TGT/PGT

BIOLOGY

Revision Book

Important Facts, Formulas & Oneliners
Chapter, Topic & Subtopic Wise

Useful for : TGT/PGT/LT-GRADE/NVS/KVS/DSSSB/GIC/GDC/Assistant Professor EMRS/AWES/DIET/AEES and Other Competitive Exam

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01.

THE LIVING WORLD

1.1 WHAT IS LIVING?

- Non-equilibrium, steady state is a - **Living state**
- Non-living things show which type of growth– **Extrinsic growth**
- Biological name of man– **Homo sapiens**
- Characteristic of living organisms– **Response to external stimuli**
- Which organism has self-consciousness– **Human**
- In the system of classification, one is not a category– **Agiospermae**
- All living organisms are linked to one another because– **They share common genetic material but to varying degrees**
- The main purpose for the classification of organisms is to– **Establish relationships amongst organisms**
- In plants, growth occurs ..... whereas in animals, it occurs ..... **Continuously, only upto a certain age**
- The statement 'nothing lives forever, yet life continues' illustrates the role of– **reproduction**
- The organisms, does not reproduce– **Mule, Worker bee, Infertile human female**
- A living organism is unexceptionally differentiated from a non-living structure on the basis of– **Responsiveness**
- The sets does not contain defining characteristics of living organisms– **Growth and reproduction**
- The defining property of living organism is – **Consciousness**
- Isolated metabolic reaction outside the body performed in test tube is– **Neither living nor non-living**
- Reproduces by fragmentations– **Fungi, Filamentous algae, Protonema of mosses**
- Organism reproduction can be considered as synonymous with worth– **Amoeba, Bacteria**
- The twin characteristics of growth are– **Increase in number of individuals, increase in mass**
- Non-living object showing growth– **Mountain, Boulder, Sand mounds**
- Characteristic feature can differentiate living from non-living– **Ability to sense surroundings**

1.2 DIVERSITY IN LIVING WORLD

- For plants, scientific name are based on agreed principles and criteria, provided in– **ICBN**
- Diversity of kinds of organisms (taxonomy) and ancestral/evolutionary relationship refers to - **Systematic**
- International code for zoological nomenclature stands for - **ICZN**
- The number and types of organisms present on Earth are collectively known as- **Biodiversity**
- Against the rules of ICBN is– **Generic and specific names should be written starting with small letters**
- Nomenclature is governed by certain universal rules. Contrary to the rules of nomenclature is– **Biological names can be written in any language**
- Diversity of kinds of organisms and their relationship is termed as- **Systematics**
- ICZN is– **International Code of Zoological Nomenclature**
- In binomial nomenclature of plants– **Both genus and species are printed in italics**
- The classification of organisms based on their evolutionary history and establishing their phylogeny on the totality of various parameters from all fields of studies is called – **Biosystematics**
- ICBN is– **International Code of Botanical Nomenclature**
- Biodiversity range is– **1.7-1.8 million**
- The title used by Linnaeus for his publication was– **Systema Naturae**
- The science of giving names to living beings called– **Nomenclature**
- The zoological name of tiger is- ***Panthera tigris***
- Biological names, hand written, should necessary be– **Underlined**
- In binomial nomenclature, the first and second components represent– **Genus and species**
- In case of mango " *Mangifera*" is generic name and *Indica* is - **Specific epithet**
- The scientific name does not ensure– **Status of threat of extinction of that organism holding**
- The word systematics is derived from– **Latin word systema**
- In Mangifera Indica Linn; Indica refers to– **Species**
- The study of different kinds of organisms and their diversities and also the relationship among them referred to as– **Systematics**
- Name of the author is not written– **In italics**
- In binomial nomenclature proposed by Linnaeus, every organism has– **One scientific/biological name with two words - a genus and a species**

- Systema Naturae is – **Publication of Linnaeus**
- The study of anatomical physiological and ecological information of organisms development of process is basis of - **Modern Taxonomic**
- The scientific name of banyan is written as Ficus bengalensis L – **Letter L signifies taxonomist Linnaeus**
- Systematics takes into account :– **Evolutionary relationship between organisms**
- Biological names are generally in ..... and written in ..... . **Latin, italics**
- Taxonomy is not component of– **Responsiveness**
- In taxonomy the first step is – **Identification**

1.3 TAXONOMIC CATEGORIES

- Datura innoxia belong to the order and family respectively– **Polymoniales, Solananceae**
- The process by which anything is grouped into convenient categories based on some easily observable characters– **Classification**
- The Indian Botanical Garden and National Botanical Garden are situated in– **Howrah (shibpur) and Lucknow respectively**
- The branch of science dealing with identification, nomenclature and classification of organisms– **Taxonomy**
- First step in taxonomy is– **Identification of the organisms**
- As we go from species to kingdom in a taxonomic hierarchy, the number of common characteristics– **Decreases**
- Any rank of taxonomic hierarchy is used for - **Taxon**
- Binomial nomenclature system given by– **Carolus Linnaeus**
- Correct scientific name of wheat derived by binomial nomenclature is– **Triticum aestivum**
- Two-word names, the first indicates genus, and other species is called- **Binomial nomenclature**
- Scientific name of Mango ..... was first described by Carolus Linnaeus– **Mangifera indica Linn**
- In a taxonomic hierarchy, genus is interpolated between– **Family and species**
- In taxonomic hierarchy, cats are placed under the genus– **Felis**
- A taxonomic category refers to– **a rank or level in a taxonomic hierarchy**
- The ascending or descending arrangement of taxonomic categories is called– **Hierarchy**
- The term 'taxon' is used for– **any rank of taxonomic hierarchy**
- Books was contributed by Linnaeus – **Systema Naturae**
- By which process anything is grouped into convenient categories based on observable characters - **Classification**
- The word systematics is derived from the ..... word ..... which means ..... **–Latin, systema, systematic arrangement of organisms**
- Biological names are generally in Greek and written in italics– **Incorrect**
- The scientific name of banyan is written as Ficus benghalensis L. This statements is correct regarding– **Letter L. signifies the taxonomist Linnaeus**
- In printed scientific names, only the ..... is capitalized– **Genus**
- The basic processes of taxonomy– **Identification and nomenclature, Characterisation and classification**
- The main objective of plant taxonomy is– **To study the world's flora, to provide a method for identification & nomenclature**
- ..... is the branch of science dealing with identifications, nomenclature and classification of organisms– **Taxonomy**
- First step in taxonomy is– **Identification of the organism**
- Founder of binomial nomenclature was– **Linnaeus**
- Scientific nomenclature true for– **Naming of particular organism by the same name all over the world**
- Most names in biological nomenclature of living organisms are taken from ..... language– **Latin**
- In the binomial system of taxonomy developed during the 18^{th} century by C. Linnaeus, the second word of an organism's biological name represents– **Species**
- As we go lower from kingdom to species the number of common characteristics goes on– **Increase**
- Lowest category of animal kingdom is– **Species**
- Obligate categories or ranks are found in a hierarchical level of classification– **7**
- The highest taxon in taxonomic hierarchy is– **Kingdom**
- A taxon in Linnaeus hierarchy is not– **Population**

1.4 SPECIES

- In biological terminology, a group of similar organisms are capable of interbreeding and producing fertile offspring– **Species**
- That characters are mainly considered for declaring a new plant species– **Floral characters**
- Categories which possesses maximum number of related characters– **Species**
- The basic unit upon ..... the systems of classification are based is– **Species**
- Amongst all the kingdoms, the only taxon that exists in nature as a biologically cohesive unit is the– **Species**

- A species consists of a population is– **Interbreeding**
- Species is considered to be static– **Incorrect**
- A group of individual organisms with fundamental similarities is– **Species**
- Indica, *tuberosum* and *leo* names represents– **Specific epithets**
- The less general in characters as compared to genus– **Species**

1.5 GENUS

- Group of closely related species of plants or animals represents - **Genus**
- In a taxonomic hierarchy, family is interpolated between– **order and genus**
- Mangifera is a– **Genus**
- Genus is a group of similar and related– **Species**
- A collection of species ..... bear a close resemblance to one another in the morphological characters of the floral parts is known as– **Genus**
- Genus represents– **Group of related species of plants or animals**
- Linnaeus put similar species into a larger group called the– **Genus**
- In a taxonomic hierarchy, genus is interprolated between– **Family and species**
- The taxonomic category below the level of family is– **Genus**
- Potato, Tobacco, Brinjal, Mango belong to many genera– **3**

1.6 FAMILY

- The common characteristics between tomato and potato will be maximum at the level of their– **family**
- 'Suffixes' used for units of classification in plants indicates a taxonomic category of 'family'– **Aceae**
- The suffix - 'oideae' is used for– **Subfamily**
- Less general in characters as compared to genus– **Family**
- The taxonomic category below the level of family is– **Genus**
- The species (man, housefly, mango, wheat, dog, cat, lion, tiger, potato, brinjal, makoi and leopard) given here belong to different families– **7**
- In taxonomical hierarchy, the category below the level of order is– **Family**
- Family and order of *Triticum aestivum* (wheat) are– **Poaceae, Poales**
- Family - order - class of *Musca domestica* (housefly) are respectively – **Muscidae-Diptera-Insecta**
- Family of man (*Homo sapiens*) is– **Hominidae**
- Wheat belongs to family– **Poaceae**
- In a taxonomic hierarchy, family is interpolated between – **Order and genus**

1.7 ORDER AND CLASS

- Taxonomic categories contains organisms least similar to one another– **Class**
- A group of related families which exhibit a few similar characters is best defined as - **Order**
- In a taxonomic hierarchy, family is interpolated between– **Order and genus**
- Animals are classified into hierarchical groups, the largest number of species is found– **Class**
- 'Aves' taxonomically represent a– **Class**
- Taxonomic categories includes all the others– **Order**
- The name of a plant order ends with– **Ales**
- In ..... order, will you place gorilla– **Primata**
- Taxonomic categories includes one or more related orders– **Class**
- Two organisms are present in the same class but not in the same family. They may belong to same– **Order**
- Order polymoniales include– **Convolvulaceae, Solanaceae**
- Carnivora includes– **Canidae, Felidae**
- Order polymoniales is based on– **Floral character**
- Diptera is the order of– **Housefly**
- Dicotyledonae is the class of– **Mango**
- When organisms are in the same class but not in same family, the taxonomic term is called as– **Order**
- The category that includes related order is– **Class**
- In taxonomical hierarchy, class is interpolated between– **Phylum and order**

1.8 PHYLUM

- House fly belongs to– **Phylum - Arthropoda**
- Two animals belong to the same kingdom but different classes. They may belong to the same– **Phylum**
- In case of plants, classes with a few similar characters are assigned to a higher category called– **Division**
- Based on the common features, fishes, amphibians, reptiles, birds are included in– **Chordata**

1.9 HERBARIUM

- Taxonomic aids for preservation of plant specimens and conservation of plants respectively are– **Herbarium, Botanical garden**
- The taxonomic unit 'Phylum' in the classification of animals is equivalent to ..... hierarchial level in classification of plants– **Division**
- Quick referral system in taxonomical studies– **Herbarium**
- Two animals belong to the same kingdom but different classes. They may belong to the same– **Phylum**

- The herbarium sheets carry a label providing information about– **Botanical name, Collector's name, Date and Place of collection**
- Indian Botanical Garden and the National Botanical Research Institute are located respectively at– **Howrah and Lucknow**
- Collection of plants that usually have been dried, pressed and preserved on sheets is called– **Herbarium**
- The quick referral system in taxonomic studies is– **Herbarium**
- In which of the taxonomical aid, the specimens become a store house or repository for future use– **Herbarium**
- Plant preservation centers in which the collected plants are preserved as dry specimens, according to any recognised system of classification is called– **Herbarium**

1.10 BOTANICAL GARDEN AND MUSEUM

- Insects are preserved in insect boxes after– **Collecting - Killing - Pinning**
- The famous Botanical Garden is– **Botanical Garden at Kew, Indian botanical Garden, Howrah, National Botanical Research Institute, Lucknow**
- Plant species in botanical gardens are labeled to indicate– **Botanical name and family**
- In museums specimens are preserved in the containers having– **Preservative solutions**
- National Botanical Research Institute located in– **Lucknow**
- Larger animals like birds and mammals are usually stuffed and preserved in– **Museum**
- The collection of preserved plants and animals for study and reference is called– **Museum**
- Museums are known to preserve– **Insects, Larger animals, Skeleton of animals**

1.11 ZOOLOGICAL PARKS

- Collection of preserved plant and animal specimens for study and reference– **Museums**
- Collection of living plants for reference– **Botanical gardens**
- Botanical gardens and zoological parks have– **Collection of endemic and exotic living species**
- Wild animals are kept in protected environment in– **Zoological parks**
- The purpose of zoological parks is– **To entertain the public, To learn their food habits and behaviour**
- Zoological parks have collection of– **Skeletons of animals, Dry plant specimens, Birds and mammals**
- Children love visiting these places, commonly called as– **Zoos**

1.12 KEYS AND OTHER TAXONOMICAL AIDS

- Most names in biological nomenclature of living organisms are taken from _____ language– **Latin**
- The places were wild animals are kept in protected environments under human care– **Zoological Parks**
- Key is called– **Lead**
- Identification of names of species found in an area **-Manuals**
- The recorded description contain information taxon is called– **Monographs**
- A taxonomical aid used for identification of plants and animals based on the similarities and dissimilarities is called– **Key**

1.13 MISCELLANEOUS

- The scientific name of dog is– **Canis familiaris**
- 'Suffixes' used for units of classification in plants indicates a taxonomic category of 'family'– **Aceae**
- As we go from species to kingdom in a taxonomic hierarchy, the number of common characteristics– **Will decrease**
- 'Suffixes' used for units of classification in plants indicates a taxonomic category of 'family'– **Aceae**
- The term 'systematics' refers to – **Diversity of kinds of organisms and their relationship**
- Genus represents– **Group of closely related species of plants or animals**
- The taxonomic unit 'Phylum' in the classification of animals is equivalent to hierarchical level in classification of plants– **Division**
- Botanical gardens and Zoological parks have– **Collection of endemic and exotic living species**
- Taxonomic key is one of the taxonomic tools in the identification and classification of plants and animals. It is used in the preparation of – **Monographs, Flora**
- All living organisms are linked to one another because– **They share common genetic material but to varying degrees**
- In the taxonomic categories, hierarchial arrangement in ascending order is correct in case of animals– **Kingdom, Phylum, Class, Order, Family, Genus, Species**
- Family Muscidae belongs to– **Housefly**
- Correct written scientific name of Mango which was first described by Carolus Linnaeus– **Mangifera indica Linn**

EXAM POINT

Defining Properties of Living Organism	
Pheromones are– **Used for animal communication**	**Rajasthan PMT-2009 Punjab MET-2009 UP CPMT-2009, AMU-2002**
The difference between holophytic nutrition and holozoic nutrition is– **Holophytic is autotrophic nutrition, while holozoic is ingestion of solid organic food**	**TS EAMCET-10.08.2021 Shift-I**
The technically complicated feature of all living organisms– **Metabolism and Consciousness**	**AP EAMCET-05.10.2021 Shift-I**
Metabolism, replication and homeostasis are the main characteristics of– **Living organisms**	**AMU-1997**
The type of nutrition where organisms engulf food materials is– **Holozoic**	**Kerala PMT-2009**
During endocytosis– **The cell engulfs and internalises materials using its membrane**	**Karnataka CET-2009**
The living organisms can be unexceptionally distinguished from the non-living things on the basis of their ability for– **Interaction with the environment and progressive evolution**	**AIPMT-2007**
Biological organization starts with– **Submicroscopic molecular level**	**AIPMT-2007**
Many elements are found in living organisms either free or in form of compounds. One of the following is negligible is living organisms– **Silicon**	**JIPMER-2014**
On the basis of nutritionally wild type organism, which does not require any additional growth supplement is known as– **Prototroph**	**CMC Ludhiana-2009 AIPMT-2004**
Ants locate sucrose by– **Physical contact with sucrose**	**KVPY (SA)-2010**
Pheromones when secreted upon the skin surface, its odour generally affects– **mutual behaviour of members of a species**	**JCECE-2002**
Divergence in the living world	
Reason of diversity in living beings is– **long term evolutionary change**	**Manipal-2013 BHU PMT (Screening)-2010**
The first organisms to appear on earth were– **chemoheterotrophs**	**AMU-1997**
The book Micrographia was written by– **Robert Hooke**	**BCECE-2002**
Philosophic Zoologique was written by– **Lamarck**	**BCECE-2003, UP CPMT-2001**
Organisms which obtain energy by the oxidation of reduced inorganic compounds are called– **Chemoautotrophs**	**AIPMT-2002**
Out of 1.7 million species of living organisms known to us, insects contributes to about– **0.7 million species**	**CMC Vellore-2012**
In vedic times, living organisms were classified into following number of classes– **3**	**BCECE-2015**
Morphology categories Taxonomic categories	
The basic unit of classification is– **species**	**J&K CET-2013, JIPMER-2011 BVP-2009,2010 Uttarakhand PMT-2009 J&K CET-2011 VMMC-2009 J&K CET-2008, CG PMT-2007 AIPMT-2003, AIIMS-1990,2000 Rajasthan PMT-1996,1997**
The term taxonomy was coined by– A.P. **De Candolle**	**Tripura JEE-2018 J&K CET-2011, BVP-2010**
Taxon is the unit of– **Taxonomy**	**J&K CET-2013 BHU PMT-2002 Haryana PMT-2000 AIPMT-1996**
A group of plants or animals with similar traits of any rank is– **Taxon**	**BVP-2012 MGIMS Wardha-2007 AIPMT-1992, 1991**
Species is a– **Closely related interbreeding population**	**Manipal-2012, 2011 AFMC-2002**

