



EXAMINATION MATERIAL ZUEB - 2022

BOTANY XI (PRE-MEDICAL)

SECTION "A" MULTIPLE CHOICE QUESTION (MCQ'S)

Chapter's Name	MCQs (Multiple Choice Questions)	
THE CELL	TOPIC: Cell as basic unit of Life Cell Theory Eukaryotic Cell Cytoplasmic organelles & membrane system	SUB TOPIC Plasma membrane Fluid mosaic model Cell wall Nucleus Active and passive transport Endoplasmic reticulum Mitochondria Golgi apparatus Lysosomes Plastid Peroxisome, Glyoxysome, Ribosomes, centriole and vacuole
	<p>1) Which of the following is NOT an organelle? A. Nucleus B. Golgi apparatus C. Lysosome D. <u>Chlorophyll</u></p> <p>2) It is function of lysosome. A. Protein synthesis B. Processing and packaging C. <u>Intercellular Digestion</u> D. Lipid Synthesis</p> <p>3) Chromosomes with un-equal arms resembling with "J" are called: A. Metacentric B. <u>Sub-metacentric</u> C. Acrocentric D. Telocentric</p> <p>4) Small pores in the cell wall are called A. Stomata B. Ribosomes C. Lenticels D. <u>Plasmodesmata</u></p> <p>5) Rough Endoplasmic Reticulum are different from smooth endoplasmic reticulum due to presence of: A. <u>Ribosomes</u> B. Lysosomes C. Mitochondria D. Golgi apparatus</p>	

	<p>6) The term “Cell” was first used by:</p> <p>A. Robert Brown 1965 B. Robert Brown 1865 C. Robert Hooke 1556 D. <u>Robert Hooke 1665</u></p>	
Variety Of Life	<p>TOPIC: Needs and Basis of Biological Classification Concept of Hierarchy Two Kingdom to Five Kingdom Systems Viruses Life cycle of Bacteriophage Animal Diseases</p>	<p>SUB TOPIC: Homology, biochemistry, cytology, genetics Units of biological classification Classification of wheat and housefly (Discovery, Characteristics, Structure and classification) The lytic cycle The lysogenic cycle Poliomyelitis, Colds, AIDS, Flu and Hepatitis</p>
	<p>7) If Viral reproductive cycle culminates in death of host cell, then its termed as:</p> <p>A. Lysogenic cycle B. <u>Lytic cycle</u> C. Krebs cycle D. Glycolysis</p> <p>8) One of the following viruses cause colds in human</p> <p>A. Poliovirus B. <u>Rhinovirus</u> C. Arbovirus D. Rhabdovirus</p> <p>9) Which one of the following is not a viral disease?</p> <p>A. Influenza B. Hepatitis C. AIDS D. <u>Pneumonia</u></p>	
The Kingdom Prokaryotae (Monera)	<p>TOPIC: Bacteria Cyanobacteria</p>	<p>SUB TOPIC: (Discovery, Structure, Nutrition, Respiration Growth and Reproduction) (Nostoc structure, nutrition, reproduction and importance)</p>
	<p>10) When the tuft of flagella is present at both the ends in the structure of bacterial cell, then the condition is known as:</p> <p>A. Atrichous B. Lophotrichous C. Peritrichous D. <u>Amphitrichous</u></p> <p>11) Bacterial Pilli help in:</p> <p>A. Locomotion B. Phagocytosis C. <u>Conjugation</u> D. Exocytosis</p> <p>12) Type of cocci having group eight are called:</p> <p>A. Diplococcus B. Streptococcus C. <u>Sarcina</u> D. Staphylococcus</p>	

	<p>13) Which of the following is a bacterial disease? A. Leishmaniosis B. <u>Tetanus</u> C. Measles D. Polio</p> <p>14) Photosynthetic Bacteria use which of the following molecule instead of H₂O? A. <u>H₂S</u> B. H₂SO₄ C. CH₄ Gas D. Atomic Hydrogen</p> <p>15) In which of the following phase of bacterial growth, death rate is more rapid than multiplication rate? A. Stationary phase B. LAG phase C. <u>Decline phase</u> D. LOG phase</p>	
The Kingdom Protista (Protoctista)	TOPIC: Diversity among Protista (Plant-like algae, Fungi-like Protoctista)	SUB TOPIC: Algae (cholera and Ulva) Slime mold and water mold
	<p>16) The number of chromosomes present in saprophytic ULVA: A. 13 B. <u>26</u> C. 24 D. 12</p> <p>17) One of the following is example of fungi like Protoctista A. Algae B. <u>Oomycota</u> C. Protozoa D. Protoctista</p> <p>18) Organisms present in fungi-like Protoctista are superficially resemble with fungi because their body is made up of thread like structures called: A. Mycelium B. <u>Hyphae</u> C. Pili D. Flagella</p> <p>19) Plant like Protoctista are: A. <u>Algae</u> B. Fungi C. Slime mol D. Protozoa</p> <p>20) Water mold Oomycotes is a pathogenic organism and causes: A. Fire bight of potato B. Ring rot of potato C. <u>Late blight of potato</u> D. Ergot of rye</p>	

