells along with intercellular substance perform a specific function known
 - (1) Tissue
 - (2) Organ
 - (3) Organ System
 - (4) Both 2 & 3
- **174.** Cells of squamous epithelium are
 - (1) Columnar
 - (2) Tall with elongated nuclei
 - (3) Flat plate like
 - (4) Cube like
- **175.** Read the statements and choose the correct option.

Statement I: Mammary gland is a exocrine gland present in all vertebrates

Statement II: Salivary gland consisting of isolated glandular cells.

- (1) Both statements are correct.
- (2) Both statements are incorrect.
- (3) Only statement I is correct.
- (4) Only statement II is correct.
- **176. Assertion:** Fibres of connective tissue are secreted by Macrophages

Reason: Ligament Connect Biceps to humerus.

- Both assertion and reason are correct and reason is the correct explanation for assertion.
- (2) Both assertion and reason are correct but reason is not the correct explanation for assertion.
- (3) Both assertion and reason are incorrect.
- (4) Only assertion is correct and reason is incorrect.

177. Match the column I with column II and choose the correct option.

	Column I		Column II
Α.	Cartilage	I.	Osteocytes
В.	Bone	II.	WBCs
C.	Blood	III.	Areolar tissue
D.	Loose	IV.	Chondrocytes
	connective		
	tissue		

	A	В	\mathbf{C}	D
(1)	IV	III	I	II
(2)	II	IV	I	III
(3)	IV	I	II	III
(4)	IV	I	III	II

- **178.** Which of the following statements are incorrect.
 - I. Biceps is a skeletal muscle
 - II. Skeletal muscles fibres tapers at both ends
 - III. Cardiac muscles are branched
 - (1) I and II
- (2) II and III
- (3) III only
- (4) II only
- 179. Dense irregular connective tissue has
 - (1) Collagen fibres
 - (2) Fibroblasts
 - (3) Fat cells
 - (4) Both (1) and (2)
- **180.** Glandular epithelium is specialized ____
 - (1) Squamous epithelium
 - (2) Columnar epithelium
 - (3) Cuboidal epithelium
 - (4) Both (2) and (3)
- **181.** Tendons attaches____
 - (1) skeletal muscle to bones
 - (2) bone to bone
 - (3) muscle to muscle
 - (4) muscle to neural tissue
- **182.** Cuboidal epithelium with brush border of microvilli is found in
 - (1) Lining of intestine
 - (2) Ducts of salivary glands
 - (3) Proximal convoluted tubule of nephron
 - (4) Eustachian tube
- **183.** The wall of blood vessels possess ___ muscle fibres
 - (1) Smooth
 - (2) Skeletal
 - (3) Cardiac
 - (4) All of the above

184. Read the statements and choose the correct option.

Statement I : Cartilage is dense regular connective tissue.

Statement II : Neural tissue exerts least control over the body.

- (1) Both statements are correct.
- (2) Both statements are incorrect.
- (3) Only statement I is correct.
- (4) Only statement II is correct.
- **185.** Movement of ovum in Fallopian tube is due to
 - (1) Simple Squamous epithelium
 - (2) Brush bordered epithelium.
 - (3) Ciliated epithelium
 - (4) Compound epithelium

SECTION-B

186. Assertion: Areolar tissue serves as a support frame work for epithelium.

Reason: Areolar tissue contains fibroblasts and mast cells.