A taxon is– **A taxonomic group of any ranking**	**VMMC-2014, CG PMT-2007 DUMET-2006 Rajasthan PMT-2001 AIPMT-1992,1990**
Biological concept of species is mainly based on– **Reproductive isolation**	**HP CET-2012 Rajasthan PMT-2008 UP CPMT-2008**
Potato and Brinjal differ in this taxon– **Species**	**AP EAPCET-11.05.2023, Shift-II**
Theory and practice of identification, nomenclature and classification of organisms is called– **Taxonomy**	**TS EAMCET-30.07.2022 Shift-I**
A group of individual organisms with fundamental similarities is called as– **Species**	**AP EAPCET-11.07.2022 Shift-I**
The hierarchical arrangement of taxonomic categories in descending order is– **Kingdom, phylum, class, order, family, genus, species**	**NEET-2022 AMU-2012**
Taxon 'tigris' represents– **Species**	**AP EAMCET-03.09.2021 Shift-II**
Among all the kingdoms, the only taxon that exists in nature as a biologically cohesive unit is the– **Species**	**AP EAMCET-03.09.2021 Shift-II**
In the hierarchy of classification, the lowest obligatory category in five kingdom classification is– **Species**	**TS EAMCET-29.09.2020 Shift-II**
Highest unit of classification– **Kingdom**	**MHT CET 5.10.2020 Shift-I CG PMT-2006**
The Study of external features is called as– **Morphology**	**AP EAMCET-24.09.2020 Shift-II**
Classical Taxonomy is based on– **Morphological Characters**	**AIIMS-2017**
The smallest unit of classification is– **Species**	**VMMC-2011, JIPMER-1997**
Branch of biology dealing with study of organism in outer space is– **Exobiology**	**DUMET-2007**
Scientific study of diversity of organisms and their evolutionary relationships is– **Systematics**	**J&K CET-2011**
The term phylum was given by– **Ernst Haeckel**	**MGIMS Wardha-2013 AIPMT-1992**
Interbreeding population of animals is called– **Species**	**MGIMS Wardha-2003**
Ambulacral grooves are absent in the living forms of the class– **Ophiuroidea**	**Punjab MET-1999**
Phenetic classification is based, on– **Observable characteristics of existing organisms**	**Manipal-2012**
A group of related genera, with still less number of similarities as compared to the genus and species constitutes– **Family**	**DUMET-2010**
The total number of species, that are known and described range between– **1.7 - 1.8 million**	**DUMET-2010**
Taxa differs from taxon due to this being– **The plural of taxon**	**DUMET-2010**
The number of species classified in Species Plantarum– **5900**	**DUMET-2008**
The class Amphineura belongs to– **Chiton**	**Uttarakhand PMT-2004**
Class is the category of taxonomy which includes related– **Orders**	**J&K CET-2014**
The concept of "biological species" was proposed by– **Ernst Mayr**	**AMU -2000**
The taxonomist described classification of plant kingdom in "Families flowering plants"– **Hutchinson**	**MGIMS Wardha-2004**
Cladistics can be best defined as– **Method of classification that attempt to interfere phylogenetic relationship**	**AMU-2006**
If a botanist want to study nomenclature of a similar species, the scientist will study- **Isotype**	**JIPMER-2001**
The word species was coined by– **John Ray**	**J&K CET-2015**
The set of 'species' names belong to same genus– **Histolytica and coli**	**JIPMER-1996 Haryana PMT-1999**
A species is a collection of demes. The deme is a group of– **Population with a common gene pool**	**BHU PMT (Screening)-2011**

Taxonomic hierarchy refers to– **Stepwise arrangement of all categories for classification of plants and animal**	**Haryana PMT-2003 DUMET-2009,2011**
Principles and rules of classification are studied under– **Taxonomy**	**Haryana PMT-2003**
The taxonomical ranks contain organisms least similar to one another– **Kingdom**	**CG PMT-2010, BCECE-2009 AP EAMCET-1997**
Taxonomy is the branch of science which deals with– **Identification, Nomenclature and Classification**	**CMC Ludhiana -2013**
Polytypic species are those which– **Contains two or more sub-species**	**CMC Ludhiana-2015**
It is true for individuals of same species– **Interbreeding**	**AIPMT-2002**
Phenetic classification of organisms is based on– **Observable characteristics of existing organisms**	**AIPMT-2004**
In Whittaker's system of classification, prokaryotes belong to the kingdom– **Monera**	**JIPMER-2010**
A species with several subspecies is called a– **Polytypic species**	**AMU-1995**
In which kingdom would you classify the archaea and nitrogen-fixing organism, if the five-kingdom system of classification is used– **Monera**	**AIPMT-2003**
In five kingdom system, the main basis of classification is– **Mode of nutrition**	**AIPMT-2002**
Species can be identified on the basis of– **Reproductive isolation**	**JIPMER-2008**
The taxon which includes related species is– **Genus**	**AIIMS-2010**
Static concept of species was put forward by– **Carolus Linnaeus**	**AIPMT-1988**
A species defined as "the group of actually or potentially inter-breeding natural population producing fertile offspring and reproductive isolated from other groups" The above statement is given by– **Mayr**	**CG PMT-2005**
The highest in the hierarchy of taxonomic category– **Kingdom**	**BCECE-2015**
The taxonomic term may be suggested for any rank in the classification– **Taxon**	**Karnataka CET-2013**
The highest number of species in the world is represented by **Fungi**	**AMU-2014**
Humans belong to the family– **Hominidae**	**J&K CET-2010**
The biological definition of a species depends on– **Reproductive isolation of two groups of organisms**	**BCECE-2012**
The framework system of classification in which various taxonomic categories are arranged in order of logical sequence is called– **Hierarchy**	**J&K CET-2011**
The organization publishes the Red Data Book is– **IUCN**	**NEET (Karnataka)-2013**
The common characteristics between tomato and potato will be maximum at the level of their– **Family**	**NEET (Karnataka)-2013**
Practical purpose of taxonomy or classification– **Facilitate the identification of unknown species**	**AIPMT-1999**
The less general in characters as compared to genus– **Species**	**BHU PMT (Screening)-2010 AIPMT-2001**
The only taxonomic category that has a real existence– **Species**	**Karnataka CET-2006**
The concept of genus was proposed by– **Tournefort**	**AMU-2003**
The type specimen used by the author in the original publication is known as– **Holotype**	**BVP-2006**
Taxonomical Aids	
The taxonomic hierarchy contains organisms belonging to the same class but not to the same family is– **Order**	**AP EAPCET-11.05.2023, Shift-I**
The taxonomical aid used for identification of organisms based both similarities and differences is– **Key**	**AP EAMCET-25.09.2020 Shift-II Kerala PMT-2012**
The contrasting characteristics generally in a pair used for identification of animals in Taxonomic Key are referred to as– **Couplet**	**NEET (Odisha)-2019**
Taxonomic key is one of the taxonomic tools in the identification and classification of plants and animals. It is used in the preparation of– **Monographs and Flora**	**JIPMER-2017**
Scientific names of plants are based on principles criteria agreed by and are given in– **ICBN**	**J&K CET-2014**

The Father of Taxonomy is regarded as– **Carolus Linnaeus**	**WB JEE-2012** **Rajasthan PMT-1995**
Herbarium sheets are arranged according to the system of classification and should have information about– **Date and place of collection, English, local and botanical names, family, collectors name**	**J&K CET-2014**
Study of preservation of dead organism in liquid by chemical method is called– **Urobiology**	**JIPMER-1995**
The Imperial Forest Research Institute (IFRI) established in 1906 changed its name to– **FRI**	**CMC Ludhiana-2014**
The correct sequence of Man, taxonomically starting from super-family to sub-family is– **Hominoidea, Hominidae, Homininae**	**TS EAMCET-2015**
The taxonomic aids can give comprehensive account of complete compiled information of any genus or family at a particular time– **Monograph**	**Kerala PMT-2009**
The label of a herbarium sheet does not carry information on– **Height of the plant**	**NEET-2016 Phase-II**
The most important function of botanical gardens is that– **They allow ex situ conservation of germplasm**	**Uttarakhand PMT-2010** **JIPMER-2007**
The pesticide that is used in the preparation of herbarium is– **Mercuric chloride**	**J&K CET-2010**
A major break through in the studies of cells came with the development of electron microscope. This is because– **The resolution power of the electron microscope is much higher than that of the light microscope**	**BCECE-2013**
A student wishes to study the cell structure under a light microscope having 10X eyepiece and 45X objective. He should illuminate the object by which one of the following colours of light so as to get the best possible resolution– **Blue**	**JIPMER-2007**
A collection of plants and seeds having diverse alleles of all the genes of a crop is called– **Germplasm**	**AIPMT (Screening)-2011**
Science, which deals with the study of ageing is knows as– **Gerontology**	**CG PMT-2009**
The study of relationship between size and shape is called– **Allometry**	**Uttarakhand PMT-2008**
The national institute encourages the publication of flora of different regions of India is– **Botanical survey of India (BSI)**	**AP EAMCET-2001**
The vital stain is a– **Methylene blue, Janus green and Neutral red**	**Haryana PMT-2011**
The electron microscope is invented by– **Knoll and Ruska**	**AIIMS-2010, DUMET-2002** **Rajasthan PMT-2001**
The crystal of lead zirconate is a key component of– **Sonography**	**WB JEE-2007**
The kind of microscopy uses acridine orange– **Fluorescence**	**BCECE-2015**
It is generally used for creating density gradient during centrifugation– **CsCl**	**BCECE-2015**
The biggest herbarium of India is situated in– **Calcutta**	**Rajasthan PMT-1996, 1995**
Binomial Nomenclature	
Binomial system of nomenclature was given by– **Linnaeus**	**Karnataka CET-2022** **Tripura JEE-2021, 2017** **AP EAMCET-05.10.2021 Shift-I** **MHT CET 5.10.2020 Shift-I** **VMMC-2012** **UP CPMT-2012, 2008** **AFMC-2010, CMC Vellore-2010** **J&K CET-2010, 2000** **AMU-2009, 2003** **Rajasthan PMT-2008, 2003, 1998** **Punjab MET-2008, 1999** **BHU-PMT (Screening)-2008, 2006** **MGIMS Wardha-2008** **CG PMT-2008, DUMET-2004** **Manipal-2002, AIIMS-2000**
ICBN stands for– **International Code for Botanical Nomenclature**	**AMU-2014, AIPMT-2007** **BVP-2004, DUMET-2003**
'X' and 'Y' are the components of Binomial nomenclature. This naming system was proposed by 'Z'–**X-Generic name, Y-Specific epithet, Z-Carolus Linnaeus**	**RE-NEET (UG)-06.06.2023 (Manipur)**
ICZN is– **International code of Zoological Nomenclature**	**AP EAMCET-03.09.2021 Shift-I**

The third name in trinomial nomenclature is– **Sub species**	**AP EAPCET-07.09.2021 Shift-I**
In Binomial nomenclature, the name of the author– **It is written in an abbreviated form**	**AP EAMCET-25.09.2020 Shift-II**
The scientific name of Mango which was first described by Carolus Linnaeus– **Mangifera indica Linn.**	**NEET-2019**
Tautonym is– **Same name for genus and species**	**CMC Ludhiana-2012 Haryana PMT-2003**
The scientific or botanical name of Asafoetida (Hing) is– ***Ferula asafoetida***	**MGIMS Wardha-2013**
Universal rules of nomenclature is wrong regarding– **Biological names are generally in Greek and written in italics**	**MGIMS Wardha-2013**
The scientific name of Asian tiger mosquito– ***Aedes albopictus***	**WB JEE-2009**
Scientific name of sunflower is– ***Helianthus annuus***	**WB JEE-2009**
The zoological name of North Indian hare is– ***Lepus nigricollis***	**UP CPMT-2004**
A social foresting species is– ***Leucaena leucocephala***	**Punjab MET-1999**
Botanical name of Chili is– ***Capsicum annum***	**Rajasthan PMT-1996**
The botanical name of cauliflower is– ***Brassica oleracea var. botrytis***	**AMU -2000**
In zoological nomenclature the sub-species is represented by– **Trinomen**	**AP EAMCET-2001 AMU-1999, JIPMER-1997**
Scientific name of king cobra is– ***Ophiophagus hannah***	**J&K CET-2006**
Zoological name of common Indian krait is– ***Bungarus caeruleus***	**AMU-2009 Punjab MET-2008**
The generic epithet for the species epithet 'Santalinus' is– **Pterocarpus**	**AP EAMCET-1997**
Indian rose wood tree is a common name of– **Dalbergia sissoo**	**Uttarakhand PMT-2008**
One of the recently introduced new crop of oil seed in the deserts of India is Jojoba . The correct botanical name of this plant is– ***Simmondsia chinensis***	**AMU-1996**
Ragi is– ***Eleusine coracana***	**BCECE-2003**
Botanical name of 'chana' is– ***Cicer arietinum***	**JIPMER-2010**
Thalamiflorae, Calyciflorae and Disciflorae are series of– **Polypetalae**	**Uttarakhand PMT-2011**
The botanical name of soyabean is– ***Glycine max***	**Kerala PMT-2008**
Systema Naturae was written by– **Linnaeus**	**JIPMER-2008**
Botanical name of arhu (peach) is– ***Prunus persica***	**Uttarakhand PMT-2006**
The classification of organisms based on their evolutionary history and establishing their phylogeny on the totality of various parameters from all fields of studies– **Biosystematics**	**AIPMT-2003**
The correct scientific name of wheat derived by binominal nomenclature is– ***Triticum aestivum***	**AIIMS-2016**
The term "New Systematics" was introduced by– **Julian Huxley**	**AIPMT-1988**
When the specific epithet exactly repeats, generic name. It is called as–**Tautonym**	**Punjab MET-2007**
Who gave the nomenclature according to which humans are called Homo sapiens– **Linnaeus**	**BCECE-2015**
Binomial nomenclature means– **Two word names, the first indicates genus, and other species**	**AMU-2014**
Oryza sativa is the binomial name of the rice plant, the sativa stands for– **Specific epithet**	**WB JEE-2008**
Nomenclature is governed by certain universal rules. The contrary to the rules of nomenclature is– **Biological names can be written in any language**	**NEET-2016 Phase-I**
The scientific name of Kashmiri stag is– ***Cervus elaphus hanglu***	**AP EAMCET-2010**
The correct method of showing scientific name of coconut palm derived by binomial nomenclature is– ***Cocos nucifera***	**Karnataka CET-2012**
The scientific name of zebu is– **Bos indicus**	**Karnataka CET-2004**
Predictive generalisation or repeatable experimentation is not based on– **Hypothesis**	**UP CPMT-2011**
In biosystematics, the basis of classification is– **Evolutionary history considering various parameters from different fields of studies**	**MGIMS Wardha-2015**

02.