	<p>21) Plant like character found in Euglena</p> <p>A. Flagellum B. Pellicle C. Pyrenoid D. <u>Photoreceptor</u></p>	
<p>The Kingdom Fungi</p>	<p>TOPIC: The body of fungus Classification of fungi with reference to structure, reproduction and importance)</p>	<p>SUB TOPIC: Nutrition in Fungai Reproduction in fungi Zygomycota Ascomycota Basidiomycota Deuteromycota</p>
	<p>22) Mycelium is a term used for:</p> <p>A. Mass of spores B. Mass of sporangia C. Zoospores D. <u>Mass of hyphae</u></p> <p>23) Mushrooms belongs to:</p> <p>A. Zygomycota B. Ascomycota C. <u>Basidiomycota</u> D. Deuteromycota</p> <p>24) Lichens show mutualistic and symbiotic associated between:</p> <p>A. <u>Fungi and Algae</u> B. Algae & Bacteria C. Bacteria and Fungus D. Bacteria and Virus</p> <p>25) One of the following is a toxin produced by aspergillois which causes cancer.</p> <p>A. Mycotoxin B. <u>Aflatoxin</u> C. Zearalenone D. Vomitoxin</p> <p>26) Which one is not belongs to Basidiomycota?</p> <p>A. <u>Cup-Fungi</u> B. Jelly-Fungi C. Puffballs D. Shelf Fungi</p> <p>27) Sexual reproduction is absent or not observed in this group of fungi.</p> <p>A. Zygomycota B. Ascomycota C. Basidiomycota D. <u>Deuteromycota</u></p>	

<p>The Kingdom Plantae</p>	<p>TOPIC: Classification of Plants Bryophytes Tracheophytes Plant families</p>	<p>SUB TOPIC: (General characteristics; adaptations; life cycle and classes) Major Groups of Vascular Plants Rhynia plant Life cycle of fern Spermopsida successful group of land plant Family Rosaceae Family Solanaceae Family fabeacea (Only scientific names of plants of other reduced families are still part of syllabus)</p>
	<p>28) Group of plants that first moved from water to land are called: A. Tracheophytes B. <u>Brvophytes</u> C. Green algae D. Blue green algae</p> <p>29) Which of the following is an example of liverworts? A. Funaria B. <u>Marchantia</u> C. Adiantum D. Anthoceros</p> <p>30) The primitive vascular plants Rhynia were widespread about: A. 300 million years ago B. <u>400 million years ago</u> C. 500 million years ago D. 600 million years ago</p> <p>31) Filament is a part of: A. Sepal B. Petal C. <u>Stamen</u> D. Carpel</p> <p>32) Peach tree, apple tree, tomato, and Chui mui are example of: A. Gymnosperms B. Bryophyte C. <u>Angiosperm</u> D. Psilopsida</p> <p>33) The botanical name of "brinjal" is: A. <u>Solanum melongena</u> B. Datura alba C. Solanum nigrum D. Solanum tuberosum</p> <p>34) The scientific name of Thorn apple is: A. lycopodium phlegmaria B. Anthoceros fusiformis C. Ginkgo biloba D. <u>Datura alba</u></p>	