- (1) Both assertion and reason are correct and reason is the correct explanation for assertion
- (2) Both assertion and reason are correct but reason is not the correct explanation for assertion
- (3) Both assertion and reason are incorrect
- (4) Only assertion is correct and reason in incorrect
- **187.** Goblet cells of alimentary canal are a type of
 - (1) Sweat gland
 - (2) Multicellular gland
 - (3) Unicellular gland
 - (4) All of the above
- **188.** Air sacs of lungs and inner surface of bronchioles consists of ______ type of tissues respectively.
 - (1) Squamous and cuboidal epithelium
 - (2) Squamous and ciliated epithelium
 - (3) Cuboidal and ciliated epithelium
 - (4) Cuboidal and columnar epithelium
- **189.** Microvilli of epithelium cells
 - (1) Increase the surface area
 - (2) Protect the cells
 - (3) Engulf the foreign matter
 - (4) Give movement to cells
- **190.** Choose the correctly matched pair.
 - (1) Tendon Specialized connective tissue
 - (2) Adipose tissue Dense connective tissue
 - (3) Areolar tissue Loose connective tissue
 - (4) Cartilage Loose connective tissue

- **191.** The ciliated epithelial cells are required to move particles or mucus in a specific direction. In humans, these cells are mainly present in
 - (1) bronchioles and Fallopian tubes
 - (2) bile duct and bronchioles
 - (3) Fallopian tubes and pancreatic duct
 - (4) Eustachian tube and salivary duct.
- **192.** Smooth muscles are
 - (1) involuntary, fusiform, non-striated
 - (2) voluntary, multinucleate, cylindrical
 - (3) involuntary, cylindrical, striated
 - (4) voluntary, spindle-shaped, uninucleate.
- **193.** Which one of the following categories does adipose tissue belong?
 - (1) Epithelial tissue
 - (2) Connective tissue
 - (3) Muscular tissue
 - (4) Neural tissue
- **194.** Which one of the following is not a connective tissue?
 - (1) Bone
 - (2) Cartilage
 - (3) Blood
 - (4) Muscles
- **195.** Which one of the following is correct pairing of a body part and the kind of muscle tissue that moves it?

I.	Biceps of upper		Smooth muscle		
	arm		fibres		
II.	Wall of intestine	-	Smooth muscle		
III.	Heart wall	-	Involuntary striated muscle		

- (1) I, II
- (2) II, III
- (3) I, III
- (4) I, II, III

- **196.** Four healthy people in their twenties got involved in injuries resulting in damage and death of few cells of the following. Which of the cells are least likely to be replaced by new cells?
 - (1) Liver cells
 - (2) Neurons
 - (3) Malpighian layer of the skin
 - (4) Osteocytes
- **197.** Read the following statements.
 - (i) It is a contractile tissue present only in the heart.
 - (ii) Cell junctions fuse the plasma membranes of these cells and make them stick together.
 - (iii) Communication juntions at some fusion points allow the cells to contract as a unit, i.e., when one cell receives a signal to contract, its neighbours are also stimulated to contract.

Which of the following type of tissue is being described by the above statements?

- (1) Skeletal muscle
- (2) Cardiac muscle
- (3) Smooth muscle
- (4) All of the above
- **198.** Cardiac muscle tissue ____
 - (1) Contractile tissue
 - (2) Present only in the heart
 - (3) Communication junction present
 - (4) All of the above
- **199.** ___ are present in spaces called lacunae
 - (1) Chondrocytes
 - (2) Osteocytes
 - (3) Blood cells
 - (4) Both 1 & 2
- **200.** Columnar epithelium is found in
 - (1) Walls of blood vessels.
 - (2) lining of intestine.
 - (3) Fallopian tubes.
 - (4) Ducts of glands.

(BOTANY)

101. (3)

Monographs contain information of any one taxon

CLASS 11 NCERT PG NO. 14

102. (1)

The number of species that are known and described range between 1.7-1.8 million.

CLASS 11 NCERT PG NO. 6

103. (1)

*Family of cat – Felidae

*Botanical Garden-These specialised gardens have collections of living plants for reference

*Herbarium – Storage of dead plant specimen

*Museum - Museums have collections of preserved plant and animal specimens for study and reference

CLASS 11 NCERT PG NO. 12,13

104. (1)

*Dog - Canis

*Genus -Felis -cat

*Potato - Solanaceae

*Wheat - Monocotyledonae

CLASS 11 NCERT PG NO. 9, 11

105. (3)

Correct biological name of House fly is *Musca domestica*

CLASS 11 NCERT PG NO. 11

106. (2)

*Each statement in Taxonomic key is known as Lead

*Couplet-Statement occur in pair CLASS 11 NCERT PG NO. 13

107. (1)

National Botanical Research Institute, Lucknow (India).