BIOLOGICAL CLASSIFICATION

2.1 CLASSIFICATION

- The most common method of reproduction in bacteria– **Binary fission**
- The vast majority of bacteria are– **Heterotrophs**
- Archaebacteria differ from other bacteria in having different– **Cell wall structure**
- Aristotle divided animals into two groups on the basis of– **Presence and absence of red blood**
- Contagium vivum fluidum was proposed by– **M. W. Beijerinck**
- The five kingdom classification was proposed by– **R. H. Whittaker**
- Mycoplasmas are classified under kingdoms of– **Monera**
- In five-kingdom classification system, the kingdom that includes the blue-green algae, nitrogen-fixing bacteria and methanogenic archaebacteria is– **Monera**
- Two classification system was a kingdom system of classification proposed by - **Linnaeus**
- The characters served as the criteria for five kingdom system of classification as used by R.H. Whittaker– **Cell structure & thallus organisation, Mode of nutrition and reproduction, Phylogenetic relationships**
- In Whittaker's five kingdom system of classification, eukaryotes are distributed among– **Four kingdoms**
- According to Whittaker, basis of classification is/are– **Cell structure, Mode of reproduction, Phylogenetic relationship and nutrition**
- Extensive metabolic diversity shows– **Bacteria**
- Whittaker's classification is not mentioned– **Virus, Viroids, Lichens**
- Four kingdom system of classification was proposed by– **Copeland**
- Two Kingdom system of classification was developed by – **Linnaeus**
- Cell wall of fungi is made up of– **Chitin**
- Whittaker is famous for – **Five kingdom classification**
- Which characteristic placed the fungi in a separate kingdom– **Cell wall composition**
- Methanogens are present in the– **Gut of cow**
- Cyanobacteria are– **Photosynthetic prokaryotes**
- Bacteria reproduces by– **Fission, Asexual reproduction (spore formation), Sexual reproduction (DNA transfer)**
- Harsh habitat found in– **Archaebacteria**
- Bacteria found in hot springs are– **Thermoacidophiles**
- The pigment present in cyanobacteria– **Chlorophyll a**
- Colonies of Eubacteria are surrounded by– **Gelatinous sheath**
- Most abundant in nature bacteria are– **Heterotrophic bacteria**
- Rod shaped bacterium is called– **Bacillus**
- Majority of heterotrophic bacteria are– **Decomposers**
- Sole member of kingdom monera are– **Bacteria**
- Which bacteria oxidise various inorganic substances such as nitrates, nitrites and ammonia and use the released energy for their ATP production– **Chemosynthetic autotrophs**
- Which types of bacteria play a great role in recycling nutrients– **Chemosynthetic autotrophic bacteria**
- Bacteria whose cell has only a curve/comma is– **Vibrio**
- Cyanobacteria are called blue green algae because– **They have chlorophyll pigment**
- The conditions which would be favoured by thermoacidophiles are– **Hot and sulphur spring**
- Most abundant microorganisms are– **Bacteria**
- Which of the following are caused by bacteria– **Cholera, Typhoid, Tetanus**
- Which bacteria would function best in hot temperatures (45-60^{0}C)– **Thermoacidophiles**
- Specialized cells for fixing atmospheric nitrogen in Nostoc and Anabaena are– **Heterocyst**
- Currently bacteria are included in– **Monera**
- During unfavourable conditions, bacteria produce– **Spores**
- The organisms that completely lack a cell wall– **Mycoplasma**
- Archaebacteria can survive in extreme conditions because of the– **Rigid cell wall**

- Characterised by the presence of a rigid cell wall are– **Eubacteria**
- The smallest organisms which cause diseases among plants are– **Mycoplasma**
- Heterocysts, specialised for nitrogen fixation, occur in certain– **Blue-green algae (Anabaena)**
- Temperature tolerance of archaebacteria is due to– **Cell wall structure**
- Name the organisms which do not derive energy directly or indirectly from sun– **Chemosynthetic bacteria**
- PPLO is– **Mycoplasma**

2.2 PROTISTA

- Protist used for the construction of sound proof rooms is– **Diatoms**
- Chlamydomonas and Chlorella are now included under– **Protista (Green algae)**
- Naked cytoplasm, mutinucleated and saprophytic are the characteristics of– **Slime moulds**
- All eukaryotic unicellular organisms belong to– **Protista**
- The multinucleate slimy mass of protoplasm ..... forms the body of slime moulds is called– **Plasmodium**
- Combinations of characters is true for slime moulds– **Saprophytic, Plasmodium without walls, spores dispersed by air currents**
- ..... is a flagellated protozoan that causes the disease..... **Trypanosoma gambiense, sleeping sickness**
- Causal organisms of malaria belong to the groups of protozoan protists is– **Sporozoans**
- Ciliated protozoan is– **Paramecium caudatum**
- Kingdom, has no well defined boundaries– **Protista**
- Organism have been placed under Kingdom Protista– **Chrysophytes & dinoflagellates, Euglenoids, Slime moulds & protozoans**
- Members of Kingdom Protista are primarily– **Aquatic**
- The Kingdom Protista forms a link with Kingdom– **Plantae, Fungi, Animalia**
- Chief producers in oceans are– **Diatoms**
- Red tides are caused by– **Dinoflagellates**
- Most of them have two flagella; one lies longitudinally and the other transversely in a furrow between the wall plates. Here we are talking about– **Gonyaulax group**
- Diatomaceous earth is the deposition of cell wall in their habitat by diatoms takes over– **Billions of years**
- The spores of slime mould are dispersed by– **Air currents**
- Protists include– **Chrysophytes, euglenoids and dinoflagellates**
- Which organism behaves like plants in the presence of light and absence of organic food, but in reverse conditions behaves like animals– **Euglena**
- Euglena belongs to which of the following kingdom– **Protista**
- The most notorious sporozoan, Plasmodium, is responsible for causing– **Malaria**
- The cell walls form two thin overlapping shells in which group of organisms such that they fit together– **Chrysophytes**
- Red tide is– **Colouration of water due to rapid multiplication of red dinoflagellates**
- Unlike other algae, diatoms do not readily decay due to– **Siliceous wall**
- Diatoms belong to– **Chrysophytes**
- In which of the following kingdoms some members have cell wall and some are without cell wall– **Protista**
- During unfavourable conditions, slime moulds– **From fruiting bodies bearing spores at their tips**
- Organisms were never included in protista– **Mosses**
- Cell wall of diatoms are composed with– **Silica**
- Decomposer protists are– **Slime moulds**
- A dinoflagellate which forms red tide– **Gonyaulax**
- In Dinoflagellates, the two flagella are– **One transverse and the other longitudinal**
- A protein rich layer which makes the body of euglenoids flexible is called– **Pellicle**
- During unfavourable conditions, the plasmodium differentiates to form fruiting bodies bearing spores at their tips. This group is– **Slime moulds**
- The photosynthetic protists are– **Euglenoids, Diatoms and Dinoflagellates**
- Protista contains– **Amoeba, Paramoecium and Dinoflagellates**
- The marine organisms responsible for killing fishes by producing toxins belong to the kingdom of Whittaker– **Protista**

2.3 FUNGI

- Morels and Agaricus have edible fruiting bodies and belong to their respective class as– **Ascomycetes and Basidimycetes**
- Neurospora and Claviceps differ from Mucor and Albugo in– **Presence of cross walls in their hyphae**
- Alternaria and Colletotrichum commonly reproduced by– **Asexual Spores (Conidia)**
- An association between roots of higher plants and fungi is– **Mycorrhiza**
- The origin of asexual spore and sexual spores produced in members of ascomycetes respectively– **Exogenous, Endogenous**
- With respect to the fungal sexual cycle, the correct sequence of events– **Plasmogamy, karyogamy and meiosis**
- The fungi growing on dung are called– **Coprophilous**
- Absence of sexual reproduction– **Deuteromycetes(Imperfect fungi)**
- Important Fungus for making bread is – **Saccharomyces**
- Extensively used in biochemical and genetic work– **Neurospora (Ascomycetes)**
- Yeast belongs to– **Ascomycetes**
- Fungi is a parasite on mustard plant and causes the disease white rust of crucifers– **Albugo candida**
- Fusion of two motile gametes which are dissimilar in size is termed as– **Anisogamy**
- Fusion between morphologically alike gametes is referred to as– **Isogamy**
- Fusion of two gametes, ... are dissimilar in size is termed as– **Oogamy, Anisogamy**
- Respect to the fungal sexual cycle, the correct sequence of events is– **Plasmogamy, Karyogamy and meiosis**
- Eukaryotic achlorophyllous and heterotrophic organisms are grouped under kingdoms– **Fungi**
- Coenocytic mycelium is– **Multinucleate, aseptate**
- Main component of the cell wall of fungi is– **Chitin**
- Fungi shows asexual reproduction by all of the kinds of spores except– **Oospores**
- Sexual reproduction in fungi occurs by all of the except– **Zoospores**
- Dikaryophase is a specific characteristic of– **Ascomycetes and Basidiomycetes**
- Classes of Kingdom Fungi are characterised by the presence of coenocytic, multinucleate and aseptate mycelium– **Phycomycetes**
- Fungi lacking crosswalls in the mycelium belong to class– **Phycomycetes**
- The wonder drug, penicillin is extracted from Penicillium that belongs to– **Ascomycetes**
- In Penicillium, the asexual reproduction takes place by– **Conidiospores**
- A common character found in a ascomycetes member, deuteromycetes member and basidiomycetes member studied by you is– **Branched, septate mycelium**
- Coenocytic hyphae is found in– **Rhizopus, Mucor, Albugo**
- The members of litter decomposers are– **Deuteromycetes**
- Fungi differ from algae in being mostly– **Heterotrophic**
- Protists survive in– **Aquatic regions**
- An edible fungus is– **Morels**
- Truffles are the member of class– **Ascomycetes**
- Bracket fungi (Polyporus) belongs to the class– **Basidiomycetes**
- Fruiting body formation during sexual reproduction is observed in– **Ascomycetes and Basidiomycetes**
- Group of fungi lack sexual reproduction– **Deuteromycetes**
- Asexual spore in fungi is– **Conidia**
- Comprises of animal like protists– **Protozoans**

2.4 KINGDOM PLANTAE AND ANIMALIA

- The smallest living cells, known without a definite cell wall, pathogenic to plants as well as animals and can survive without oxygen– **Mycoplasma**
- Archaebacteria differ from eubacteria in– **Cell membrane structure**
- Ciliates differ from all other protozoans in– **Having two types of nuclei**
- ..... is not a plant like protist– **Slime mould**
- Members of Phycomycetes are found in– **Aquatic habitats, On decaying wood, Moist and damp places, As obligate parasites on plants**
- An association between roots of higher plants and fungi is called– **Mycorrhiza**
- When the two haploid cells do not fuse immediately, it formed - **A dikaryon**
- Organisms living in salty areas are called as– **Halophiles**

- Insectivorous plants is– **Venus fly trap bladderwort**
- Kingdom Plantae includes– **Algae and bryophytes, Pteridophytes and gymnosperms, angiosperms**
- Character of plants only– **Cellulosic cell wall**
- The major difference between plant cell and an animal cell– **Cell wall**
- The phenomenon of alternation of generation is found in– **Kingdom Plantae**
- Life cycle of plants has two distinct phases namely– **Diploid sporophytic and haploid gametophytic phase**
- Insectivorous plants examples– **Bladderwort, Venus fly trap**
- Kingdom Animalia is characterized by– **Multicellular, eukaryotic and heterotrophic**
- Kingdom Animalia is– **Their mode of nutrition is holozoic**

2.5 VIRUS, VIROIDS AND LICHENS

- Prions are– **Proteinaceous infectious particle**
- It protects the nucleic acid from ribonuclease enzyme in tobacco mosaic virus (TMV) - **Capsomeres**
- Prions have only– **Protein coat and no nucleic acid**
- Extreme saline conditions found in– **Archaebacteria**
- The pair that consists of viral diseases is– **Mumps & small pox, Herpes & influenza**
- Viruses that infect bacterium are known as– **Bacteriophages**
- Virus could be crystallized and crystals consist largely of proteins. This was shown by– **W. M. Stanley**
- Viruses are – **Obligative parasite**
- Those viruses infect plants have which type of genetic material– **Single stranded RNA**
- Viruses that infect animals have which type of genetic material– **Either single/double stranded RNA or double stranded DNA**
- Genetic material of bacteriophage– **Double stranded DNA**
- Viroid was discovered by– **T. O. Diener**
- The fungal portion in Lichens is known as– **Mycobiont**
- Protein coat of virus is called– **capsid**
- In TMV, capsomeres are arranged in– **Helical manner**
- Crystallized and isolated viruses for the first time– **WM Stanley**
- Viruses are essentially made up of– **Proteins and nucleic acid**
- Lichens are indicators of pollution because– **They don't grow in polluted regions**
- Viroids differ from viruses in being– **Naked RNA molecules only**
- Neither prokaryotes nor eukaryotes among– **Virus**
- Viral genome is– **Either DNA or RNA**
- Acellular organisms called– **Viruses and viroids**
- Prepare food in lichens– **Phycobiont**
- Potato Spindle Tuber disease is caused due to– **Viroid**
- The most notable disease(s) caused by prions is/are– **Bovine spongiform encephalopathy, Mad cow disease in cattle, Cr–Jacob disease (CJD) in humans**
- There exists a close relationship between alga and fungus within a lichen. The fungus– **Provides protection, Anchorage and absorption for the algae**

2.6 MISCELLANEOUS

- Infectious agents which posses low molecular weight genetic material lacks– **Peplomers**
- Smallest living cells are– **Pathogenic both to plants and animals**
- Phylogenetic classification systems– **Are based on evolutionary relationship**
- ..... are important decomposers that cause decay and decomposition of dead bodies of plants and animals– **Saprophytic bacteria**
- The pair that consists of plant or animal bacterial diseases– **Citrus canker and tetanus**
- All eukaryotic unicellular organisms belong to – **Protista**
- The five kingdom classification was proposed by– **R. H. Whittaker**
- Organisms living in salty areas are called as– **Halophiles**
- Naked cytoplasm, multinucleated and saprophytic are the characteristics of– **Slime moulds**
- A dikaryon is formed when– **The two haploid cells do not fuse immediately**
- Members of phycomycetes are found in– **Aquatic habitats, On decaying wood, Moist and damp places, As obligate parasites on plants**

EXAM POINT

Categorization of Organisms and Kingdom System	
The five-kingdom classification was suggested by– **Whittaker**	**UPCPMT-2011, 2010 J&K CET-2010 / AFMC-2009 AIPMT-2002 / BVP-2001 / AIIMS-1994**
In Whittaker's system of classification, prokaryotes belong to the kingdom of– **Monera**	**J &K CET-2009, 2008 JIPMER-2008 MGIM Wardha-2008 BHU PMT (Screening)-2007**
Bacteria that have specialized cell wall and plasma membrane structures to live and withstand the extreme environmental conditions– **Archaebacteria**	**AP EAPCET-22.05.2023, Shift-II**
Organism is multicellular– **Bacillus**	**TS EAMCET-31.07.2022 Shift-I**
The number of cohorts in calyciflorae and heteromerae of Bentham and Hooker classification respectively are– **5 and 3**	**TS EAMCET-30.07.2022 Shift-I**
Two animals belong to the same kingdom but different classes. They may belong to the same– **Phylum**	**AP EAPCET-07.09.2021 Shift-I**
Identification and arrangement of organisms on the basis of their cytological characteristics is called - **Biosystematics**	**AP EAPCET-07.09.2021 Shift-I**
Engler and Prantl published a phylogenetic system in the monograph– **Die Naturlichen Pflanzen Familien**	**AP EAMCET-2021, Shift-I CMC Vellore-2008**
If the student wants to study the development of zygote, internal structure and function of various pairs to assign the organism to a particular phylum, the student takes the help of following branches– **Development Biology, Anatomy, Physiology and Taxonomy**	**AP EAMCET-03.09.2021 Shift-I**
Multicellular heterotrophs are placed in how many kingdoms by R.H. Whittaker– **2**	**MHT CET-06.10.2020 Shift-I**
The study of different kinds of organisms, their diversities and relationship among them is studies in– **Systematics**	**TS EAMCET-29.09.2020 Shift-II**
The sexual system of classification is proposed by– **Carolus Van Linnaeus**	**AP EAMCET-24.09.2020 Shift-II UPCPMT-2012**
The third kingdom Protista is suggested by– **Haeckel**	**MHT CET-08.10.2020 Shift-I**
Mangifera indica, Solanum tuberosum (potato) and Panthera leo (lion) is regarding– **Mango belongs to Anacardiaceae, Potato belongs to Solanacea and Lion belongs to family Felidae**	**AP EAMCET-25.09.2020 Shift-I**
This pairs was excluded from Whittaker's five kingdom classification– **Viruses and lichens**	**KVPY SB and SX-2019**
Natural system of classification of plant kingdom was proposed by– **Bentham and Hooker**	**Tripura JEE-2018 VMMC-2013**
New Systematics introduced by Sir Julian Huxley is also called as– **Biosystematics**	**Kerala PMT-2008**
It is not a eukaryotic organism– **Anabaena**	**Assam CEE-2014**
'Genera Plantarum' was written by– **Linnaeus**	**AIIMS-1994**
The Phylogenetic System of classification was put forth by– **Adolf Engler and Karl Prantl**	**VMMC-2013 Kerala PMT-2009**
Five kingdom system of classification suggested by R.H. Whittaker is not based on– **Presence or absence of a well defined nucleus**	**AIPMT-2014**
The ascending order to Linnaean hierarchy is– **Species - genus - family - order - class - phylum - kingdom**	**Karnataka CET-2011**
An important criterion for modern day classification is– **Anatomical and physiological traits**	**AIPMT-1991**
Systema Naturae was written by– **Linnaeus**	**JIPMER-2008 DUMET-2008**
Phylogenetic system of classification includes– **Evolutionary trends**	**AIIMS-1995, 2014**
In five kingdom system of classification of RH Whittaker, how many kingdoms contain eukaryotes– **Four kingdoms**	**Punjab MET-2008**
It is not true about prokaryotes– **DNA is complexed with histones**	**DUMET-2006**
Engulfing of food either in solid or liquid is called– **Holozoic nutrition**	**J&K CET-2005**

