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ICHALKARANJI**

DEPARTMENT OF BOTANY

B.Sc. Part - II

QUESTION BANK

(MCQ)

2015-16

- 1) True nucleus is absent in -----
 a) bryophytes b) Pteridophytes c) gymnosperms d) Bacteria
- 2) Nuclear membrane is present in nucleus of -----
 a) *eukaryotic organisms* b) bacteria c) fungi d) viruses
- 3) Nucleoplasm carries out the synthesis of -----
 a) m-RNA b) t-RNA c) proteins d) lipids
- 4) Histones are rich in -----
 a) glutamine b) valine
 c) Arginine and lysine d) Asparagine
- 5) Ribosomes observed in clusters and held together by m-RNA strand, are called -----
 a) polyribosomes b) polysomes c) oxysome d) peroxisomes
- 6) Ribosome particles are measured by -----
 a) *Sedimentation coefficient* b) linear coefficient
 c) upward coefficient d) downward coefficient
- 7) ----- ions are responsible for dissociation of Ribosomes.
 a) Mg^{++} b) Fe^{++} c) Na^{++} d) Ca^{++}
- 8) Eukaryotic ribosome is made up of sedimentation coefficient -----
 a) 60s b) 80s c) 40s d) 50s
- 9) 70s of Prokaryotic ribosome is composed of -----
 a) 50s & 30s b) 40s & 30s c) 50s & 20s d) 35s & 35s
- 10) Larger subunit of eukaryotic ribosome consists of ----- proteins
 a) 40 b) 30 c) 50 d) 34
- 11) ----- (1956) used the term Ribosomes
 a) Robertson b) Morgan c) De robertis d) S Hall & Zubay
- 12) Eukaryotic ribosomes show ----- RNA.
 a) 2 b) 3 c) 4 d) 6

- 13) Prokaryotic ribosomes consists ----- RNA.
 a) fat b) carbohydrate c) Protein d) lipid
- 14) Yeast ribosomes contain ----- RNA
 a) 10% b) 20% c) 30% d) 30-44%
- 15) Ribosomes carry out ----- synthesis
 a) Fat b) Carbohydrate c) Protein d) lipid
- 16) The unit membrane of nuclear envelope is about ----- thick.
 a) 75- 90°A b) 20-30°A c) 40 - 70°A d) 30-40°A
- 17) The nuclear envelope is interrupted by -----
 a) b) nuclear pores c) larvina d) peripheral space
- 18) Nuclear pore is enclosed by a circular structure called -----
 a) lumen b) lamina c) lumen d) annulus
- 19) ----- are the uncondensed chromatin material present in nucleoplasm
 a)
- 20) Eukaryotic cells are -----
 a) dikaryotic b) monokaryotic c) Polykargotic d) akaryotic
- 21) DNA and Histores are always present in fixed ratio of -----
 a) 2 : 1 b) 2 : 2 c) 1 : 2 d) 1 : 1
- 22) Eukaryotic chromosome usually show -----
 a) three b) four c) five d) six
- 23) H1 histone is rich in -----
 a) Vanine b) aryonine c) lysine d) Nanine
- 24) Histones are -----
 a) lipids b) proteins c) syars d) lignin
- 25) Golgi complex was first discovered by -----
 a) Weismass b) Camillic Golgi c) Fontana d) Krebs
- 26) ----- is responsible for cell plate formation.
 a) Golgi complex b) mitochondria c) mososome d) giboromes
- 27) ----- are absent in blue greealgu and bacteria.
 a) ER b) mitochondria c) mesosome d) gibosome

- 28) ----- are called suicide bags
 a) Lysosomes b) mesosomes c) ribosomes d) ribosomes
- 29) Autolysis is found in -----
 a) me b) dictyosomes c) Lysosomes d) ribosomes
- 30) ----- in golgi complex help in transport of proteins and lipids.
 a) cytoplasm b) vesicles c) ectoplasm d) lysatubules
- 31) The -face of cisterna consists ----- enzyme.
 a) acid phosphatase b) alkaline - phosphatase
 c) ATP d) catalase
- 32) Golgi complex are located near -----
 a) nucleus b) mitochondria c) chloroplast d) peroxisomes
- 33) Golgi complex are responsible for ----- during cell division.
 a) cell wall formation b) cell plate formation
 c) nuclear membrane formation d) cytoplasm formation
- 34) In golgi complex, ----- store proteins & lipids
 a) vesicles b) tubules c) cisternne d) ER
- 35) ----- are found attached to nucleus
 a) chloroplast b) ER c) mitochondria d) ribosomes
- 36) ER constitute cisternae, vesicles and -----
 a) cytoskeleton b) tubules c) thylakoids d) fibrils
- 37) ----- are found attached to ER
 a) Lysosomes b) Peroxisomes c) Ribosomes d) Glyoxysomes
- 38) Vesicles in ER, synthesize -----
 a) proteins b) lipids c) carbohydrates d) pectin
- 39) The outer bilayer of ER is made up of -----
 a) carbohydrates b) lipids c) amino acids d) suberin
- 40) Golgi bodies are absent in -----
 a) plants b) animals c) insects d) bacteria
- 41) Catalase enzyme is found in -----
 a) peroxisomes b) glyoxysomes c) ribosomes d) oxysomes