CLASS 11 NCERT PG NO. 12

108. (1)

Ex-situ conservation of plants -Botanical Garden CLASS 11 NCERT PG NO. 12

109. (3)

Mangifera-Genus and Anacardiaceae- Family CLASS 11 NCERT PG NO. 11

110. (4)

Datura are placed in the family Solanaceae CLASS 11 NCERT PG NO. 9

111. (2)

*Polymoniales, Diptera, Poales are order *Canidae, Hominidae, Anacardiaceae are family CLASS 11 NCERT PG NO. 11

112. (1)

The concept of biological species was given by Ernst Mayr.

CLASS 11 NCERT PG NO. 2

113. (3)

*Non-living objects also grow if we take increase in body mass as a criterion for growth. Mountains, boulders and sand mounds do grow. *However, this kind of growth exhibited by non-living objects is by accumulation of material on the surface. In living organisms, growth is from

*Growth, therefore, cannot be taken as a defining property of living organisms

CLASS 11 NCERT PG NO. 4

114. (1)

Both Assertion & Reason are true and the reason is the correct explanation of the assertion CLASS 11 NCERT PG NO. 4

115. (2)

Manual are useful in providing information for identification of names of species found in an area

CLASS 11 NCERT PG NO. 14

116. (1)

The collection of actual specimens of plant and animal species is essential and is the prime source of taxonomic studies

CLASS 11 NCERT PG NO. 11

117. (4)

The scope of systematics was later enlarged to include identification, nomenclature and classification. Systematics takes into account evolutionary relationships between organisms.

CLASS 11 NCERT PG NO. 8

118. (4)

Biological names are generally in Latin and written in italics.

They are Latinised or derived from Latin irrespective of their origin

CLASS 11 NCERT PG NO. 7

119. (2)

Museum -Insects are preserved in insect box after collecting, killing, pinning.

CLASS 11 NCERT PG NO. 12

120. (1)

*In animals growth is seen only up to a certain age.

*In plants, the growth by cell division occur continuously throughout their life span.

CLASS 11 NCERT PG NO. 4

121. (3)

Growth and reproduction are mutually exclusive events in higher plants and animals.

CLASS 11 NCERT PG NO. 4

122. (4)

Herbarium serve as quick referral system in taxonomical studies.

CLASS 11 NCERT PG NO. 12

123. (3)

Solanaceae and Convolvulaceae have common order polymoniales

CLASS 11 NCERT PG NO. 10

124. (1)

Housefly belong to phylum arthropoda and dog belong to Chordata phylum.

CLASS 11 NCERT PG NO. 11

125. (1)

*Petunia- Dicotyledonae

* Petunia-belongs to Solanaceae family

CLASS 11 NCERT PG NO. 9

126. (2)

As we go higher from species to kingdom, the number of common characteristics goes on decreasing.

CLASS 11 NCERT PG NO. 11

127. (1)

*ICBN is for rule for binomial nomenclature of plants.

*ICBN-International Code for Botanical Nomenclature

CLASS 11 NCERT PG NO. 12

128. (3)

Indian Botanical Garden is located in Howrah.

CLASS 11 NCERT PG NO. 12

129. (1)

Whe	Triticum	Triticum	Poaceae	Poales	Monocoty	Angios-
	aestivum				-ledonae	permae

CLASS 11 NCERT PG NO. 11

130. (3)

Families are characterised on the basis of both vegetative and reproductive features of plant species.