The book Genera Plantarum was written by– **Bentham and Hooker**	**BVP-2008**
A virus differs from a bacterium as it contains– **DNA or RNA as genetic material with no ribosomes**	**J&K CET-2011**
The Kingdoms-Monera, Protista, Fungi, Plantae and Animalia are distinguished on the basis of– **Type of nutrition, Type of cell and Type of reproduction**	**Haryana PMT-2000**
As per Whittaker's classification, an organism possessing eukaryotic cell structure, multicellular organisation, with a cell wall and nuclear membrane showing heterotrophic nutrition can be placed under the kingdom– **Fungi**	**Kerala PMT-2014**
In the five kingdom system of classification, which single kingdom out of the following can include blue-green algae, nitrogen-fixing bacteria and methanogenic archaebacteria– **Monera**	**Punjab MET-2010**
Phylogenetic system of classification is based on– **Evolutionary relationships**	**AIPMT-2009**
Number of criteria used in classifying organisms in five kingdom classification is– **5**	**AP EAMCET-2011**
Phylogenetic relationship cannot determine by– **Morphology**	**AP EAMCET-2011**
In classification of Carolus Linnaeus, which was not included– **Family and phylum**	**UP CPMT-2014**
Prokaryotic genetic system has– **DNA and no Histone**	**UPCPMT-2002**
Plant cell is differ from animal cell because of– **The presence of cell wall and chlorophyll in plant cell**	**MGIMS Wardha-2003**
Phylogenetic classification is one which is based on– **Common evolutionary descent**	**J&K CET-2014** **AFMC-2000**
Evolutionary history of an organisms is known as– **Phylogeny**	**Manipal-2012**
Which one is a prokaryote– **Streptococcus**	**Manipal-2011**
The method of classification, called cladistics, is based on– **Evolutionary**	**Manipal-2004**
The basic unit of classification of plants and animals is– **Species**	**Uttarakhand-2005** **BHU PMT-2001**
Two kingdoms constantly figured in all biological classifications are– **Plantae and Animalia**	**J&K CET-2008**
Phylogenetic system of classification was supported by– **John Hutchinson**	**Manipal-2000 , JIPMER-1998**
Classification of organisms based on evolutionary as well as genetic relationships is called– **Cladistics**	**DUMET-2010**
Scala naturae was written by– **Aristotle**	**DUMET-2008**
On the basis of body organization, animals are grouped as– **Protozoa and Metazoa**	**CG PMT-2007**
Binomial nomenclature indicates– **Genus and species**	**Uttarakhand-2005**
Hutchinson system of classification is– **Phylogenetic**	**Uttarakhand-2005**
The division of the plant kingdom into prokaryotic and eukaryotic is based on the character is of– **Nucleus, chromosomes and cell organelles**	**Haryana PMT-1999**
In five-kingdom classification, Euglena is placed in– **Protista**	**Rajasthan PMT-2011**
In five kingdom classification of Whittaker, eukaryotes were assigned to– **4 of 5 kingdoms**	**HP CET-2012** **AMU-2009** **Uttarakhand PMT-2004**
In the classification of Whittaker the kingdom Monera include– **Bacteria and cyanobacteria**	**Rajasthan PMT-2000**
The kingdoms-Monera, Protista, Fungi, Plantae and Animalia are distinguished on the basis of– **Type of nutrition, Type of cell and Type of reproduction**	**VMMC-2002**

Monera

Extra circular, double stranded, self-replicating DNA present in a bacteria is known as– **Plasmid**	**AP EAPCET-11.07.2022 Shift-I** **Rajasthan PMT-2007, 2003** **BVP-2005** **JCECE-2004** **AIIMS-1998**
Plasmids are found in– **Bacteria**	**MHT CET-2010** **Rajasthan PMT-2009, 2005, 1996** **Punjab MET-2009** **CMC Vellore-2009** **UP CPMT-2009, 2002** **Manipal-2002** **Karnataka CET-2001**

_____is a bacterium commonly found in the animal and human intestines– **Escherichia coli**	**AP EAMCET-11.07.2022 Shift-II Punjab MET-2011 DUMET-2011**
Wriggling movements of sporozoites are caused by– **Microtubules**	**AP EAPCET-23.05.2023, Shift-II**
Amphitrichous bacteria contains which type of flagella –**Single flagella at each en**	**AP EAPCET-23.05.2023, Shift-II**
DNA of $\phi \times 174$ bacteriophage has– **5386 Nucleotides**	**TS EAMCET-11.05.2023, Shift-II**
The early bacteria synthesized chlorophyll from– **Magnesium porphyrin**	**AP EAPCET-23.05.2023, Shift-I**
The structures of the parent that disappear during binary fission of Euglena and develop a fresh in daughter euglenae– **Stigma paraflagellar body and contractile vacuole**	**AP EAPCET-23.05.2023, Shift-I**
Two enzymes responsible for restricting the growth of bacteriophage were isolated from– **Escherichia coli**	**AP EAMCET-12.07.2022 Shift-II**
Fragment of DNA inserted in bacteria for forming copies is known as - **Plasmid**	**AP EAMCET-12.07.2022 Shift-II Punjab MET-2009**
Antibiotics are produced by– **Bacteria**	**AP EAPCET-12.07.2022 Shift-I**
Archaebacteria differ from eubacteria in– **Cell membrane**	**AP EAMCET -03.09.2021, Shift-I AIPMT-2014**
The use of friendly bacteria for therapeutic use is a concept of– **Probiotics**	**AP EAMCET-03.09.2021 Shift-II**
Smallest bacterial genome is seen in– **Mycobacterium genitalium**	**MHT CET 5.10.2020 Shift-I**
The sites of nitrogen fixation in blue green algae are– **Heterocysts**	**MHT CET 5.10.2020 Shift-I**
Escherichia coli is extensively used in biological research because it is– **Easily cultured**	**AP EAMCET-24.09.2020 Shift-II AIPMT-1993**
The structure present in cyanobacteria (BGA) helping is N_2 fixation is– **Heterocyst**	**Punjab MET-2008 TS EAMCET-29.09.2020 Shift-II**
Inclusion bodies of blue-green, purple and green photosynthetic bacteria are– **Gas vacuoles**	**NEET-2020 Phase-II**
The main difference in Gram (+)ve and Gram (–)ve bacteria resides in their– **Cell wall**	**WB JEE-2011 AP EAMCET-24.09.2020 Shift-II AIPMT-1990**
Microbes like Spirulina can be good alternate to the conventional sources of proteins for human nutrition, because– **They give more biomass in less time**	**Karnataka CET-2019**
It is true about culture media for microbes– **Lowenstein-Jensen medium is used to isolate mycobacteria**	**SRM JEEE-2019**
Single chromosome with circular DNA as genetic material occurs in– **E. coli**	**MHT CET-2019**
Bacterial flagella is made up of– **Flagellin**	**SRM JEEE-2018**
It is the non-pathogenic bacteria of colon– **Escherichia coli**	**HP CET-2018**
Bacterium the REN-Sal-I is isolated by– **Streptomyces albus**	**Karnataka CET-2017**
Restriction endonucleases are isolated from some bacteria. Their role in bacteria is– **Defence against virus**	**Karnataka CET-2017**
Treponema pallidum is a ____bacterium. **Spirochaete**	**MHT CET-2017**
The components which provides sticky character to the bacterial cell–**Glycocalyx**	**NEET-2017**
Which group contain DNA and RNA, demonstrate a long circular strand of DNA, not formed enclosed in a nuclear membrane and are bacteria- **Monerans**	**JIPMER-2017**
Teichoic acids are typically found in– **Cell walls of gram positive bacteria**	**SRM JEEE -2017 UPCPMT-2011, 2009 J & K CET-2008**
Microbes that inhibit the growth of other microorganisms termed as–**Antagonism**	**SRM JEEE -2017**
Most widely used bioweapon is– **Bacillus anthracis**	**BCECE-2010**
In bacteria, plasmid is– **Extra chromosomal material**	**AIPMT-2002**
The semilog of per minute growing bacteria is ploted against time. The shape of graph will– **Ascending straight line**	**AIPMT-2002**
'Comma' shaped bacteria are known as– **Vibrio**	**AFMC-2001**
The type of nutrition in purple and green sulphur bacteria is– **Photoautotrophic**	**TS EAMCET-2015**
Bacterium responsible for retting of jute and flex is– **Clostridium**	**UP CPMT-2013**
Bacteria with flagella all over its body, is called– **Peritrichous**	**AIIMS-1994**
Single filament of Nostoc without mucilage sheath is called as– **Trichome**	**BHU PMT (Mains)-2010**
Autotrophic organism with phycocyanin is called **–** **Cyanobacteria**	**BVP-2004**

A mutant which has lost its ability to synthesize one or more essential compounds is called a/an– **Auxotroph**	**BVP-2005**
Heterothallism was discovered in– **Mucor**	**BVP-2002**
Bacterial toxins when excreted into the surrounding medium are known as– **Exotoxins**	**Uttarakhand PMT-2006**
Sexual reproduction is absent in– **Nostoc**	**BVP-2001**
Beggiatoa is a– **Chemoautotroph**	**AP EAMCET-2014**
The structure present in cyanobacteria (BGA) helping in nitrogen-fixation is– **Heterocyst**	**JCECE-2010**
Plasmid found in bacteria and used as vectors in molecular biology/ biotechnology work. These genetic element of bacteria are– **Extra-chromosomal**	**AMU-1995**
When there is bunch of flagella on one side, the bacteria are known as– **Lophotrichous**	**AMU-1995**
Methanogens belong to– **Archaebacteria**	**NEET-2016 Phase-II**
The structures that help some bacteria to attach to rocks and/or host tissues are– **Fimbriae**	**AIPMT (Re-Exam)-2015**
Structures which perform the function of mitochondria in bacteria– **Mesosomes**	**AIPMT-2014**
Pigment-containing membranous extensions in some cyanobacteria are– **Chromatophores**	**NEET-2013**
Besides paddy fields, cyanobacteria are also found inside vegetative part of– **Cycas**	**NEET-2013**
Barophilic prokaryotes– **Grow and multiply in very deep marine sediments**	**AIPMT-2005**
In Angiosperm all the four microspores of tetrad are covered by a layer which is formed by– **Callose**	**AIPMT-2002**
Transduction in bacteria is mediated by– **Phage vectors**	**AIPMT-1994**
Genophore/bacterial genome or nucleoid is made of– **A single double stranded DNA**	**AIPMT-1993**
Bacteria lack alternation of generation because there is– **Neither syngamy nor reduction division**	**AIPMT-1992, 1991**
Organisms, which fix atmospheric nitrogen in the soil, fall under the category of– **Bacteria**	**AIPMT-1994**
A large number of organic compounds can be decomposed by– **Chemolithotrophs**	**AIPMT-1995**
The sex organs provided in some bacteria are– **Sex pili**	**AIPMT-1996**
Azotobacter and *Bacillus polymyxa* are the examples of– **Non-symbiotic N_2 fixer**	**AIPMT-1996**
The hereditary material present in the bacterium E.coli is–**Double-stranded DNA**	**AIPMT-1997**
In bacteria respiration occurs in– **Cytoplasmic membrane**	**JIPMER-2005**
Water bloom is generally caused by– **Blue green algae**	**JIPMER-2008** **BHU PMT (Screening)-2007** **BVP-2004**
Genes are packaged into a bacterial chromosome by– **Basic protein**	**AIPMT-1997**
Photosynthetic bacteria have– **Pigment systems I and II**	**AIIMS-2011**
Some Gram-ve bacteria have peptidoglycan and an extra layer of– **Lipo-polysaccharide**	**AIIMS-2001**
The site of respiration in bacteria is– **Mesosome**	**AIPMT-1997**
Bacteria with single flagella at one end is called– **Monotrichous**	**Punjab MET-2006**
Maximum number of antibiotics are obtained from– **Bacteria**	**AFMC-2003**
Substances secreted by bacteria are– **Toxins**	**AFMC-2003**
Splenic fever occurs in cattles, goats, camel and sheep etc, and is caused by– **Bacillus anthracis**	**BCECE-2015**
Incubation period of Treponema pallidum is about– **3 to 4 weeks**	**MHT CET-2016**
Extra chromosomal circular DNA is found in– **Bacteria**	**MHT CET-2008**
The structure formed by bacterial genome is called– **Nucleoid**	**Rajasthan PMT-1997** **JIPMER-1996**
A plasmid is made up of– **DNA**	**JIPMER-2002**
An organisms having cytoplasm, DNA and RNA but no cell wall is–**Mycoplasma**	**CG PMT-2005**

How many basal body rings are present in gram positive cells– **2**	**BCECE-2015**
Archaebacteria is also called– **Halophiles**	**WB JEE-2007**
Actinomycetes is not a– **Bacteria**	**MGIMS Wardha-2015**
Organisms found in extreme temperature are– **Archaebacteria**	**DUMET-2002**
In ruminants cellulose digestion takes place by– **Bacteria and protozoans**	**DUMET-2002**
Bacteria do not have– **Mitochondria**	**BVP-2008, DUMET-2005**
Spirochaetes is– **Bacteria**	**DUMET-2011**
How many linear DNA fragments will be produced when a circular plasmid is digested with a restriction enzyme having 3 sites– **4**	**KVPY SB & SX-2014**
A bacterial colony is produced from– **A single bacterium by its repetitive division**	**KVPY SB & SX-2014**
Monera possess– **Nucleoproteins in direct contact with the rest of the cell substance**	**MP PMT-2013**
In purple and green bacteria, oxygen is not evolved during photosynthesis because hydrogen donor is– **H_2S**	**AMU-2014**
The plasma membrane of mycoplasma is rich in– **Cholesterol**	**Punjab MET-2011**
The characteristic of blue-green algae is– **DNA without histone, nuclear membrane absent and 70s ribosomes**	**Rajasthan PMT-2002 JCECE-2003**
Gram negative bacteria are resistant due to presence of– **Lipopolysaccharides**	**UP CPMT-2012**
The organism which completely lack a cell wall and can live without oxygen are– **Mycoplasmas**	**Karnataka CET-2015**
Linkage group in E. coli is– **1**	**DUMET-2007**
The structure of E. colichromosomal DNA is– **Double – stranded, right handed and circular**	**WB JEE-2014**
Lederberg and Tatum (1946) discovered– **Conjugation**	**WB JEE-2014**
The component of bacteria that retains the crystal violet stain during Gram staining is– **Peptidoglycan**	**WB JEE-2014**
Streptococcus pyogenes bacteria is observed as– **Chain - like formation**	**WB JEE-2014**
Chromosomes in a bacterial cell can be 1-3 in number and are– **Always circular**	**BVP-2008**
Bacteria are considered plant because they– **Have rigid cell wall**	**JIPMER-2010 BHU PMT (Mains)-2008 BHU PMT (Screening)-2005**
The bacterium (*Clostridium botulinum*) that causes botulism is– **An obligate anaerobe**	**BCECE-2013 BHU PMT (Mains)-2010 AIPMT-2006**
Mesosomes are distinctive prominent is not characteristic of– **Gram positive bacteria**	**BCECE-2012**
The bacterial genome contains **DNA without histone**	**CG PMT-2004**
The smallest free-living organism is– **Mycoplasma**	**CG PMT-2004**
The sexuality in bacteria was established by– **Lederberg and Tatum**	**CG PMT-2004**
Cell wall is extremely well preserved in fossil specimen in– **Diatoms**	**BVP-2011**
Some bacteria are not easily killed by antibiotics or heat treatment because of their– **Capsule**	**CMC Vellore-2011**
Pseudomonas is– **Denitrifying bacteria**	**J&K CET-2011**
Plague (black death) is caused by– **Bacteria**	**Haryana PMT-2000**
The Gram (-) bacteria detect and respond to the chemicals in their surroundings by– **Porin**	**WB JEE-2008**
Staphylococci cocci appears like graphs under– **Microscope**	**WB JEE-2015**
Smallest bacteria is– **Dialister**	**VMMC-2007 Rajasthan PMT-2005 UPCPMT-2002**
Photosynthetic bacteria have pigments in– **Chromatophore**	**Punjab MET-2010**
Single-stranded is not a feature of the– **Plasmids**	**NEET-2016 Phase-I**
Some hyperthermophilic organisms that grow in highly acidic (pH - 2) habitats belong to the two groups– **Eubacteria and archaea**	**AIPMT (Screening)-2010**
Membrane-bound organelles are absent in– **Streptococcus**	**AIPMT (Screening)-2010**
Circular free DNA is found in– **Bacteria**	**JIPMER-2004**