	<p>35) One of the following structures is hair like which protect the sex organs of bryophytes from drying out.</p> <p>A. <u>Paraphyses</u> B. Lactophyses C. Mesophytes D. Cilia</p> <p>36) Wheat, Oats, rice & corns belong to the family:</p> <p>A. Fabaceae B. <u>Poaceae</u> C. Solanaceae D. Rosaceae</p>		
<p>Bioenergetics</p>	<table border="1"> <tr> <td data-bbox="421 571 957 907"> <p>TOPIC: Need of Energy and role of ATP as energy Photosynthesis Cellular respiration Aerobic and anaerobic respiration</p> </td> <td data-bbox="957 571 1495 907"> <p>SUB TOPIC: (Raw material; product, process of Photosynthesis, light and dark reactions) Oxidative photophosphorylation Fermentation Glycolysis Breakdown of pyruvic acid Alcoholic and lactic acid fermentation. Krebs's cycle Electron transport chain</p> </td> </tr> </table>	<p>TOPIC: Need of Energy and role of ATP as energy Photosynthesis Cellular respiration Aerobic and anaerobic respiration</p>	<p>SUB TOPIC: (Raw material; product, process of Photosynthesis, light and dark reactions) Oxidative photophosphorylation Fermentation Glycolysis Breakdown of pyruvic acid Alcoholic and lactic acid fermentation. Krebs's cycle Electron transport chain</p>
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	<p>37) Which of the following is a stage in the light independent reactions of photosynthesis?</p> <p>A. <u>Carboxylation of a five-carbon sugar</u> B. Photolysis of water C. Photophosphorylation of ADP D. Release of oxygen</p> <p>38) In aerobic respiration how many ATP are produced?</p> <p>A. <u>36</u> B. 02 C. 38 D. 04</p> <p>39) The primary electron acceptor in PS-II is:</p> <p>A. Plastoquinone B. <u>Phaeophytin</u> C. Plastocyanin D. FeS</p> <p>40) The light reaction of photosynthesis occurs in the:</p> <p>A. Stroma B. <u>Thylakoid membranes</u> C. Mitochondria D. Nucleus</p> <p>41) Pyruvic acid is the end product of :</p> <p>A. Kreb's cycle B. Anaerobic respiration C. Photosynthesis D. <u>Glycolysis</u></p>		

	<p>42) The photosynthetic pigments can be separated by a process called:</p> <p>A. Photosynthesis B. Respiration C. <u>Paper chromatography</u> D. Hydrolysis</p> <p>43) The dark reaction of photosynthesis:</p> <p>A. <u>Takes place in the stroma of the chloroplast.</u> B. Involves the fixing of water C. Causes formation of lactic acid D. Takes place in the cytoplasm</p> <p>44) Enzyme responsible for carboxylation in Benson and Calvin cycle is known as:</p> <p>A. Fumarate B. Pepsin C. <u>RUBISCO</u> D. Isomerase</p> <p>45) Tri carboxylic cycle is also known as;</p> <p>A. <u>Citric acid Cycle</u> B. Calvin Cycle C. Lactic acid D. Acetyl CoA</p>	
Nutrition	TOPIC: Autotrophic and Heterotrophic mode of Nutrition in Plants	SUB TOPIC: Phototrophic and chemotrophic nutrition in plants. Parasitic, saprophytic and carnivorous plants
	<p>46) Organism prepared their own food through raw material are termed as:</p> <p>A. <u>Autotrophic</u> B. Heterotrophic C. Chemotrophic D. None of these</p> <p>47) Due to deficiency of it, leaves turn pale yellow.</p> <p>E. Phosphorous A. <u>Nitrogen</u> B. Potassium C. Magnesium</p> <p>48) Sundew is an example of :</p> <p>A. Autotrophic plant B. Parasitic plant C. Saprophytic plant D. <u>Carnivorous plant</u></p>	

Gaseous Exchange	TOPIC: Gaseous Exchange in plants	SUB TOPIC: photorespiration
	<p>49) The following are involved with plant respiration.</p> <p>A. <u>Stomata</u> B. Chloroplast C. Auxin D. Grana</p> <p>50) These cells have chloroplast.</p> <p>A. Goblet cells B. R.B.C C. <u>Guard Cell</u> D. None of these</p> <p>51) The process in which C3 plants consume oxygen and produce Carbon dioxide during day time without producing energy.</p> <p>A. Photosynthesis B. <u>Photorespiration</u> C. Chemosynthesis D. Respiration</p>	
Transport	TOPIC: Transport in Plants (Uptake and transport of water and minerals) Water and mineral uptake Transpiration	SUB TOPIC: Diffusion Facilitated diffusion Active transport Osmosis Imbibition Ascent of sap Pathway and movement of water and minerals Root pressure theory (Types, stomata structure and opening and closing, transpiration as necessary evil)
	<p>52) In the process of guttation:</p> <p>A. Plant can excrete salts B. Excess water release from stomata C. Manufacture organic substances. D. <u>Water is forced out in the form of liquid(droplets) through hydathodes</u></p> <p>53) Upward movement of water from root to leaves against the gravity pull is known as :</p> <p>A. <u>Ascent of sap</u> B. Passive transport C. Diffusion D. Osmosis</p> <p>54) Symplast pathway is the transport of water and solute through:</p> <p>A. Stomata B. Cell membrane C. <u>Plasmodesmata</u> D. Cell wall</p>	