- 42) ----- iarry photorespiration in C3 plants.
 a) ribosomes b) Glyoxysomes c) peroxisomes d) dictyo
- 43) Lysosomes are absent in -----
 a) bacteria b) plant cells c) animal cells d) viruses
- 44) Agranular ER synthesizes -----, stored in ER
 a) glycogen b) pectin c) sugars d) phospholipids
- 45) ER membrane consists ----- enzyme
 a) ATP-ase b) Xylase c) pectinase d) nitrogenose
- 46) ER activities ----- synthesis
 a) protein b) ATP c) lipid d) carbohydrates
- 47) ----- organecl consisting enzymes H₂O₂ metabolism
 a) lysosomes b) peroxisomes c) ribosomes d) dictyosomes
- 48) H₂O₂ is broken down by ----- in useful products.
 a) dictyosomes b) glyoxysomes c) peroxisomes d) ribosomes
- 49) Peroxisomes contain ----- enzyme.
 a) peroxidase b) catalase c) ATP-ase d) ligase
- 50) Enzymes of glyoxylace cycle are present.
 a) peroxisomes b) dictyosomes c) glyoxisomes d) ribosomes
- 51) Singer - Nicholson's submit model of cell membrane is also known as -----
 a) fluid-mosaic nodel b) Robertson model
 c) Davson model d) Singars model
- 52) Lipid Bilayer model of cell membrane is also known as -----
 a) Singer Micholson's model b) Danielli Davson model
 b) Robertson's model d) Nicholson's Model
- 53) Integral membrane proteins are called -----
 a) actin b) tubulin c) mydin d) ion chamels
- 54) Smooth ER is mainly present in cells those carrying ----- metabolism
 a) lipid b) Nitrogen c) Carbohydrate d) fat

- 55) Linkage in *Orosophila* discovered by -----
 a) Morgan b) Muller c) Mendel d) Bateson
- 56) Phenomenon that works opposite linkage is -----
 a) Segregation b) Mutation c) assortment d) Crossing over
- 57) Complete linkage is found in -----
 a) mala *Drosophila* b) Birds
 c) Insects d) female *Drosophila*
- 58) Crossing over occurs at -----
 a) Pachytene b) dialinesis c) Zygotene d) leptotene
- 59) Crossing over results in -----
 a) mutation b) selection
 c) genetic recombination d) inversion
- 60) Crossing over occurs at ----- stage
 a) centromere b) chiasmata c) telomere d) deletion
- 61) Linkage groups are equal to ----- number of chromosomes
 a) haploid b) diploid c) triploid d) tetraploid
- 62) In ----- chiasmata are formed along the length of chromosomes in homologous pair
 a) double cross over b) triple crossing over
 c) single crossing over d) four stranded crossing over
- 63) ----- considered as cytological proof for crossing over
 a) chromosome variation b) gene mutation
 c) chiasma d) deletion
- 64) In human beings, ----- linkage groups occur
 a) 46 b) 23 c) 33 d) 13
- 65) Mendelian recombination are due to -----
 a) linkage b) mutation c) crossing over d) Independent assortment
- 66) In -----, the linked genes don't always stay together.
 a) complete linkage b) incomplete linkage
 c) mutation d) crossing over