Thermococcus, Methanococcus and Methanobacterium are groups of– **Archaebacteria that consists of protein homologous to eukaryotic core histones**	**CMC Vellore-2015 JIPMER-2015 AIIMS-2008**
The part of the bacterial chromosome sharing homology with genome fragment transferred from the recipients to cell during merozygote formation is known as– **Endogenate**	**JIPMER-2015**
Gas gangrene is caused by– **Clostridium perfringens**	**JIPMER-2015**
The most abundant prokaryotes helpful to humans in making curd from milk and in production of antibiotics are ones categorised as– **Heterotrophic bacteria**	**AIPMT (Screening)-2012**
The Cyanobacteria are also referred to as– **Blue green algae**	**AIPMT (Screening)-2012**
Cell membrane does not differ in– **E.coli and Chlamydomonas**	**AIPMT (Screening)-2012**
Maximum nutritional diversity is found in the group– **Monera**	**AIPMT (Screening)-2012**
Capsule advantageous to a bacterium because– **It allows bacterium to "hide" from host's immune system**	**NEET (Karnataka)-2013**
The term 'Glycocalyx' is used for–**A layer surrounding the cell wall of bacteria**	**NEET (Karnataka)-2013**
Modern farmer's can increase the yield of paddy upto 50% by the use of– **Cyanobacteria in Azolla pinnata**	**AIPMT-1998**
Transduction in bacteria carried out by– **Bacteriophage**	**AIPMT-1998**
Hot water spring thermophiles survives a temperature of– **104 ºC to 106ºC**	**AIPMT-1998**
Bacteria are essential in carbon cycle as– **Decomposer**	**AIPMT-1998**
According to five kingdom system, blue-green algae belongs to– **Monera**	**J&K CET-2011, AIPMT-1998**
Non–symbiotic nitrogen fixing bacteria– **Azotobacter**	**AIPMT-1998**
DNA of E. coli– **ds circular**	**AIPMT-1998**
Azolla is used in the cultivation of– **Rice**	**AIPMT-1999**
Anabaena is associated with Azolla– **Leaves**	**AIPMT-1999**
Plant pathogenic bacteria are mostly– **Gram – Non spore forming**	**AIPMT-1999**
In Lederberg's replica plating experiment what shall be used to obtain streptomycin resistant strain– **Complete medium and streptomycin**	**AIPMT-2001**
Oxygenic with nitrogenase is true for– **Cyano bacteria**	**AIPMT-2001**
Plant decomposers are– **Monera and fungi**	**AIPMT-2001**
Oldest living beings is true for– **Archaebacteria**	**AIPMT-2001**
Difference in gram positive and gram negative bacteria is due to– **Cell wall**	**AIPMT-2001**
An organism used as a Biofertilizer for raising soyabean crop is– **Rhizobium**	**AIPMT (Screening)-2011**
Marsh gas is mainly produced by the activity of anaerobic bacteria on– **Sewage**	**AIPMT (Screening)-2011**
Glomus helps in absorption of phosphorus from soil by– **Plants**	**AIPMT (Screening)-2011**
The function of leghaemoglobin in the root nodules of legumes is– **Oxygen removal**	**AIPMT (Screening)-2011**
Bacteria which oxidize ammonia to nitrates- **Nitrifying bacteria**	**AIPMT (Screening)-2011**
In eubacteria, a cellular component that resembles eukaryotic cell is– **Plasma membrane**	**AIPMT (Screening)-2011**
Organisms called Methanogens are most abundant in a– **Cattle yard**	**AIPMT (Screening)-2011**
PPLO are smallest cell in the living world. The extend form of PPLO is– **Pleuro Pneumonia Like Organism**	**JIPMER-2016 AMU-1999**
The wall of bacteria consists of– **N- acetyl glucosamine and N- acetyl muramic acid**	**UP CPMT-2005 DUMET-2005**
A bacterial cell wall is mainly composed of– **Peptidoglycan (murein)**	**UP CPMT-2014 VMMC-2003 / AIIMS-1999**
Mollicutes cell is most minute and smallest– **Free-living organism**	**UP CPMT-2014**
Circular free floating molecule of DNA duplex, autonomous, found in bacterial cytoplasm are extensively used as vector in genetic engineering– **Plasmids**	**UP CPMT-2014 BVP-2006**
Bacteria differ from plants in that they do not have– **A well define nucleus**	**UP CPMT-2011**
Identify a micro-organism that can produces biomass of protein– **Methylophilus methylotrophus**	**Karnataka CET-2016**
Chromosomes in bacterial cell can be 1 to 3 in– **are always circular**	**MGIMS Wardha-2010 Uttarakhand PMT-2007**
Lipopolysaccharide located on the surface of the bacteria is called - **Bacterial endotoxin**	**JIPMER-2013**

Colourless, unicellular, cell wall bound, spherical or rod-shaped micro-organism and lacking organised nucleus is called– **Bacteria**	**UP CPMT-2004**
Tuberculosis is caused by– **Mycobacterium sp.**	**WB JEE-2010**
Bacteriophages kill– **Bacteria**	**WB JEE-2010**
Bacteria with single flagella at one end is called– **Monotrichous**	**Rajasthan PMT-2004**
Bacteria causing disease of citrus is– **Citrus canker**	**Rajasthan PMT-2004**
O_2 does not evolved in photosynthesis of– **Bacteria**	**Rajasthan PMT-2004**
When the procedure of bacterial staining is carried out, the Gram negative bacteria stains– **Red**	**AFMC-2000**
The cell wall material present only in bacteria and blue-green algae is– **Muramic acids**	**AMU-2015**
Nucleic acid is the hereditary material in– **Bacteria**	**BCECE-2005**
Mesosomes are found in– **Bacteria**	**BHU PMT-2002**
Type of genetic material present in bacteria is– **DNA**	**Punjab MET-2003** **BHU PMT-2002**
In bacteria respiration occurs in– **Cytoplasmic membrane**	**BHU PMT-2003**
In bacterial cell enzymes for aerobic respiration are found in– **Mesosome**	**Punjab MET-2003** **Rajasthan PMT-1996**
Blue-green algae are– **Prokaryotic**	**UP CPMT-2010**
Amphitrichous have flagella on both ends of the– **Bacterial cell**	**UP CPMT-2010, 2001**
Pigment present in cyanobacteria is– **c-phycocyanin**	**BHU PMT (Screening)-2007** **UP CPMT-2003**
Bacteria do not have– **Mitochondria**	**Uttarakhand PMT-2007** **UP CPMT-2003**
Photosynthetic bacteria does not evolve during– **Photosynthesis**	**UP CPMT-2003**
Cyanobacteria is an– **algae having blue-green pigment**	**UP CPMT-2003**
The peptidoglycans of bacteria consist of– **Sugars, D-amino acids and L-amino acids**	**KVPY SB and SX-2015**
Slime mould does not belong to– **Kingdom-Monera**	**DUMET-2008**
Rhizobium is– **Symbiotic bacteria**	**JCECE-2005**
The autonomously independent self replicating extra nuclear DNA imparting certain factors to some bacterium is called– **Plasmid**	**J&K CET-2009**
The term bacteria was coined by– **Ehrenberg**	**J&K CET-2009**
The genetic material of bacteria is present as– **Genophore**	**JIPMER-2002, 1997**
The site of photosynthesis in blue-green algae is– **Chromatophores**	**BCECE-2014** **Uttarakhand PMT-2009** **BHU PMT (Screening)-2009**
Heterotrophic belongs to the– **Kingdom Monera**	**Kerala PMT-2015**
Maximum number of bases in plasmid discovered so far is– **500 kilobase**	**BHU PMT (Screening)-2010**
The oldest living organisms on earth are known as– **Archaebacteria**	**BHU PMT (Screening)-2010**
The red color of red sea is due to– **Trichodesmium blue-green algae**	**JIPMER-2003**
Blue-green algae is found in– **Cycas**	**JIPMER-2003**
In prokaryotes, internal membrane systems that may become extensive and complex in photosynthetic bacteria is known as **-** **Chromatophores**	**Rajasthan PMT-2010**
Nuclear membrane is absent in– **Monera**	**AMU-2010**
The most successful group of organism on the surface of our globe is– **Gram negative photosynthetic cyanobacteria**	**AMU -2000**
The characteristic cells wall material peptidoglycan has another covering of lipopolysaccharides. This specialized condition is found in– **Eubacteria Gram negative**	**AMU -2000**
The rumen of cattle is the site of fermentation of cellulose fibres through the action of– **Archaebacteria**	**AMU-1999**
The nature of photosynthesis in blue-green algae is– **Oxygenic**	**AMU-1998**
Heterocysts are found in– **Nostoc**	**HP CET-2013** **VMMC-2002**
A pigment in carotenoid is found in bacteria and fungi, it is– **Capsanthin**	**VMMC-2006**
The site of respiration in bacteria is– **Mesosomes**	**VMMC-2006**
The cells of the bacterium Streptococcus remain arranged in the form of– **Chain**	**VMMC-2006**

Infolding of plasma membrane in gram (+ve) bacterial cell is called– **Mesosome**	**Rajasthan PMT-1998**
Witches broom disease is caused by– **Mycoplasma**	**JCECE-2005** **Manipal-2000** **Rajasthan PMT-1998**
The photoautotrophs, chemoautotrophs and heterotrophs incorporates by– **kingdom Monera**	**BCECE-2009** **CG PMT-2007** **AMU-1999**
Blue-green alga are included in– **Prokaryotes**	**Uttarakhand-2005**
Heterocysts are found in– **Cyanophyceae**	**Haryana PMT-2007** **J & K CET-2000**
The outer face of outer membrane of Gram-negative bacteria having– **Lipopolysaccharides**	**VMMC-2014**
Photosynthetic bacteria does not evolve– **Oxygen**	**JIPMER-2001**
Organism without any specific shape are– **Mycoplasm**	**Manipal-2013**
Botanical name of 'gram' is– **Cicer arietinum**	**BHU PMT (Mains)-2008**
The shape of the cocci bacteria is– **Spherical**	**AMU-2012**
Black rot of crucifers is caused by a– **Bacterium**	**AMU-2012**
Many bacteria are now resistant to penicillin because– **previously resistant forms survived and reproduced better than non-resistant forms**	**BHU PMT (Screening)-2011**
A bacterium is capable of withstanding extreme heat, dryness and toxic chemical. This indicates that it is probably able to form– **Endospores**	**Manipal-2009**
An example for symbiotic bacteria– **Rhizobium leguminosarum**	**DUMET-2009**
E. coli is found in– **Colon of human**	**VMMC-2010**
Leprosy is due to– **Mycobacterium**	**Haryana PMT-2003**
Cyanobacteria differs from other groups of bacteria in their– **Nutrition**	**CG PMT-2010**
Instead of chromosome which of the following has only DNA– **Anabaena and E. coli**	**CMC Vellore-2014**
70 S type of ribosomes are found in– **Nostoc cells**	**CMC Vellore-2014**
Bacterial chlorophyll absorbs mainly– **Infra red light**	**VMMC-2003**
Bacteria in cold climate can live for– **Many thousand year**	**AFMC-2001**
The disease caused by mycoplasma is– **Papaya bunchy top, Brinjal little leaf and Witches broom of potato**	**Rajasthan PMT-2000**
The inner most membrane of gram (-) negative bacteria is consist of–**Lipoprotein**	**Rajasthan PMT-2000**
Pseudomonas is detrimental to– **Soil fertility**	**KVPY SA-2015**
Product of photosynthesis in blue-green algae is– **Glycogen like**	**AMU-2002**
Aerobic bacteria found in hot sulphur springs are termed as– **Thermoacidophiles**	**AMU-2001**
The bacteria oxidising a number of inorganic compounds to obtain energy for the assimilation of CO_2 are called– **Chemoautotrophic bacteria**	**UP CPMT-2011** **AMU-2001**
Xanthomonas citri possesses– **Single polar flagellum**	**AP EAMCET-2002**
Protista	
Contractile vacuole in protozoan Amoeba is meant for– **Osmoregulation**	**UP CPMT-2012,2011,2008** **Rajasthan PMT-2011, 2008, 2007, 2004, 2000, 2002, 1998** **JCECE-2010 / Punjab MET-2008 / AIPMT-2002, 1991** **CG PMT-2008/ Karnataka CET-2005** **Manipal-2001/ AIIMS-1996**
Passive food ingestion in Amoeba is known as– **Import**	**BVP-2012, 2007** **CGPMT-2010, Manipal-2008** **Uttarakhand PMT-2008** **MGIMS Wardha-2006**
A bite of tse- tse fly may pass to humans– **Trypanosoma gambiense**	**AFMC-2003** **Rajasthan PMT-2003** **Karnataka CET-2000** **AIPMT-1991, 1989**
The infective stage of malarial parasite, Plasmodium that enters human body is– **Sporozoite**	**WBJEE-2011** **DU MET-2008, 2005, 2001** **Punjab MET-2003** **JIPMER-1996** **AIPMT-1990**