CLASS 11 NCERT PG NO. 10

131. (3)

*Lower taxa, more are the characteristics that the members within the taxon share

*Dicotyledonae - Class

*Sapindales - Order

*Anacardiaceae - Family

*Mangifera -Genus

CLASS 11 NCERT PG NO. 11

132. (3)

 $Primata-Assemblage\ of\ families$

CLASS 11 NCERT PG NO. 9

133. (2)

The fundamental taxonomic category or basic unit of classification is species.

CLASS 11 NCERT PG NO. 9

134. (1)

Both Assertion & Reason are true and the reason is the correct explanation of the assertion

CLASS 11 NCERT PG NO. 7

135. (2)

The first word denoting the genus starts with a capital letter while the specific epithet starts with a small letter.

CLASS 11 NCERT PG NO. 7

136. (3)

All animals in a zoo are provided the condition similar to natural habitat.

CLASS 11 NCERT PG NO. 12

137. (4)

The herbarium sheets also carry a label providing information about date and place of collection, English, local and botanical names, family, collector's name.

CLASS 11 NCERT PG NO. 12

138. (1)

*Property of tissue are not present in the constituents cells but arise due to the interaction of constituent cells.

*All living organism can sense and respond to environmental cues.

CLASS 11 NCERT PG NO. 5

139. (4)

Plant and animal specimens may also be preserved as dry specimens. Insects are preserved in insect boxes after collecting, killing and pinning. Larger animals like birds and mammals are usually stuffed and preserved. Museums often have collections of skeletons of animals too.

CLASS 11 NCERT PG NO. 12

140. (2)

Datura, Makoi and Mango belong to same class dicotyledonae

CLASS 11 NCERT PG NO. 9,11

141. (3)

Species – genus – family – order – class.

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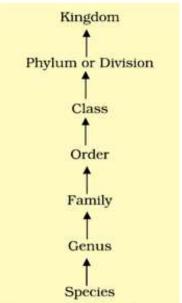


Figure 1.1 Taxonomic categories showing hierarchical arrangement in ascending order.

142. (3)

Taxonimic category, which is the assemblage of families exhibiting a few similar character is order

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143. (3)

ICBN – International Code for Botanical Nomenclature

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144. (1)

Separate taxonomic key can be used for all taxonomic categories

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145. (1)

Human belong to family Hominidae

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146. (4)

Taxonomic studies are useful in agriculture and forestry, industry and knowing our bioresources and their diversity.

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147. (2)

Kingdom is the highest rank.

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148. (4)

Botanical garden is a place where living plants specimen is present.

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149. (2)

Name of author appear in biological name after specific epithet.

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150. (2)

Tiger, dog and cat are placed in order of carnivora.

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(ZOOLOGY)

151. (4)

NCERT class 11th chapter 7 (Pg. 102)

Compound epithelium covers the dry surface of the skin, the moist surface of buccal cavity, pharynx, inner lining of ducts of salivary glands and pancreatic ducts.

152. (4)

NCERT class 11th chapter 7 (Pg. 102)

Tight junction, gap junction, and adhering junction are found in animal tissue. Plasmodesmata is found in plants.

153. (1)

NCERT class 11th chapter 7 (Pg. 103)

The chondrocytes are found in cartilage.

154. (2)

NCERT class 11th chapter 7 (Pg. 105)

Neurons forms the structural and functional unit of nervous tissue. They are excitable cells. While the neuroglial cells constitute the rest of the neural system that protect and support neurons and are non-excitable.

155. (4)

NCERT class 11th chapter 7 (Pg. 103)

In all connective tissue except blood (a fluid connective tissue), the cells secrete fibres of structural proteins called collagen or elastin.

156. (2)

NCERT class 11th chapter 7 (Pg. 101, 102)

Connective tissue is a group of tissues in the body that maintains the form of the body and its organs and provides cohesion and internal support. The connective tissues include several types of fibrous tissue that vary only in their density and cellularity, as well as the more specialized and recognizable variants-bone, ligaments, tendons, cartilage, and adipose (fat) tissue.