- 67) Crossing over leads to new -----
 a) character combination b) deviation
 c) mutation d) segregation
- 68) The genes which are not assorted indepently are called -----
 a) barnase genes b) jumping genes
 c) lethal genes d) linked genes
- 69) The unit of crossing over is -----
 a) centimeter b) millimeter c) centimorgan d) milligram
- 70) The botanical name of rubber plant is -----
 a) *Hevea brasiliensis* b) *Hibiscus rosa Sinensis*
 c) *Lawsonia inermis* d) *Acadirachta indica*
- 71) *Hevea brasiliensis* belongs to -----
 a) India b) Indonesia c) Africa d) Brazil
- 72) The rubber obtained from *Hevea brasiliensis* is called -----
 a) ceara rubber b) para rubber
 c) Assam rubber d) Lagas silk rubber
- 73) The collection of latex from rubber is called
 a) pressing b) evaporation c) tapping d) crushing
- 74) ----- is an important chemical constituent of Neem
 a) borneol b) curcumin c) Nimbidine d) Azadirachtine
- 75) Red Indians used, ----- for colouring bodies
 a) annatto b) c) d)
- 76) ----- is obtained from Azadirachta
 a) Azadirachtine b) curcumin c) indicant
- 77) *Curcuma longa* is also called -----
 a) Henna b) turmeric c) saffron d) Annatto
- 78) 'Aunalto' is obtained from -----
 a) *Bixa orellatna* b) *Lawsonia inermis*
 c) *Carthamous tinctorius* d) *Rubia tentorium*
- 79) Orange-red dye is obtained from rhizomes of -----
 a) turmeric b) annattic c) henna d) saffron

- 80) ----- insecticide is obtained from *Nicotiana tabacum*
 a) nicotine b) Azadirachtine c) nimbin d) Nimbidine
- 81) Flower of *Butea* yields ----- eye
 a) bright yellow b) blue c) orange d) purple
- 82) The botanical name of ginger is -----
 a) *Zingiber officinale* b) *Withania somnifera*
 c) *Emblica officinalis* d) *Tinospora cordifolia*
- 83) The botanical name of Ashwagandha is -----
 a) *Tinospora cordifolia* b) *Withania somnifera*
 c) *Emblica officinalis* d) *Adhatoda vasica*
- 84) The botanical name of Adulsa is -----
 a) *Justicia adhatoda* b) *Tinospora cordifolia*
 c) *Zingiber officinale* d) *Syzygium aromaticum*
- 85) The botanical name of Clove is -----
 a) *Syzygium rubicundum* b) *Syzygium aromaticum*
 c) *Syzygium jambolana* d) *Syzygium cumini*
- 86) An important chief constituent of *Zingiber officinale* is -----
 a) eugenol b) Zingiberine c) Codeine d) morphine
- 87) A chemical constituent somniferine is present in -----
 a) *Withania somnifera* b) *Zingiber officinale*
 c) *Curcuma longa* d) *Justicia adhatoda*
- 88) A bitter alkaloid of *Justicia adhatoda* is -----
 a) Vasicinine b) phyllembin c) Caryophyllene d) Zingiberine
- 89) *Justicia adhatoda* is commonly called -----
 a) clove b) vasoka c) Turmeric d) Aswagandha
- 90) ----- is used in ayurvedic medicine in case of *Zingiber officinale*
 a) rhizome b) fruits c) leaves d) flower buds.
- 91) The native place of clove referred to -----
 a) Moluccas island b) India c) West Indies d) Africa
- 92) ----- fruits are richest natural source of Vit-C.
 a) *Emblica* b) *Zingiber* c) *Withania* d) *Syzygium*

- 93) ----- is one of the important constituents of *Triphala churna* in ayurvedic preparations.
- a) Emblica fruits b) clove buds
c) Zingiber rihizome d) withania roots
- 94) Flowers buds of ----- are used in ayurvedic medicines.
- a) clove b) Amla c) Zinger d) Vasaka.
- 95) Chavanprash a ayurvedic tonic is made from -----
- a) *Emblica officinalis* b) *Tinospora cordifolia*
c) *Terminalia bellerica* d) *Terminalea chebula*
- 96) ----- is one of the chemical constituents present in *Syzygium aromaticum*
- a) Caryophyllene b) Zingiberine c) coderine d) Morphine
- 97) ----- oil is used in mouthwash preparations.
- a) Clove b) Zinger c) turmeric d) Amla
- 98) ----- is a ayurvedic preparation extracted from dry stem of *Tinospora*
- a) gulvel satva b) sunth c) Avalkathi d) Chavanprash
- 99) Chewing ----- prevents nausea and vomiting
- a) Amla fruits b) clove c) Vasaka leaves d) Zinger rhizome
- 100) Active constituent of ----- inhibits growth of *E. coli*.
- a) Tinospora b) clove c) Withania d) Vasaka
- 101) Zingiber originated in -----
- a) Africa b) Far east c) South-East Asia d) Moluccas
- 102) ----- is used in antiseptic ointments and lotions for skin.
- a) clove oil b) zinger oil c) Amla oil d) Root paste
- 103) ----- is a important constituent of *Emblica officinalis*
- a) phyllemblin b) Zingiberene c) engenol d) curcumene
- 104) ----- is commonly called Horse tail pteridophyte
- a) *Equisetum* b) *Ophioglossum* c) *Adiantum* d) *Psilotum*
- 105) ----- is the spore producing structure in *Psilotum*
- a) Sorus b) Strobilus c) Synangium d) Sporangium
- 106) *Pinus* belongs to class -----
- a) *psilopsida* b) *Bryopsida* c) *Anthocerotopsida* d) *Coniferopsida*