Amoeba differs from Entamoeba in having– **Contractile vacuole**	**JIPMER-2010 AMU-2009, 2002 Punjab MET-2008 UPCPMT-2006**
Mild tertian malaria is caused by– **Plasmodium ovale**	**AP EAPCET-22.05.2023, Shift-II**
Free living microorganism that feed on organic detritus and an example– **Saprophytes, Bacillus**	**AP EAPCET-22.05.2023, Shift-I**
Protozoan in which cilia are confined only to juvenile stages are– **Acineta**	**AP EAPCET-23.05.2023, Shift-II**
The diploid stage in the life cycle of Plasmodium vivax is– **Ookinete**	**TS EAMCET-11.05.2023, Shift-I**
Undulipodia are– **Flagella and cilia of protozoans**	**AP EAPCET-11.07.2022 Shift-I**
In parasitic castration– **Gonads of the host degenerate**	**AP EAPCET-11.07.2022 Shift-I**
Multicellular animals that exhibit cellular level organisation are– **Parazoans**	**TS EAMCET-30.07.2022 Shift-II**
During binary fission of Euglena is divided by– **Nucleus, kinetosomes and chromatophores**	**AP EAPCET-12.07.2022 Shift-I**
Digenetic cytozoic parasite is– **Plasmodium**	**TS EAMCET-30.07.2022 Shift-II**
Organism "A" lives as a parasite in the body of an organism "B", "C" is another organism lives as a parasite in the body of "A" then C is– **Hyperparasite**	**TS EAMCET-31.07.2022 Shift-I**
Transformation of merozoites of Plasmodium into gametocytes takes place when the erythrocytes are in– **Bone marrow**	**TS EAMCET-31.07.2022 Shift-I**
Actinophrys has– **Heliopodia**	**TS EAMCET-09.08.2021 Shift-II**
In which body part of female Anopheles mosquito, gametes of parasite Plasmodium fertilise and develop– **Gut**	**GUJCET-2021**
Dimorphic nucleus is found in animal– **Paramecium caudatum**	**AP EAMCET-06.09.2021 Shift-I AIPMT-2002**
The daughter paramecia formed immediately after binary fission are– **Proter and opisthe**	**TS EAMCET-10.08.2021 Shift-I**
All protozoans are / have– **Eukaryotic organization**	**AP EAMCET-03.09.2021 Shift-I**
The interval between the first entry of Plasmodium into the blood of man in the form of sporozoites and its second entry in the form of cryptozoites is called– **Prepatent period**	**AP EAPCET-07.09.2021 Shift-I TS EAMCET-08.05.2019 Shift-II**
Euglena is– **Photosynthetic Protozoa**	**AP EAMCET-05.10.2021 Shift-I**
Multiple fission in Amoeba is called– **Sporulation**	**TS EAMCET-09.08.2021 Shift-I BCECE-2004**
The vigour and vitality lost due to repeated binary fissions in ciliates is restored by– **Conjugation**	**TS EAMCET-29.09.2020 Shift-I**
Pseudopodia is mainly seen in– **Amoeba**	**AP EAMCET-25.09.2020 Shift-II**
The typical angiosperm embryo sac– **8 nucleate, 7 celled**	**TS EAMCET-29.09.2020 Shift-II Karnataka CET-2013**
Mastigophora is also known as– **Flagellata**	**AP EAMCET-24.09.2020 Shift-II**
Protozoan are usually– **Unicellular**	**AP EAMCET-25.09.2020 Shift-I**
Euglenoids are characterized by– **Flagellated, Pellicle, Eyespot**	**AP EAMCET-25.09.2020 Shift-I**
The process of 'exflagellation' occurs in which one of the following stages of the life cycle of Plasmodium– **Gametogony**	**TS EAMCET-08.05.2019 Shift-I**
The sequence in the developmental stages of plasmodium– **Sporozoites → Merozoites → Trophozoites → Schizonts**	**MHT CET-2019**
The enzyme secreted by trophozoites of *Entamoeba hystolytica* to dissolve the mucosal lining of the intestine of man– **Histolysin**	**TS EAMCET-09.05.2019 Shift-I**
Infective stages of malarial parasite is found in– **Salivary glands of mosquito**	**AIIMS-27.05.2018 Shift-II**
Paramecium is an example of– **Ciliated Protozoa**	**Tripura JEE-2018**
Most unusual protist phyla is– **Dinoflagellates**	**HP CET-2018**
Ciliates differ from all other protozoans in– **having two types of nuclei**	**NEET-2018**
Amoeba is immortal because– **Parental body is distributed among the offsprings during binary fission**	**Karnataka CET-2017**
Auxospores are produced in– **Diatoms**	**VMMC-2015**
Life history of Plasmodium is– **Digenetic**	**Haryana PMT-1999**
Protists obtain their food as– **Photosynthesizers and chemosynthesizers**	**AIIMS-2011**
Protista differs from Monera in having– **Nuclear membrane**	**AIIMS-2010**
Intermediate host is absent in the infection of– **Entamoeba**	**AIIMS-2009**

Sexual stage (gametocytes) of Plasmodium occurs in– **Human RBC**	**AIIMS-2013**
In Entamoeba histolytica, the presence of chromatid bodies is characteristic of– **Precystic stage**	**AIIMS-2002**
The part of life cycle of malarial parasite Plasmodium vivax, that is passed in female Anopheles is– **Sexual cycle**	**AIPMT-1992**
Malignant tertian malaria parasite, belongs to – **Plasmodium falciparum**	**AIPMT-1991**
Kala azar and Oriental Sore are spread by– **Sand fly**	**AIPMT-1990**
During unfavourable conditions Amoeba reproduces through– **Multiple fission**	**Punjab MET-2006** **Rajasthan PMT-2004**
When more than one species of Plasmodium infect a person, it is called– **Quotidian malaria**	**JCECE-2002**
In which species of Paramecium, autogamy is found– **Paramecium aurelia**	**JCECE-2002**
Which response Amoeba shows towards current of water– **Rheotaxis**	**JCECE-2002**
NH_3 in Amoeba is excreted by– **Plasma membrane**	**JCECE-2006**
Entamoeba histolytica is– **Monogenetic parasite**	**JCECE-2006**
The cyst wall of Euglena is made up of– **Carbohydrates**	**Uttarakhand PMT-2010**
Schuffner's dots produced by Plasmodium are– **Antigens**	**Uttarakhand PMT-2010**
Plasmodium falciparum causes which type of malaria– **Pernicious**	**Uttarakhand PMT-2010**
Two mating types of a variety of Paramecium are– **Morphologically similar and physiologically different**	**CMC Vellore-2012**
They have indestructible wall layer deposited with sillica is a characteristic feature of– **Chrysophytes**	**Kerala PMT-2011**
Euglena is a– **Holophytic protozoa**	**BCECE-2015**
Mode of nutrition in Trypanosoma is– **Parasitic**	**DUMET-2006**
Chagas disease is caused by– **Trypanosoma cruzi**	**DUMET-2006**
Marine protozoans lack contractile vacuole because– **they are hypo-osmotic to their environment**	**DUMET-2002**
Amoeba is an– **Unicellular animal**	**DUMET-2005** **UPCPMT-2003**
Sporogony of malarial parasite occur in– **Stomach wall of mosquito**	**DUMET-2004, BVP-2014, 2000**
Recombination results from conjugation in– **Paramecium**	**KVPY SB & SX-2014**
Name the protozoan parasite with a food vacuole– **Plasmodium**	**AP EAMCET-1998**
Unicellular algae, diatoms and protozoans are the members of– **Protista**	**J&K CET-2013**
Schizogony of Plasmodium is also called as– **Agamogony**	**Punjab MET-2011**
In life cycle of Plasmodium, ex-flagellation leads to– **formation of microgametes**	**Rajasthan PMT-2002**
What happens in anterior part of Amoeba at the time of formation of pseudopodia– **plasma gel convert into plasma sol**	**Rajasthan PMT-2002**
Where does exoerythrocytic cycle take place in life cycle of Plasmodium– **Human liver**	**Rajasthan PMT-2002**
Dimorphism is present in which– **Ciliata Protozoa**	**Rajasthan PMT-1999**
In Amoeba hyaline cap is formed on – **Pseudopodia**	**Rajasthan PMT-1999** **MGIMS Wardha-2012**
Slipper animalcule is– **Paramecium**	**Manipal-2005**
Sporozoite infectious stage of Plasmodium parasite contains– **a nucleus**	**BVP-2014**
Oocysts in the stomach of female Anapheles discovered by– **Ronald Ross**	**VMMC-2009**
Kinety system is present in– **Ciliates**	**AP EAMCET-2015** **TS EAMCET-2015**
Excretory substance of Amoeba is– **Ammonia**	**Rajasthan PMT-1995**
Entamoeba histolytica is present in– **Life cycle**	**Rajasthan PMT-1995**
Entamoeba coli doesn't spread disease in– **Human**	**Rajasthan PMT-1995**
Pseudopodia is characteristic of class– **Sarcodina**	**Rajasthan PMT-1995**
Mode of feeding in free living protozoan is– **Holozoic and saprozoic**	**DUMET-2007**
Pseudopodia are produced by– **Fibroblast cell**	**WB JEE-2014**
During which process in Paramecium out of the four micronuclei formed, three nuclei degenerate- **Conjugation**	**BCECE-2012** **Punjab MET-2004**
Chromatoid bodies in Entamoeba histolytica are found in– **Cysts**	**CMC Vellore-2011**
Entamoeba histolytica is found in – **Intestine**	**Haryana PMT-2000**

Kingdom which includes life cycle showing zygotic meiosis and life cycle showing gametic meiosis- **Protista**	**Punjab MET-2005**
Euglenoid species that have chlorophyll are– **Facultative autotrophs**	**Punjab MET-2005**
Phytoplankton creatures are direct or indirect food of all creature on the– **Oceans surface**	**Punjab MET-2005**
Pebrine disease of mulberry silkworm caused by– **Protozoa**	**WB JEE-2008**
Euglenoids of organisms have a protein rich layer called– **Pellicle**	**Kerala PMT-2014**
The main function of filiform apparatus present at the micropylar part of the ovule– **It guides the entry of pollen tube into a synergid and discharge the male gametes**	**Kerala PMT-2013**
Chrysophytes, Euglenoids, Dinoflagellates and slime moulds are included in the kingdom– **Protista**	**NEET-2016 Phase-I**
Single-celled eukaryotes are included in– **Protista**	**AIPMT (Screening)-2010**
Yeast belongs to class– **Ascomycetes**	**JIPMER-2004**
Certain stages of *Plasmodium vivax* may survive for a long period in the liver of man as dormant stages and on reactivation enter into the cycles– **Erythrocytic schizogony**	**AP EAMCET-2008**
Nosema bombycis which causes pebrine in silk worms is a– **Protozoan**	**Karnataka CET-2009**
When fresh water protozoan is placed in marine water– **The contractile vacuoles disappear**	**Karnataka CET-2010**
Slime-mould belongs to– **Kingdom Protista**	**JIPMER-2016**
Number of layers in amoeboid cyst are– **3**	**UP CPMT-2011**
Amoeba was discovered by– **August Johann Rosel von Rosenhoff**	**UP CPMT-2006**
Phagocytosis was observed first time by– **Elie Metchnikoff**	**Uttarakhand-2005 BVP-2000**
Kappa particles indicate– **Cytoplasmic inheritance**	**JIPMER-2006**
The parasite of endothelial system of man is– **Leishmania**	**AP EAMCET-2000**
The phenomenon of metaboly is exhibited by– **Euglena**	**UP CPMT-2013**
Obligate parasites lives on – **Living host**	**AIIMS-1999**
Schistosoma is a parasite found in– **Liver**	**BVP-2003**
Reproduction in Paramecium is controlled by– **Micronucleus**	**BVP-2001 Manipal-2002**
The type of syngamy seen in Trichonympha is– **Hologamy**	**AP EAMCET-2014**
Algae attached to stone is called– **Epilithic**	**JCECE-2010**
A pathogen which cannot be cultured in an artificial medium is– **Virus**	**KVPY (SA)-2013**
Cell wall is absent in– **Amoeba**	**AIIMS-2000**
The infective stage of Entamoeba histolytica is– **Trophozoite**	**UPCPMT-2009 AIIMS-1998**
Trypanosoma causes sleeping sickness in man, it finally invades– **Cerebro-spinal fluid**	**AIIMS-1998**
True nucleus is absent in– **Anabaena**	**AIPMT-2015**
Carriers of Entamoeba histolytica are– **Healthy human host**	**UP CPMT-2007**
Mycorrhiza is an example of– **Symbiotic relationship**	**AIPMT-2003**
The protists have– **Membrane-bound nucleoproteins lying embedded in the cytoplasm**	**AIPMT-1994 Karnataka CET-2001 Haryana PMT-2000**
Genetic information in Paramecium is contained in– **Micronucleus**	**AIPMT-1990**
Trypanosoma belongs to class– **Zooflagellata**	**AIPMT-1989**
Movements by pseudopodia of Amoeba are due to change in– **Viscosity**	**JIPMER-2008**
Slimy mass of multinucleate protoplasm, having pseudopodia-like structures for engulfing food, reproduction through fragmentation of zoospores are – **Myxomycetes**	**AIIMS-2006**
Proterospongia is a connecting link between– **Protozoans and poriferans**	**AIIMS-2011**
Nosema protozoans is threat to– **Apiculture and sericulture**	**AIIMS-2011**
Parapodia is not the locomotory organ of– **Protozoa**	**AFMC-2005**
An intracellular parasite is– **Plasmodium**	**BCECE-2011**

Taenia is not a– **Protist**	**BCECE-2011**
In 1902 Nobel prize was given to– **Sir Ronald Ross for observing Plasmodium**	**Rajasthan PMT-1996**
Assistance provided during locomotion in Amoeba– **Rough surface**	**Rajasthan PMT-1996**
Less temperature are optimum for activation of gametogenesis in Plasmodium in stomach/ alimentary canal of– **Female Anopheles**	**Rajasthan PMT-1996**
Incubation period of *Plasmodium falciparum* is– **12 days**	**Rajasthan PMT-1996**
Amoeba lack– **Centrosome**	**Rajasthan PMT-1996**
Plant like nutrition is present in– **Euglena**	**UP CPMT-2003**
The disease caused by Entamoeba gingivalis is spread through– **Kissing**	**Manipal-2011**
Lime-knots of slime moulds are– **Capillitia**	**AFMC -2011**
Sand fly spreads a particular type of disease by its– **Proboscis**	**Manipal-2004**
Nucleus of Monocystis is– **Spherical**	**Manipal-2004**
Plasmodium is an– **Endoparasite**	**Manipal-2004**
Sexual mode of reproduction in Protozoa is– **Anisogamy**	**Uttarakhand PMT-2004**
Octanucleated cyst stage is found in– **Entamoeba histolytica**	**JIPMER-1997**
The protists have– **Membrane bound nucleoproteins lying embedded is the cytoplasm**	**VMMC-2002**
Physarum is a– **Slime mould**	**Rajasthan PMT-2010**
Animal cell in which centrosome is not present is of– **Plasmodium**	**AMU-1998**
Thigmotaxis is not shown by– **Ascaris**	**VMMC-2012**
Protozoan, Protista are differentiated on the basis of– **Locomotory structures**	**CG PMT-2007**
The type of pseudopodia seen in Lecithium is– **Filopodia**	**AP EAMCET-2003**
The intermediate host of the parasite that causes Tashkent ulcers is– **Phlebotomus papatassi**	**AP EAMCET-2004**
Study of protozoans is called– **Protozoology**	**Haryana PMT-2002**
The disease oriental sore is caused by– **Protozoa**	**Haryana PMT-2004**
The structure in Amoeba functionally similar to human kidney is– **Contractile vacuole**	**AMU-2006**
Protista includes– **Dinoflagellates, Amoeba, Paramecium**	**J&K CET-2006**
Nucleus of Monocystis is– **Spherical**	**AMU-2005**
The number of daughter Vorticella formed after the second series of post-conjugation fissions is– **7**	**VMMC-2010**
Hyman has proposed the sol gel theory for– **Amoeboid movement explanation**	**BVP-2013**
An example of terrestrial protozoan is– **Didymium**	**AP EAMCET-1999**
Diatoms belong to class– **Bacillariophyceae**	**BCECE-2008** **UP CPMT-2007**
Amoeba has been kept in protozoa because– **Unicellular body**	**BCECE-2002**
The beautiful diatoms and desmids are placed under– **Chrysophytes**	**AMU-2012**
Diatoms float in water because they have– **Wing like structure in middle of the body**	**AMU-2001**
Diatoms do not decay easily because– **they have siliceous walls**	**AIIMS-2011**
'Red tide' is caused by– **Gonyaulax**	**AIIMS-2014** **VMMC-2014**
The reserved food of Albugo is– **Glycogen**	**Haryana PMT-2010** **UP CPMT-2010** **AMU-2009 / AFMC-2007** **Rajasthan PMT-1996**
Lomasomes are found in– **Fungal cell**	**AP EAMCET-2011** **BVP-2000 / Manipal-2002** **Haryana PMT-2001**
Late blight of potato is caused by– **Phytophthora infestans**	**BCECE-2010** **Haryana PMT-2009** **MGIMS Wardha-2008** **AMU-1996**
Cell wall of fungi is made up of– **Fungal cellulose and fungal chitin**	**UP CPMT-2009** **JIPMER-2011, 2018** **Rajasthan PMT-1997**
Puffballs belongs to the class– **Basidiomycetes**	**TS EAMCET-11.05.2023, Shift-I**
Identify the asexual reproductive structure associated with Penicillium– **Conidia**	**NEET-2022**