157. (3)

NCERT class 11th chapter 7 (Pg. 101)

Cuboidal epithelium are commonly found in ducts of glands and tubular parts of nephrons in kidneys.

158. (4)

NCERT class 11th chapter 7 (Pg. 103)

Cartilage is a type of connective tissue which is present in human external cars, the nose tip, ribcage joints, etc.

159. (3)

NCERT class 11th chapter 7 (Pg. 103)

Conceptual question

160. (4)

NCERT class 11th chapter 7 (Pg. 104)

Cells of smooth muscle tissue arc spindle shaped and pointed at their ends. Striations are absent due to different arrangement of actin and myosin filaments.

161. (1)

NCERT class 11th chapter 7 (Pg. 102)

Pancreas releases both exocrine and endocrine secretions.

162. (2)

NCERT class 11th chapter 7 (Pg. 104)

Bone marrow is the flexible tissue in the interior of bones. In humans, red blood cells arc produced by cores of bone marrow in the heads of long bones in a process known as haematopoiesis. Bone marrow is also a key component of the lymphatic system, producing the lymphocytes that support the body's immune system.

163. (3)

NCERT class 11th chapter 7 (Pg. 101)

The columnar epithelium is composed of a single layer of tall and slender cells. Their free surface have microvilli found in the lining of stomach and intestine and help in secretion and absorption

164. (3)

NCERT class 11th chapter 7 (Pg. 102)

Connective tissue fills the spaces between organs and tissues, and provides structural and metabolic support for other tissues and organs. The three basic components of connective tissue are cells protein fibres and ground matrix.

165. (1)

NCERT class 11th chapter 7 (Pg. 101)

Simple epithelium is composed of a single layer of cells.

166. (2)

NCERT class 11th chapter 7 (Pg. 102)

Endocrine glands do not have ducts, their secretions called hormones are secreted directly into the blood.

167. (3)

NCERT class 11th chapter 7 (Pg. 103, Fig. 7.4)

Areolar connective tissue serves as a support framework for epithelium, it consists fibroblasts, macrophages and mast cells.

168. (2)

NCERT class 11th chapter 7 (Pg. 104)

Muscle tissue cells are contractile, it means muscle fibres contracts in response to stimulation, then relax to their uncontracted state.

169. (4)

NCERT class 11th chapter 7 (Pg. 102)

- (1) Tight junctions help to stop substances from leaking across a tissue.
- (2) Adhering junctions perform cementing to keep neighbouring cells together.
- (3) Gap junctions facilitate the cells to communicate with each other by connecting the cytoplasm of adjoining cells, for rapid transfer of ions, small molecules and sometimes big molecules.

170. (4)

NCERT class 11th chapter 7 (Pg. 100)

On the basis of structures and functions animal tissues are classified into 4 types: Epithelial tissue, Connective tissue, Muscular tissue and neural tissue.

171. (4)

NCERT class 11th chapter 7 (Pg. 102, 103, 105)

Cartilage, bones and blood are various types of specialised connective tissue.

172. (4)

NCERT class 11th chapter 7 (Pg. 103)

The major functions of loose connective tissue include

- (1) occupying spaces between organs and supporting epithelia.
- (2) supporting and surrounding blood vessels and nerves
- (3) cushioning organs, storing lipids and facilitating diffusion.

173. (1)

NCERT class 11th chapter 7 (Pg. 100)

A group of similar cells along with inter cellular substance perform a specific function known as tissue.

174. (3)

NCERT class 11th chapter 7 (Pg. 101)

Squamous epithelium is made of a single thin layer of flattened cells with irregular boundaries.

175. (3)

NCERT class 11th chapter 7 (Pg. 102)

Salivary gland consisting of cluster of cells.

176. (3)

NCERT class 11th chapter 7 (Pg. 103)

In connective tissue except blood all the cells secrete fibres of structural protein called collagen or elastin.

Ligament connects one bone to another bone.