- 107) The ovules of *Pinus* are -----
- a) Campycotropus b) Orthotropus
c) Circinotropus d) Anatropous
- 108) *Ocimum* shows ----- type of inflorescence.
- a) Verticillaster b) Capitulum c) Cyathium d) Spadix
- 109) ----- is an essential whorl of a flower.
- a) Corolla b) Bracteole c) Gynoecium d) Calyx
- 110) Standard or vexillum is a part of ----- Corolla.
- a) Canpanulate b) Cruciform
c) Caryophyllaceous d) Papilionaceous
- 111) Bentham and Hooker published ----- for a system of classification of plants.
- a) Indian herbs b) *Genera plantarum*
c) *Materia medica* d) *Garcia d'orta*
- 112) The natural openings in the periderm region of stem are known as -----
- a) hydathodes b) Stomata
c) pneumatohodes d) lenticles
- 113) Bulliform cells are present in -----.
- a) Banyah leaf b) Sunflower leaf
c) Maize leaf d) Mangifera leaf
- 114) 70s of prokaryotic ribosome is composed of ----- subunits.
- a) 30s and 50s b) 60s and 40s
c) 60s and 20s d) 40s and 40s
- 115) DNA and histones are present usually in fixed ratio of -----.
- a) 1:2 b) 1:1 c) 1:3 d) 1:4
- 116) There are about fifty ----- enzymes present in the Lysosomes.
- a) nitrogenase b) hydrolases c) phosphatases d) catalases
- 117) The tendency of genes to remain together during the process of inheritance is called -----
- a) mutation b) deletion c) Linkage d) evolution
- 118) Leaves of *Nicotiana tabacum* Linn. contain pyridine alkaloid named -----

- a) bixin b) Phellandrene c) nimbin d) nicotine
- 119) The rhizome of turmeric contain colouring matter -----.
- a) curcumin b) Saponins c) glycoside d) flavonoids
- 120) *Butea monosperma* flowers yield -----.
- a) blue-green dye b) bright-yellow dye
c) orange-red dye d) Pink-red dye
- 121) The stem of *Tinospora cordifolia* consists medicinally important constituent ---.
- a) curcumin b) vasicinine c) glucoside-giolin d) gingerin
- 122) The leaves of *Justicia adhatoda* contain an important alkaloid called -----.
- a) columbin b) curcumin c) tinosporol d) vasicinine
- 123) ----- is one of the constituents of ayurvedic medicine 'Triphala churna'
- a) Turmeric rhizome b) Ginger rhizome
c) Stem of *Tinospora* d) *Emblica* fruit
- 124) A stele without a central pith is called a -----
- a) Dictyostele b) Protostele c) *Siphonostele* d) Solenostele
- 125) ----- and Archegonia are produced in the prothallus.
- a) *antheridia* b) *ascogonia* c) Oogonia d) Spermatangia
- 126) In Stele, a smooth core of xylem is surrounded by Phloem is called a -----
- a) *Haplostele* b) Plectostele c) *Siphonostele* d) actinostele
- 127) ----- is a leafless pteridophyte
- a) Selaginella b) *Psilotum* c) marsilea d) Equisetum
- 128) Pteridophytes belonging to equisetineae are called -----.
- a) *Horse tail pteridophytes* b) liverworts c) hornworts d) mosses
- 129) The xylem in *Equisetum* root is usually -----
- a) Diarch b) monarch c) tetrarch d) Polyarch
- 130) The tubers in *Equisetum* are -----
- a) one internode long b) neither nodes or internodes
c) two internode long d) several internode long
- 131) The root of *Equisetum* shows -----
- a) double layered pericycle b) cortical aerenchyma
c) double layered endodermis d) single layered endodermis

- 132) Annulus in the cone of *Equisetum* lies at the -----
 a) base of Sporangiphore b) base of Sporangium
 c) base of cone d) top of sporangiophore
- 133) The number of Sporangia in *Equisetum* per sporangiophore ranges between ---