Deuteromycetes is called as Imperfect fungi because– **Sexual reproduction is absent**	**AP EAPCET-11.07.2022 Shift-I**
Perithecium is characterized by– **Flask-shaped fruiting body with apical opening**	**AP EAMCET-12.07.2022 Shift-II**
Organisms which are eukaryotic, non-cellulosic cell wall, heterotrophic belongs to– **Mycota**	**AP EAMCET-03.09.2021 Shift-II**
Basidiomycetes do not form– **Asexual spores**	**TS EAMCET-09.08.2021 Shift-I**
The saprophytes like bacteria, actinomycetes and fungi are– **Micro-consumers in an ecosystem**	**MHT CET-07.10.2020 Shift-I**
Vernalization increases the resistance of plants for diseases caused by– **Fungi**	**MHT CET-06.10.2020 Shift-I**
Fungus without any mycelium is– **Saccharomyces**	**AP EAMCET-24.09.2020 Shift-I**
Yeast cell can progress through the cell cycle in about– **90 minutes**	**AP EAMCET-24.09.2020 Shift-I**
A student while extracting DNA from Aspergillus fungus requires _____ enzyme to break open the cell wall. **Chitinase**	**Karnataka CET-2019**
Morphologically and Physiologically similar and usually motile and flagellated gametes are known as– Isogamete, Cladophora	**GUJCET-2018**
VAM (Vesicular Arbuscular Mycorrhizae) is– **Endomycorrhiza**	**SRM JEEE-2018**
After karyogamy followed by meiosis, spores are produced exogenously in– **Agaricus**	**NEET-2018**
Macromolecule nitrogen containing polysaccharide is **–** **Chitin**	**JIPMER-2017**
Dikaryotisation (n+n) in Agaricus is brought about by– **Clamp connections and Somatogamay between two hyphae of different strains**	**AIIMS-2017**
Among plants, Pheromones are secreted by the cells of the– **Yeast for facilitating mating**	**Haryana PMT - 2005** **BHU PMT-2003**
Aspergillus secretes toxins during storage conditions of– **Crop plants**	**AIPMT-2002**
The zygospore in Rhizopus develops into– **Promycelium**	**J&K CET-2002**
Yeast is– **Unicellular fungus**	**BHU PMT (Mains)-2010** **AIIMS-2000** **Manipal-2002**
Aspergillus cause disease in– **Human beings**	**BVP-2005**
Slimy mass of protoplasm with many nuclei and an amoeba-like thalloid body is a characteristic feature of– **Myxomycetes**	**Kerala PMT-2009**
Fungi can be stained with– **Cotton blue**	**BVP-2000**
Penicillium belongs to– **Ascomycetes**	**BVP-2000**
Organism which can respire in absence of O_2 is– **Saccharomyces**	**BVP-2000**
When a fungus completes its life cycle on two hosts, it is called– **Heteroecious**	**AMU-1995** **CMC Vellore-2008**
The fruiting body of Aspergillus or Penicillium is– **Cleistotheciun**	**AIIMS-1998** **JCECE-2006**
The imperfect fungi which are decomposers of litter and help in mineral cycling belong to– **Deuteromycetes**	**AIPMT (Re-Exam)-2015**
Amanita muscaria fungi contains– **Hallucinogens**	**AIPMT-2014**
An eukaryote which causes disease comes under– **Fungi**	**UP CPMT-2007**
The black rust of wheat is a fungal disease caused by– **Puccinia graminis tritici**	**AIPMT-1995**
Absorptive heterotrophic nutrition is exhibited by– **Fungi**	**AIPMT-1990**
Chlamydospores from dikaryotic mycelium fungus is produced by– **Sphacelotheca sorghi**	**AP EAMCET-2008**
Yeast is not included in protozoans but in fungi because– **it shows saprotrophic mode of nutrition**	**AIIMS-2016**
Rhizopus shows– **Heterothallism**	**AIIMS-2014**
Branched, aseptate, coenocytic mycelium present in– **Albugo**	**Punjab MET-2006** **Rajasthan PMT-2002** **JCECE-2003**
Mushrooms is not comprised of– **Sac-fungi**	**JCECE-2002**
The scientific name of oyster mushroom, an edible fungus is– **Pleurotus ostreatus**	**JCECE-2002**
Yeast is different from *Penicillium* and *Rhizopus* in being– **Unicellular**	**JCECE-2002**
Dikaryon formation is characteristic feature of– **Basidiomycetes and Ascomycetes**	**BVP-2014** **MGIMS Wardha-2006**

A fungal disease of the poultry is– **Monilliasis**	**AP EAMCET-1998**
One of the major components of cell wall of most fungi is– **Chitin**	**NEET-2016 Phase-I**
The parthenospores of Rhizopus are– **Multinucleate**	**AP EAMCET-2007**
Stored food in fungi– **Glycogen**	**AIPMT-2000**
Black rust of wheat is caused by– **Puccinia**	**AIPMT-2000**
Monascus purpureus is a yeast used commercially in the production of– **Blood cholesterol lowering statins**	**AIPMT (Screening)-2012**
Yeast is used in the production of– **Bread and beer**	**AIPMT (Screening)-2012**
The highest number of species in the world is represented by– **Fungi**	**AIPMT (Screening)-2012**
Saccharomyces cerevisiae is used in the formation of– **Ethanol**	**MGIMS Wardha-2003 AIPMT-1998**
Aspergillus niger yields– **Citric acid**	**AIPMT-1998**
Adhesive pad of fungi penetrate the host with the help of– **Mechanical pressure and enzymes**	**AIPMT-2001**
The sequence of the stages in the life cycle of Rhizopus after the reduction division of zygospore– **Promycelium → germ sporangium → germ spores → mycelium**	**AP EAMCET-2010**
Monerans and fungi groups of organisms are– **Ecologically similar**	**AP EAMCET-2008**
Birds' nest fungi and Puffballs belongs to– **Basidiomycetes**	**AIPMT-2007**
'Clamp connections' are observed in– **Basidiomycetes**	**JIPMER-2009**
Edible part of mushroom is– **Basidiocarp**	**JIPMER-2009**
Parasitic and saprophytic conditions are more familiar in– **Fungi**	**UP CPMT-2005**
Powdery mildew of crops are caused by– **Ascomycetes**	**MGIMS Wardha-2010**
LSD is obtained from– **Fungus**	**AFMC-2000**
Fungal spores produced externally at the top of hyphae are– **Conidia**	**AFMC-2005**
Morels and truffles groups of fungi are classified under– **Ascomycetes**	**AMU-2015**
Multinucleated filament of Rhizopus is– **Coenocytic**	**BCECE-2005**
A septum in Eumycota fungi, bearing a complex pore is called as– **Dolipore septum**	**BHU PMT-2002**
Yeast shows formation of– **Pseudo mycelium**	**BHU PMT-2002**
The basic unit of chitin is– **N-acetyl glucosamine**	**Punjab MET-2003**
Bacillus and Clostridium genera endospores are formed for– **Reproduction**	**Punjab MET-2003**
Aflatoxins are mainly produced by– **Fungi**	**Rajasthan PMT-1996**
Flagella present in Zoospores of Albugo are– **Two dissimilar, on lateral surface**	**Rajasthan PMT-1996**
Water is not necessary for fertilization in– **Albugo**	**Rajasthan PMT-1996**
Fungi produces spores, but lacks– **Vasculature**	**VMMC-2013**
Fermentation products of yeast are– **Ethyl alcohol + CO_2**	**MGIMS Wardha-2007**
Sexual dimorphism is absent in– **Deuteromycetes**	**Manipal-2012**
Gill of mushroom are meant for– **Reproduction**	**Manipal-2011**
Mycobiont and phycobiont association is– **Helotism**	**AFMC -2011**
The total number of ascospores in Penicillium are– **8**	**VMMC - 2014 AFMC -2011**
Laboratory weed is– **Aspergillus**	**BHU PMT (Mains)-2011**
Heterothallism is common in– **Mucor**	**BHU PMT-2001**
Club fungi is included in– **Basidiomycetes**	**BHU PMT-2001**
Trichoderma species are potentially useful as– **Biopesticides**	**DUMET-2010**
Fungi differs from slime moulds by lacking of– **Flagellated spores**	**DUMET-2008**
In Rhizopus, the fusion of two different thalli to form zygospore is called– **Gametangial copulation**	**AFMC-2002**
Agaricus is an– **Edible fungus**	**BHU PMT (Mains)-2008 JIPMER-2003, 2000, 1997**
Biochemical and genetic work used extensively by– **Neurospora**	**Kerala PMT-2015**
Diplanetism is exhibited by– **Saprolegnia**	**AMU-2011**
Heterotrophic fungi can live as– **Saprophytes, symbionts and parasites**	**AMU-2010**
Beadle and Tatum to proposed one gene-one enzyme hypothesis organism was used in– **Neurospora**	**MGIMS Wardha-2004 UP CPMT-2004**

In the sporogonium of which plant, columella is present– **Rhizopus**	**MGIMS Wardha-2004 UP CPMT-2004**
The chemical produced by the host plant to protect themselves against fungal infection is– **Phytoalexin**	**Manipal-2000**
Basidiospores are produced by– **Agaricus**	**Karnataka CET-2003**
Branched conidiophores are present in– **Penicillium**	**Uttarakhand-2005**
In Rhizopus, dome shaped sterile portions are found on erect structures that arise from stolons. These structures are referred to as– **Sporangiophores**	**AP EAMCET-2004**
The fungus that is edible– **Morchella**	**Haryana PMT-2009 CG PMT-2009 MGIMS Wardha-2009 Haryana PMT-2009**
Early blight disease of potato is caused by– **Alternaria solani**	**VMMC-2014**
In Puccinia, infection from barberry leaf to wheat plant is caused by–**Aeciospores**	**JIPMER-2001**
A species of Neurospora which can grow on a simple minimal medium is known as– **Prototroph**	**JIPMER-1995**
Promycelium in Rhizopus develops from– **Zygospore**	**AP EAMCET-2001**
Common bread mould is– **Rhizopus**	**CG PMT-2006**
Zygophore, progametangium, gametangium, zygospore are the successive structures formed in course of– **Sexual reproduction of Rhizopus**	**VMMC-2010**
Fungi considered as plant because of presence of– **Cell wall**	**VMMC-2010**
When the mycelium of *Rhizopus oryzae* grows submerged in a nutritive medium such as sugar solution the young coenocytic hyphae develop septa and divide into short multinucleate segment known as– **Oidia**	**CMC Vellore-2007**
Yeast is a good source of– **Riboflavin (vitamin -B_2)**	**CG PMT-2011**
Vascular wilts are caused by– **Erwinia pathogen**	**AP EAMCET-2000**
Black coal like spots of Anthracnose in plants caused by– **Gloeosporium fungus**	**AP EAMCET-2000**
Powdery mildew of wheat is caused by a species of– **Erysiphe**	**Rajasthan PMT-2011**
Sulphuric acid is not produced by various species of– **Fungi**	**HP CET-2013 VMMC-2003**
Fungal flagellum originates from– **Kinetosomes**	**Manipal-2010**
Zygospore formation occurs in– **Mucor**	**Manipal-2010**
Bakanae disease is caused by– **Fungus**	**BHU-PMT (Screening)-2008**
Fruiting body of mushrooms is present in– **Fungi**	**BCECE-2004**
Mycology is related with– **Fungi**	**BCECE-2004**
This fungus is not edible– **Toadstool**	**BCECE-2009**
Plantae	
Yeast poison themselves to death, because– **Above 13% of alcohol is hazardous**	**AP EAPCET-23.05.2023, Shift-II**
A person suffering from Iodine deficiency may be recommended to take extracts of this plant preparation– **Laminaria**	**AP EAPCET-23.05.2023, Shift-II**
Hashish, Charas and Ganja are– **Cannabinoids**	**TS EAMCET-11.05.2023, Shift-I**
The plants in the order of Ephemeral, Succulent and Non-succulent type– **Tribulus, Aloe, Casuarina**	**TS EAMCET-11.05.2023, Shift-I**
The plant has lateral branches of one internodal length– **Eichhornia**	**AP EAPCET-12.07.2022 Shift-I**
Jatropa and Pongamia plants are called as– **Petro-plants**	**TS EAMCET-31.07.2022 Shift-II**
Plant in which floral buds store food material– **Agave**	**AP EAPCET-12.07.2022 Shift-I**
The Campylotropous ovule is characterized by– **Micropyle comes towards funiculus**	**AP EAMCET-24.09.2020 Shift-I**
Green plants are– **Autotrophs**	**BVP-2000**
Sex chromosomes for the first time was discovered in– **Sphaerocarpos plant**	**DUMET-2006**
Polygonum type of embryo sac is– **Monosporic octa (8) nucleate**	**MP PMT-2013**
Insectivorous plant is– **Drosera**	**MGIMS Wardha-2012**
The most harmful weed is– **Parthenium**	**CMC Vellore-2011**
The movement of hairs in Drosera is– **Thigmonastic**	**UP CPMT-2011**
Aerenchyma provides– **Buoyancy to hydrophytic plants**	**Uttarakhand PMT-2004**
Insectivorous plants grow in a soil– **Deficient in nitrogen**	**HP CET-2011**

A branch of botany concerned with the classification, nomenclature and identification of plants is– **Systematic Botany**	**JIPMER-2000**
Utricaurens is called– **Stinging nettle**	**AMU-2003**
Study of animal behaviour is– **Ethology**	**TS EAMCET-31.07.2022 Shift-II**
In Caecilians, vertebrae are– **Amphicoelous**	**AP EAPCET-12.07.2022 Shift-I**
Earthworm is not a– **Deuterostome**	**J&K CET-2011**
The possible beneficial aspect of grazing animals is the– **Addition of their excreta into the soil**	**HP CET-2011**
Notes on viruses, Viroids, Prions and Lichens	
The most suitable indicators of SO_2 pollution in the environment is– **Lichens**	**AIPMT (Re-Exam)-2015 UP CPMT-2007 AIPMT-1992 JIPMER-2005**
LPP-1 is a– **Cyanophage**	**AIIMS-2014 BVP-2001 AIIMS-1995 Manipal-2001**
Human Papilloma Virus and Chronic Hepatitis B are causing– **Cancer**	**TS EAMCET-11.05.2023, Shift-II**
Bovine spongiform encephalitis disease is caused by– **Prions**	**AP EAMCET-11.07.2022 Shift-II**
The virus which causes Bird flu is– H_5N_1	**TS EAMCET-30.07.2022 Shift-II**
The phage that attacks a host cell but do not destroy it immediately– **Temperate phage**	**AP EAMCET-12.07.2022 Shift-II**
Mad cow disease in cattle and Cr Jacob disease in humans are due to infection by– **Prion**	**NEET (Re-Exam)-04.09.2022**
Prophage is viral genome– **Incorporated and integrated to host genome**	**AP EAMCET-03.09.2021 Shift-II**
Classification of Virus is done by– **ICTV**	**AP EAMCET-25.09.2020 Shift-II**
The algal partner of the lichen is called– **Phycobiont or photobiont**	**MHT CET-07.10.2020 Shift-I**
The capsid of tobacco mosaic virus (TMV) has capsomere numbering– **2130**	**AP EAMCET-24.09.2020 Shift-I KCET-2000**
Mad cow disease in cattle is caused by an organism which have– **Abnormally folded protein**	**NEET (Odisha)-2019**
HIV belongs to the genus– **Lentivirus**	**AP EAMCET-25.04.2018 Shift-II**
Viroids differ from viruses in having– **RNA molecules without protein coat**	**NEET-2017**
There exists a close association between the alga and the fungus within a lichen. The fungus– **Provides protection, anchorage and absorption for the alga**	**AIPMT-2005**
Tobacco mosaic virus (TMV) genes are– **Single stranded RNA**	**AIPMT-1994 / BVP-2002**
Viruses possess– **Either DNA or RNA**	**AIPMT-1997**
Most of the lichens consist of– **Green algae and ascomycetes**	**AIPMT-1997**
Litmus is obtained from– **Rocella montagnei and Lasallia pustulata**	**JIPMER-2005 HARYANA PMT -2005**
Retrovirus have genetic material– **RNA**	**JIPMER-2008**
The genetic material in tobacco mosaic virus is– **ss RNA**	**AIIMS-2016**
Cyphella structure helps in the– **Respiration of lichens**	**AIIMS-2002**
The antibiotics have no effect on viruses because– **Viruses show no metabolism of their own**	**AIIMS-2015**
Single stranded RNA not enclosed by protein coat is called – **Viroids**	**AIIMS-2003 Punjab MET-2006**
Infectious proteins are present in– **Prions**	**AIPMT (Screening)-2010**
HIV/ HIV does not follow the central dogma of– **Molecular biology**	**AIPMT (Screening)-2010**
Virus envelope is known as– **Capsid**	**AIPMT (Screening)-2010**
'Reindeer moss' is common name for– **Cladonia rangiferina**	**JIPMER-2004**
There exists a close association between the alga and the fungus within a lichen. The fungus– **provides protection, anchorage and absorption for the algae**	**JIPMER-2007**
A term helotism is used for the symbiosis of– **Algae and fungi**	**AP EAMCET-2007**
Nucleic acid in HIV– **ss RNA**	**AIPMT-1998**