177. (3)

NCERT class 11th chapter 7 (Pg. 104)

Conceptual question

178. (4)

NCERT class 11th chapter 7 (Pg. 105)

Smooth muscle fibres tapers at both the ends.

179. (4)

NCERT class 11th chapter 7 (Pg. 103)

Dense irregular, connective tissue has collagen fibres and fibroblasts.

180. (4)

NCERT class 11th chapter 7 (Pg. 102)

Glandular epithelium is specialised columnar and cuboidal epithelium.

181. (1)

NCERT class 11th chapter 7 (Pg. 103)

Tendons attaches skeletal muscle to bones.

182. (3)

NCERT class 11th chapter 7 (Pg. 101)

The cuboidal epithelium is composed of a single layer of cube-like cells which is commonly found in ducts of glands and tubular parts of nephrons in kidneys and its main functions are secretion and absorption. The epithelium of proximal convoluted tubule (PCT) of nephron in the kidney has microvilli.

183. (1)

NCERT class 11th chapter 7 (Pg. 105)

The wall of blood vessels possess smooth muscle fibres

184. (2)

NCERT class 11th chapter 7 (Pg. 103, 105)

Cartilage is specialised connective tissue.

Neural tissue exerts the greatest control over the body's responsiveness.

185. (3)

NCERT class 11th chapter 7 (Pg. 101)

Movement of ovum in fallopian tube is due to ciliated epithelium.

186. (2)

NCERT class 11th chapter 7 (Pg. 103)

Areolar tissue serves as a support frame work for epithelium.

Areolar tissue contains fibroblasts and mast cells

187. (3)

NCERT class 11th chapter 7 (Pg. 102)

Goblet cells of alimentary canal are a type of unicellular gland.

188. (2)

NCERT class 11th chapter 7 (Pg. 101)

Air sacs of lungs and inner surface of bronchioles consists of squamous and ciliated epithelium type of tissue respectively.

189. (1)

NCERT class 11th chapter 7 (Pg. 101)

Microvilli of epithelium cells increase the surface area.

190. (3)

NCERT class 11th chapter 7 (Pg. 103)

Areolar tissue is the most widely distributed loose connective tissue in the body. Tendon is a type of dense connective tissue, adipose tissue is a fatstoring loose connective tissue and cartilage is a specialised connective tissue.

191. (1)

NCERT class 11th chapter 7 (Pg. 101)

The ciliated epithelial cells are present in bronchioles and fallopian tube.

192. (1)

NCERT class 11th chapter 7 (Pg. 105)

Smooth muscle fibres are elongated and spindle shaped (fusiform), involuntary and non-striated.

193. (2)

NCERT class 11th chapter 7 (Pg. 103)

Adipose tissue is a connective tissue, located mainly beneath the skin. The cells of adipose tissue are specialised in storing fats in the form of fat globules

194. (4)

NCERT class 11th chapter 7 (Pg. 104)

Muscle is not a connective tissue It is composed of long, cylindrical, numerous fine fibrils called myofibrils.

Bone is a solid, rigid, connective tissue.

Blood is a fluid connective tissue

Cartilage is a solid but semi-rigid and flexible connective, tissue.

195. (2)

NCERT class 11th chapter 7 (Pg. 105)

Conceptual question

196. (2)

NCERT class 11th chapter 7 (Pg. 105)

Neurons are least likely to be replaced by new cells as they have least regeneration power.

197. (2)

NCERT class 11th chapter 7 (Pg. 102)

Conceptual question

198. (4)

NCERT class 11th chapter 7 (Pg. 105)

Cardiac muscle is a contractile tissue, present only in heart, communication junctions is present.

199. (4)

NCERT class 11th chapter 7 (Pg. 104)

Osteocytes and chondrocytes are present in spaces called lacunae.

200. (2)

NCERT class 11th chapter 7 (Pg. 101)

Columnar epithelium is found in the lining of stomach and intestine.