 a) 2-4 b) 5-10 c) 15-20 d) 20-30
- 134) The jacket of a mature Sporangium of *Equisetum* is -----
 a) 1-2 layered b) 4-8 layered
 c) 3-5 layered d) many layered
- 135) The elaters in the Sporangium of *Equisetum* are derived from -----
 a) Exospore b) episporium c) episporium d) exosporium
- 136) ----- sporangiophores are present in each whorl in *Equisetum* cone.
 a) two b) four c) twelve d) twenty
- 137) ----- elaters are present in *Equisetum* spore
 a) two b) four c) six d) eight
- 138) Antherozoids of *Equisetum* are -----
 a) spiral biflagellate b) sickle shaped biflagellate
 c) spiral multiflagellate d) sickle shaped multiflagellate
- 139) In ----- antheridia are produced on the lobes of the prothallus.
 a) *Psilotum* b) *Marsilea* c) *Equisetum* d) *Rhynia*
- 140) Prothallus of *Equisetum* is -----
 a) only monoecious b) dioecious
 c) equally of mono & dioecious d) usually monoecious or partly dioecious
- 141) The vallicular canals in *Equisetum* are present -----
 a) below the ridges b) below the furrows
 c) between ridges and furrows d) between epidermis and endodermis
- 142) *Equisetum* belongs to -----
 a) Sphenopsida b) Psilopsida c) Lycopsidea d) Eligulopsida
- 143) The Stele in *Psilotum* stem is of -----
 a) Protostele b) Solerostele c) Polystele d) dictyostele

- 144) In ----- scaly leaf lacks midrib.
 a) Equisetum b) Psilotum c) Marsilea d) Selaginella
- 145) ----- reproduces vegetatively by gemmae.
 a) Equisetum b) Selaginella c) Psilotum d) Marsilea
- 146) Specialised structures are developed in Psilotum to produce spores are called -----
 a) Synangia b) Conidia c) anthercidia d) Oogonia
- 147) Each sporangium in Psilotum is ----- lobed.
 a) two b) three c) four d) five
- 148) Eusporangiate type of sporangium development is found in -----
 a) Selaginella b) Marsilea c) Nephrolepis d) Psilotum
- 149) ----- is Homosporous.
 a) Equisetum b) Psilotum c) Selaginella d) Marsilea
- 150) Psilotum belongs to order -----
 a) Equisetales b) Psilotales c) Rhyniales d) Marcileales
- 151) The gametophyte of Psilotum grows as -----
 a) Parasite b) epiphyte c) Saprophyte d) halophyte
- 152) Spermatozoids in Psilotum are -----.
 a) biflagellate b) biflagellated and uncoiled
 c) multiflagellate and spirally coiled d) unflagellated and coiled
- 153) The roots of Pinus have symbiotic association of -----
 a) bacteria b) alga c) ecto-mycorrhiza d) endomycorrhiza
- 154) Winged pollen grains are found in -----
 a) Pteris b) Pinus c) Selaginella d) Psilotum
- 155) The wing of Pinus derives from -----
 a) Seed coat b) axis of cone c) bract scale d) avuliferous scale
- 156) Pinus seed develop ----- cotyledons
 a) one b) two c) many d) fleshy

- 183) Bougeinuillea shows ----- inflorescence.
 a) monochasial cyme b) dichasial cyme c) racemose d) solitary cyme
- 184) Verticillaster inflorescence is present in -----.
 a) Ocimum b) Onion c) Carrot d) Datura
- 185) Cup shaped involucre is present in -----.
 a) cyathium b) verticillaster c) Hypantholium d) umbel
- 186) Male, female and gall flowers are present in ----- inflorescence.
 a) Cyathrium b) Hypanthodium c) Verticillaster d) capitute
- 187) ----- is one of the essential whorls of a flower
 a) corolla b) calyx c) bract d) androecium
- 188) In Gynandropsis, the elongation of second and third internode is called ----
 a) anthophore b) gynophore
 c) gynandrophore d) sporangiophore
- 189) The spongy and flat top modified thalamus is present in -----
 a) carrot b) chinorose c) Annona d) chinorose
- 190) Cupulate type of Calyx is present in -----
 a) vinca b) Bryophyllum c) Datura b) Bombax
- 191) The disc florets exhibit
 a) pappus b) marigold c) Datura d) petalloid sepat
- 192) Petalloid sepals are present in -----
 a) mussaenola b) Barleria c) Tridax d) Salvia
- 193) Flower having four free petals arranged in the form of cross is called -----
 corolla.
 a) caryophyllaceous b) Papillionaceous
 c) Cruciform d) Rosaceous
- 194) The shape of corolla is like butterfly is called -----
 a) Cruciform b) Papilionaceous
 c) Caryophyllaceous d) Rosaceous
- 195) Cucurbita flower shows ----- type of corolla
 a) campanulate b) cruciform c) Rotate d) Infundibuliform

- 196) Bryophyllum flower shows ----- type of corolla
 a) Cruciform b) rotate c) Urceolate d) Hypocrateriform
- 197) Strap shaped corolla is present in -----
 a) ray floret of sunflower b) Catharanthus
 c) Bryophyllum d) Ipomoea
- 198) Bilabiate corolla is present in -----
 a) Cucurbita b) Salvia c) Dahlia d) Mirabilis
- 199) Twisted aestivation is found in -----
 a) China rose b) Salvia c) Anona d) Caesalpinia
- 200) Imbricate aestivation is found in -----
 a) China-rose b) Salvia c) Caesalpinia d) Clitoria
- 201) Vexillary aestivation is common in flowers of -----
 a) Clitoria b) Salvia c) Caesalpinia d) Shinorose
- 202) The fusion of stamens on sepals is called ----- condition.
 a) Cpipetalous b) pisepalous c) epiphyllous d) inferior
- 203) The fusion of Stamens with petals is called ----- condition
 a) epipetalous b) gynostegium c) epipetalous d) episepalous
- 204) Adhesion between androecium and gynoecium is called -----
 a) gynostegium b) monoadelphy c) diadelphly d) polyadephy
- 205) Disc florets of sunflower shows ----- stamens
 a) Synandrous b) syngenesious
 c) polyadelphous d) monoadelphous
- 206) ----- pistil is present in Michelia
 a) syncarpous b) apocarpous c) tricarpellary d) bicarpellary
- 207) ----- placenration is present in sunflower
 a) marginal b) basal c) axile d) parietal
- 208) When micropyle, Chalaza and funiculus lie in one straight vertical line; the ovule is termed as -----
 a) campylotropous b) circinotropous
 c) anatropous d) orthotropous

- 209) ----- type of fruit is present in sunflower
 a) cypsela b) achene c) caryopsis d) Samara
- 210) ----- exhibit samara type of fruit
 a) Terminalia arjuna b) sunflower c) maize d) cypsela
- 211) Mustard shows ----- type of fruit
 a) Siliqua b) drupe c) capsule d) follicle
- 212) Ocimum shows ----- type of fruit
 a) carcerule b) drupe c) regma d) Lomentum
- 213) Acacia fruit is called -----
 a) Reqwa b) carcerule c) cremocarp d) Lomentum
- 214) Coconut exhibit ----- fruit
 a) fibrous drupe b) regma c) cremocarp d) Lowentum
- 215) Cucurbita shows ----- of fruit
 a) regma b) pepo c) carcerule d) cremocarp
- 216) Michelia shows -----
 a) Etacrio of folliclies b) Elaero of achenes
 c) Etaerio of dmpe d) Sorosis
- 217) Etaerio of berries is present in -----
 a) China rose b) Datura c) Anona d) Ocimum
- 218) Fruit of fig is called -----
 a) Sorosis b) Syconus c) drupe d) Pepo
- 219) Mulberry shows ----- type of fruit
 a) etaerio of berries b) etaerio of blrapes
 c) etacrio of achenes d) etaerio of follicles.
- 220) A term plant taxonomy was coined by -----
 a) A.P. deCandolle b) Bentham and Hooker
 c) Hutchinson d) Linnaeus
- 221) In 1565, *Garcia d'orta* published and translated a book ----- in Latin language.
 a) Indian Medicinal plants b) Indian ornamental plants
 c) Indian herbaceous plants d) Indian trees

- 222) Indian Botanic Garden was established by ----- in 1787.
 a) Leut.col. Robert Kyd b) Roxburgh c) Calder d) Wallich
- 223) Indian botanic Garden is situated at -----
 a) Calcutta b) Lucknow c) Darjeling d) Coimbatore
- 224) ----- tree appear like tiny forest in Indian Botanic Garden, Calcutta.
 a) Fig b) Indian rubber c) Banyan d) Margosa
- 225) ----- are the wonder of Indian Botanic Garden, Calcutta.
 a) Giant water lilies b) Bamboos c) Roses d) Phlox
- 226) National Botanic Garden, Lucknow was established by -----.
 a) Sadat Ali Khan b) Roxburgh c) Wallich d) Calder
- 227) Lead botanical Garden was funded by ----- to Shivaji University, Kolhapur in 1996.
 a) MoEF b) DBT c) DST d) UGC
- 228) Bentham and Hooker published -----.
 a) Genera plantarum b) Indian trees
 c) Indian Meteria Medica d) Indian herbs
- 229) Radial voscular bundles are present in -----
 a) Sunflower stem b) Maize stem c) Jowar stem d) Maize root.
- 230) ----- is present in vascular bundle of Maize stem.
 a) bundle sheath b) sclerenchnatous
 c) lignin sheath d) collenchymate sheath.
- 231) Hypodermis in maize stem is made up of -----
 a) parenchyma b) collenchyma c) sclerendyma d) chlorenchyma
- 232) When cambium is absent vascular bundle it is called -----
 a) bicollateral b) closed c) open as well as closed d) only open
- 233) Tetrarch vascular bundles are present in -----
 a) sunflower roots b) sunflower stem
 c) maize stem d) maize root
- 234) Starch sheath is present in covtex of ----- stem
 a) sunflower b) maize c) jowar d) wheat

- 235) Hard bast is made up of -----
 a) parenchyma b) collenchyma c) xylem d) sclerenchyma
- 236) Adaptive abnormal secondary growth is found in -----stem.
 a) Bignonia b) Dracaena c) Yucca d) Aloe
- 237) Non-adaptive abnormal secondary growth is found in ----- stem.
 a) Dracaena b) Bignonia c) Serjania d) sunflower.
- 238) Cap cells are present in alga -----.
 a) Sargassum b) Nostoc
 c) Oedogonium d) Spirogyra
- 239) Male and Female conceptacles are present in -----.
 a) Oedogonium b) Spirogyra
 c) Sargassum d) Nostoc
- 240) The antibiotic Penicillin is obtained from -----.
 a) Penicillium b) Mucor
 c) Aspergillus d) Puccinia
- 241) Puccinia is a -----.
 a) Saprophyte b) Ectoparasite
 c) Obligate Parasite d) Facultative Parasite
- 242) Lichens are formed by Symbiotic association between alga and -----.
 a) bacteria b) fungus
 c) bryophyte d) pteridophyte
- 243) Sexual reproduction in Anthoceros is -----.
 a) isogamous b) anisogamous
 c) oogamous d) plasmogamous
- 244) Mushrooms produce -----.
 a) ascospores b) conidiospores
 c) basidiospores d) teleutospores
- 245) The main source of biofertilizers are -----.
 a) Mycoplasma b) Pteridophytes
 c) BGA d) Bryophytes

- 265) ----- deals with cultivation of flowering plants.
- | | |
|-----------------|------------------------|
| a) Pomoculture | b) Olericulture |
| c) Floriculture | d) Landscape gardening |
- 266) Art of connecting two pieces of living tissue together is known as -----.
- | | |
|-------------|-------------|
| a) Grafting | b) Layering |
| c) budding | d) Cutting |
- 267) *Bryophyllum* is propagated by ----- cutting.
- | | |
|---------|------------------|
| a) Stem | b) Leaf |
| c) Root | d) None of these |
- 268) Etiolation in plants is caused when they are grown in -----.
- | | |
|------------------|---------|
| a) intense light | b) dark |
| c) blue light | d) red |
- 269) Avena coleoptiles test was performed by -----.
- | | |
|------------------|----------------|
| a) R. V. Thimann | b) F. W. Went |
| c) F. Skoog | d) L. J. Audus |
- 270) The term **vernalization** was coined by -----.
- | | |
|-------------|-------------|
| a) Purvis | b) Chourad |
| c) Mekchers | d) Ly senko |
- 271) Seed dormancy in pulses is due to -----.
- | | |
|--------------------|-------------------|
| a) thin seed coat | b) hard seed coat |
| c) immature embryo | d) auxin |
- 272) Glycine max is a ----- plant.
- | | |
|--------------|----------------|
| a) short-day | b) long day |
| c) CAM | d) Day neutral |
- 273) ----- growth hormone is found in coconut milk.

- a) Kinin
b) Abscissic acid
- c) Indole-acetic acid
d) Gibberellic acid
- 274) ----- is a submerged hydrophyte.
- a) Typha
b) Vallisnaria
- c) Salvinia
d) Azolla
- 275) Air layering is also denoted as -----.
- a) Whip graft
b) Top-tongue graft
- c) Approach graft
d) Goote
- 276) ----- serves as a good indicator of land productivity.
- a) Forest
b) Pollution
- c) Desert
c) Agriculture
- 277) ----- deals with the distribution of plants.
- a) Phytomorphology
b) Geomorphology
- c) Phytogeography
d) Geology.
- 278) The wall of a guard cell surrounding stomatal pore is -----.
- a) thin and elastic
b) thin and non-elastic
- c) thick
d) thick and nonelastic
- 279) Due to deficiency, the older leaves show marginal chlorosis and necrosis
- a) Copper
b) Phosphorus
- c) Potassium
d) Calcium
- 280) During light reachion, splitting of water molecule occurs, the process is referred as -----.
- a) Photolysis.
b) Phosphorylation
- c) Photoperiodism
d) Photorespiration

- 281) ----- show symbiotic association between alga and a fungus.
- a) Bacteria
 - b) Viruses
 - c) Lichens
 - d) Pteridophytes
- 282) Fungi growing on cattle or animal dung are called ----- fungi.
- a) entomogenous
 - b) aquatic
 - c) parasitic
 - d) coprophilous
- 283) ----- is a fresh water alga.
- a) Spirogyra
 - b) Ulva
 - c) Sargassum
 - d) Ectocarpus
- 284) ----- is responsible for biological nitrogen fixation.
- a) Nustoc
 - b) Sargassum
 - c) Polysiphonia
 - d) Spirogyra
- 285) ----- lack chlorophyll pigments.
- a) Fungi
 - b) alga
 - c) bryophytes
 - d) pteridophytes
- 286) ----- is called bread mould fungus.
- a) Puccinia
 - b) Cercospora
 - c) Mucor
 - d) Cercospora
- 287) Polyporus and Ganoderma causes ----- to higher plank
- a) Wood rotting
 - b) parasitic
 - c) aquatic
 - d) entomogenous
- 288) Riccia belongs to -----.
- a) Sphenopsida
 - b) Lycopsida
 - c) Hepaticopsida
 - d) Anthocerotopsida

- 297) ----- show inhibitory action on growth process.
- | | |
|---------------------------|--------------------------|
| a) Abscisic acid | b) Gibberellic acid |
| c) Napthalene acetic acid | d) Indole-3-butyric acid |
- 298) Glycolysis process occurs in -----
- | | |
|-----------------|--------------------------|
| a) Cytosol | b) Endoplasmic reticulum |
| c) mitochondria | d) chloroplast |
- 299) Nitrogen is converted to ammonia in presence of ----- enzyme.
- | | |
|---------------|----------------|
| a) peroxidase | b) catalase |
| c) ligase | d) Nitrogenase |
- 300) Healthy root nodules in leguminous plants are pink due to presence of red pigment called -----.
- | | |
|----------------|-------------------|
| a) haemoglobin | b) leghaemoglobin |
| c) anthocyanin | d) cyanophycin |
- 301) Naturally occurring hormone present in coconut milk is called -----.
- | | |
|----------------|--------------|
| a) Abscisin | b) Ethylene |
| c) Gibberellin | d) Gytokinin |
- 302) The substance responsible for flowering stimulus is known as -----.
- | | |
|-------------|-------------|
| a) Kinetin | b) florigen |
| c) Vernalin | d) Abscisin |
- 303) ----- is essential for fixation of atmospheric nitrogen.
- | | |
|---------------|-----------|
| a) Zinc | b) Nickel |
| c) Molybdenum | d) Copper |
- 304) ----- deficiency is responsible for physiological disease like mottled chlorosis.
- | | |
|--------------|---------------|
| a) Magnesium | b) Molybdenum |
| c) Manganese | d) Chlorine |

- 337) ----- number of elements are called essential elements.
- a) 17
b) 20
c) 25
d) 30
- 338) In photosynthesis light is converted to -----.
- a) Kinetic energy
b) Chemical energy
c) Radiant energy
d) Photochemical energy
- 339) Naturally occurring hormone in coconut is -----.
- a) Auxin
b) Gibberellin
c) Cytokinin
d) Ethylene
- 340) Phycobilins are found in -----.
- a) Algae
b) Fungi
c) Actinomycet
d) Bacteria
- 341) The growth curve is usually -----.
- a) 'S' shaped
b) 'V' shaped
c) 'J' shaped
d) Bell shaped
- 342) Kranz anatomy is characteristic of -----.
- a) C₃ plants
b) C₄ plants
c) CAM plants
d) Succulent plants
- 343) Uniseriate unbranched filaments are found in -----.
- a) Oedogonium
b) Chara
c) Polysiphonia
d) Sargassum
- 344) Sargassum belongs to order ----- of phaeophyta.
- a) Zygnematales
b) Oedogoniales
c) Fucales
d) Siphonales

- 369) The exposure of plants to low temperature for induction of flowering is called -----.
- | | |
|-------------------|---------------------|
| a) photoperiodism | b) Photorespiration |
| c) vernalisation | d) stratification |
- 370) Breaking of seed dormancy by either rupturing or weakening of hard seed coat is known as -----.
- | | |
|--------------------|------------------|
| a) stratification | b) scarification |
| c) devernalisation | d) guttation |
- 371) In ----- the root formation takes place on the branches which are still attached to the parent plant.
- | | |
|-------------|-------------|
| a) cutting | b) grafting |
| c) layering | d) budding |
- 372) An art of connecting two pieces of living plants together, is known as -----
- | | |
|-------------|------------|
| a) layering | b) budding |
| c) grafting | d) cutting |