Lichens can be used as– **Bio-indicator for water and air pollution**	**AIPMT-1999**
Cauliflower mosaic virus contains– **ds DNA**	**AIPMT-2001**
The latest view for the origin of viruses is– **These are modified plasmids, which are infact the fragments of the nucleic acids of the host**	**AP EAMCET-2011**
The agents which are known to cause CJD are– **Protein particles**	**Karnataka CET-2009**
The total number of amino acids when the capsid of TMV contains 2130 capsomeres is– **336540**	**AP EAMCET-2013**
Cyanophages discovered by– **Shafferman and Morris**	**UP CPMT-2014**
The virus, that infects bacteria, are made up of– **DNA and protein**	**WB JEE-2006**
Provirus is– **Integrated viral genome**	**JCECE-2008**
A lichen responsible for forest fire is– **Usnea**	**BVP-2010**
Virus is classified in– **Akaryota class**	**Rajasthan PMT-1996**
The protein that reproduce within the living cells are termed as– **Prions**	**MGIMS Wardha-2014**
Helical contractile sheath is found in– **Bacteriophage**	**Manipal-2011**
The common phycobiont of lichens is– **Trebouxia**	**BHU PMT (Mains)-2011**
The process which cannot takes place in the absence of virus is– **Transduction**	**Karnataka CET-2002**
Polio is caused by a– **Virus with a single-stranded RNA**	**DUMET-2010**
The number of linkage group(s) present in *Escherichia coli* is– **One**	**DUMET-2010**
Rabies is caused by– **Virus**	**DUMET-2008**
Small proteins produced by vertebrate cells naturally in response to viral infections and which inhibit multiplication of viruses are called– **Interferons**	**AFMC-2007**
Viruses that infect bacteria multiply and cause their lysis, are called– **Lytic**	**Rajasthan PMT-2010**
Animals virus contains mostly– **DNA**	**AMU-2011**
The genetic material in influenza virus is– **RNA**	**AMU-2011**
Gemini viruses are plant viruses with– **Circular single stranded DNA**	**AMU-1998**
Bacteriophage is consist of– **Nucleoproteins**	**Rajasthan PMT-1998**
The virus which causes ring spot diseases in cherry is transmitted through– **Pollen grains**	**AP EAMCET-2001**
Fungus/lichens which grow on wood is– **Lignicolous**	**AFMC-2004**
Basic structure of protein was given by– **F. Sanger**	**AFMC-2004**
The smallest organisms, which cause disease among plant are– **Mycoplasma**	**CG PMT-2006**
Virus multiplies in– **Living tissue**	**BHU-PMT (Screening)-2008 Uttarakhand PMT-2008 BHU PMT-2004**
Smallest animal virus is– **Polio virus**	**BHU PMT (Screening)-2011**
Potato spindle tuber disease is caused by– **A viroid**	**DUMET-2009**
Viruses are– **Intracellular obligate parasites**	**DUMET-2009**
The pair that shows the double stranded RNA– **Wound tumour virus and reovirus**	**VMMC-2010**
Bio-indicators are used for– **Oxygen demand, air pollution and mineral present**	**Haryana PMT-2008**
Interferons are synthesized in response to– **Viruses**	**Haryana PMT-2003**
AIDS, Rabies pair of disease is– **Viral**	**Haryana PMT-2003**
T series bacteriophage possess complex tail structure is– **T_4**	**CG PMT-2010**
A virus that can reproduce without killing its host is called a– **Temperate virus**	**CG PMT-2010**
Dulbecco is credited to show that Viruses are the cause of– **Cancer**	**CMC Vellore-2014**
Virus cause swollen shoot disease in– **Cocoa**	**AP EAMCET-1999**
Tobacco mosaic virus is a tubular filament of size– **300 × 20 nm**	**VMMC-2007**
Reovirus has double-stranded– **RNA**	**CMC Vellore-2010**
Viruses that infect bacteria, multiply and cause their lysis are– **Lytic**	**CMC Ludhiana-2012**
Plant viruses contain– **RNA**	**AMU-2003**

03.

PLANT KINGDOM

3.1 CLASSIFICATION

- Laminarin is the stored food in– **Dictyota**
- _____ of classification involves usage of one or few morphological characters for grouping of organisms– **Artificial system**
- Classification of organisms on the basis of fossils record that play important role in elucidation of evolutionary relationship is– **Phylogenetic system**
- The earliest system of classification used– **Only superficial morphological characters**
- Classification system, given by George Bentham and Joseph Dalton Hooker is– **Natural Classification System**
- Taxonomy is based on chromosome number, structure, behaviour is known as– **Cytotaxonomy**
- Artificial systems of classification were based upon– **Vegetative characters, Androecium structure, Habit and habitat**
- A system of classification in which a large number of traits are considered is– **Natural system**
- Each character is given equal importance and at the same time hundreds of characters can be considered in– **Numerical taxonomy**
- ..... uses the chemical constituents of plants to resolves confusions– **Chemotaxonomy**
- Cytotaxonomy is based on– **Structure and behaviour of chromosomes**

3.2 ALGAE

- Reproduction is synonymous with growth– **Chlorella and Amoeba**
- Life cycle is represented by fucus– **Diplontic**
- The formation of gametes in gametophyte of bryophyte, pteridophyte and gymnosperm occurs by– **Mitosis in all**
- Gracilaria and Gelidium reproduce sexually by– **Rhodophyceae (non-flagellate gametes)**
- Organisms, having chlorophyll a, c and fucoxanthin in their double membranous organelles– **Also have mannitol and laminarin starch as their reserve food**
- An alga as the source of protein is– **Chlorella**
- Brown algae is characterized by the presence of– **Fucoxanthin**
- Algae with floridean starch as reserve material is also characterized by – **Rhodophyceae (nonflagellate nature)**
- Algae, bryophytes and pteridophytes resemble with each other in– **Dependence on water for fertilisation**
- Haplontic life is is represented by– **Volvox**
- An alga exhibits diplontic life cycle is– **Fucus**
- Antherozoids represents– **Motile male gametes**
- In gracilaria, sexual reproduction is– **Oogamous**
- Ectocarpus is– **Filamentous brown algae**
- In algae, the photosynthetic pigments are present in– **Chloroplast**
- Peat is obtained from– **Sphagnum**
- Kelps are massive– **Brown algae**
- A colonial algae is– **Volvox**
- Algae has similar sized non flagellated gametes– **Spirogyra**
- Diatoms pile up at the bottom of water reservoirs and form big heaps as– **Their walls are embedded with silica**
- Members of chrysophytes– **Are found only in fresh water**
- Cell wall of diatoms– **Silica deposition**
- Most of _____ have two flagella, one lies longitudinally and the other transversely, in a furrow between the wall plates– **Dinoflagellates**
- Dinoflagellates are mostly– **Marine and photosynthetic**
- Diatoms do not decay as readily as most other algae because– **They have siliceous cell walls**
- Responsible for death of large numbers of marine animals such as fishes– **Red dinoflagellates (Gonyaulax)**
- Groups of organisms are included under chrysophytes– **Diatoms and desmids (golden algae)**
- The cell wall is composed of two thin overlapping shells, fit together like a soap case, in– **Diatoms**
- Red tides in warm coastal water develop due to the abundance of– **Dinoflagellates**
- Cyanobacteria also referred to– **Blue-green algae**
- Cyanobacteria are– **Photoautotrophs**
- Nuclear membrane is absent in– **Nostoc (prokaryotes)**
- Algae have cells made up of– **Cellulose, galatians and mannans**
- An example of colonial alga is– **Volvox**
- ..... plants is monoecious– **Chara**
- Life cycles of Ectocarpus and Fucus respectively, are– **Haplodiplontic, diplontic**
- Algae contains mannitol as reserve food material– **Ectocarpus**
- ..... is wrong about Chara– **Upper antheridium and lower oogonium**
- Isogamous condition with non-flagellated gametes is found in– **Spirogyra**
- Holdfast, stipe and frond constitute the plant body in case of– **Phaeophyceae**
- Cyanobacteria are classified under– **Monera**
- Laminarin and mannitol, the reserve food of brown algae, are– **Complex carbohydrates**
- Dictyota belongs to– **Phaeophyceae**
- Photosynthetic pigments of Rhodophyceae (red algae)– **chl a, chl d and phycoerythrin**

- Phycoerythrin is present in– **Polysiphonia**
- Phycoerythrin, chlorophyll a chlorophyll d are characteristics of– **Rhodophyceae**
- Common example of red algae is– **Porphyra, Polysiphonia**
- Belong to red algae– **Gelidium, Porphyra**
- Gracilaria is a– **Red alga**
- Type of sexual reproduction is found in Volvox– **Oogamous**
- Agar-agar is commercially obtained from– **red algae**
- ..... is unicellular alga, rich in proteins, that is used as food supplements even by space travellers– **Chlorella**
- At least a half of the total CO_2 fixation on Earth is carried out through photosynthesis by– **Algae**
- Major photosynthetic pigments in green algae are– **Chl a and b**
- The chloroplast in green algae is– **Cup-shaped, Discoid, Reticulate**
- In most green algae, pyrenoids, the storage bodies, are located in– **Chloroplasts**
- Green algae usually have a rigid cell wall made of an inner layer of ..... and an outer layer of ..... **Cellulose, Pectose**
- A member of Class Chlorophyceae is– **Volvox, Chlamydomonas, Ulothrix**
- In Ulothrix, sexual reproduction takes place by–**Isogamy**
- Belongs to same class of alga– **Volvox, Chlamydomonas**
- The members of Phaeophyceae or brown algae are found primarily in / on– **Marine habitat**
- The pigments are found in brown algae– **Chl a, chl c and fucoxanthin**
- The possesses pyriform gametes that bear two laterally attached flagella– **Ectocarpus, Laminaria, Fucus**
- The organisms are known as chief producers in the oceans– **Diatoms**
- Groups of organisms are included under chrysophytes– **Diatoms & desmids (golden algae)**
- Chrysophytes are– **Planktons**
- The cell wall is composed of two thin overlapping shells ..... fit together like a soap case in– **Diatoms**
- Siliceous frustules of diatoms being indestructible, piled up at the bottom of ocean and formed a thick bed over billions of years. Such a thick bed is known as– **Diatomaceous earth**
- Diatomaceous earth is used for all except– **Biogas production**
- Dinoflagellates are mostly– **Marine & photosynthetic**
- A slide under microscope shows features– **Dinoflagellate**
- That group of organisms is represented– **Dinoflagellates**
- Red tides in warm coastal water develop due to the abundance of– **Dinoflagellates**
- Cyanobacteria are used in agricultural fields for crop improvement because they cause– **N_2 fixation**
- In Anabaena and Nostoc, ... are the sites for nitrogen fixation– **Heterocysts**
- Cyanobacteria are classified under kingdoms– **Monera**
- Algae forms motile colony is– **Volvox**
- In green algae, vegetative reproduction usually takes place by– **Fragmentation, Formation of different types of spores**
- Chlorophyll a, c, carotenoids and xanthophylls are present in– **Phaeophyceae**
- Pyrenoids are made up of– **Proteinaceous centre surrounded by starchy sheath**
- Carrageen is a water holding substance and obtained from– **Red algae**
- Main pigment in phaeophycene (Brown algae) is– **Fucoxanthin**
- In green algae, the plant body is usually attached to the substratum by a– **Holdfast**
- Food reserve in Rhodophyceae (red algae) is– **Floridean starch**
- Some species of marine algae are used as food. These are– **Porphyra, Laminaria, Sargassum**
- Kelps may reach a height of– **100 metres**
- Fusion of two morphologically similar but physiologically different gametes- **Isogamy involves**
- Example of filamentous algae– **Spirogyra, Ulothrix**
- Agar is an important commercial product which is produced by two Red Algae, These algae are– **Gelidium, Gracilaria**
- The chlorophyll pigments present in chlorophyceae (Green Algae) are– **Chlorophyll a and b**
- Cell wall of Spirogyra is composed of– **Pectose, Cellulose**
- Laminarin is the stored food in– **Dictyota**
- In Gracilaria, sexual reproduction is– **Oogamous**
- Chlamydomonas, Volvox, Ulothrix, Spirogyra and Chara are examples of– **Green algae**
- 'Non-flagellated' gametes occur in– **Spirogyra**
- During asexual reproduction, in most of brown algae, zoospores are produced– **Pear-shaped with two flagella**
- Brown algae is– **Sargassum**
- All algae have two photosynthetic pigments in common– **Chlorophyll a and carotenes**
- Groups of algae, belongs to class rhodophyceae– **Gracilaria, Gelidium, Porphyra, Polysiphonia**
- Sets-belongs to the same class of algae– **Volvox, Spirogyra, Chlamydomonas**
- The thallus organisation of Volvax is– **Colonial and Motile**

3.3 BRYOPHYTES

- The sporophyte is non foliar and partially dependent on gametophyte for water and minerals is - **Funaria**
- Funaria, Polytrichum and Sphagnum should have– **Diploid Zygote**
- Inconspicuous thalloid gametophyte is - **Prothallus**
- Starting of megaspore is a preparation of few heterosporous species to move towards seed habit - **In- situ germination**
- The bryophytes divided into– **Liverworts and hornwort mosses**

- Bryophyta in plant kingdom is called– **Amphibians**
- The sperms can easily reach upto egg in the archegonium in bryophyta are dependent on - **Water**
- Moss peat is used as a packing material for sending flowers and live plants to distant places because– **It is hygroscopic**
- The dominant photosynthetic phase in the life cycle of pteridophyta is equivalent to the– **Gametophytic phase of bryophyta**
- ____ possess vascular tissues but lacks seeds– **Ferns**
- Liverworts reproduce asexually by– **Gemmae, Fragmentation**
- In mosses the sex organs are present in the– **Leafy stage**
- ..... is responsible for peat formation– **Sphagnum**
- Compared with the gametophytes of the bryophytes, the gametophytes of vascular plants tend to be– **Smaller and to have smaller sex organs**
- If the diploid number of a flowering plant is 36, what would be the chromosome number in its endosperm– **54**
- Protonema is– **Haploid and is found in mosses**
- A plant shows thallus level of organisation. It shows rhizoids and is haploid. It needs water to complete its life cycle because the male gametes are motile. It may belong to– **Bryophytes.**
- A gametophytic free living structure formed in pteridophytes is a - **Prothallus**
- Bryophytes include– **Mosses and liverworts**
- The bryophytes are usually found in– **Damp and shaded areas**
- Resemblances between algae and bryophytes include– **Thallus-like plant body, lack of vascular tissue, autotrophic nutrition**
- The prominent phase in the life cycle of bryophytes is– **Gametophyte**
- The female sex organ in Polytrichum and Funaria is – **Archegonium**
- Multicellular sex organs are found in– **Funaria, Polytrichum, Sphagnum**
- The Zygote in bryophytes develops in the– **Archegonium**
- The sporophyte is attached to the gametophyte in– **Bryophytes**
- Sporophytes are dependent upon gametophytes in- **Bryophytes**
- Peat, obtained from Sphagnum moss is used as– **Fuel**
- Asexual reproduction in liverworts takes place by– **Fragmentation of thalli and gemmae formation**
- Gemmae are asexual reproductive bodies of– **Liverworts**
- Gemmae are the specialised structures produced in liverworts. These are– **Green, multicellular, asexual buds which develop in gemma cups**
- Gemmae are multicellular green structures for vegetative propagation. These are found inside gemma cups in– **Marchantia thallus**
- Includes liverworts and mosses respectively– **Marchantia, Funaria**
- Funaria, the haploid structure is– **Protonema**
- The sporophytic phase in Funaria is well developed and composed of– **Foot, Seta and Capsule**
- ..... is not a mass– **Marchantia**
- Funaria requires water because– **Fertilisation occurs in water only**
- A moss sperm moves by means of– **Flagella**
- Peat is obtained from– **Sphagnum**
- Liverwort reproduce asexually by– **Gemmae, Fragmentation**
- In mosses the sex organs are present in the– **Leafy stage**
- Antherozoids represents– **Motile male gametes**
- Archegonium is– **Female sex organ**
- Plant succession on bare rocks or soil an important role of– **Bryophytes**
- Mosses are attached to substratum by– **Rhizoids**
- Mosses occur in moist places because they– **Require water for the transport of gametes**
- Foot, seta and capsule are the parts of– **Sporophyte in bryophytes**
- Bryophytes that prevent soil erosion by forming dense mats on the soil are– **Mosses**
- The packing material for trans-shipment of living material is obtained from– **Sphagnum**
- Ancestors of land plants were– **Green algae**
- Sporophyte of liverworts bears spores in– **Capsule**
- Bryophytes are also called amphibians of the plant kingdom because– **They require both land and water for survive**
- Sex organs are found on specialized stalked sexual receptacles called antheridiophore and archegoniophore in– **Marchantia**
- Branched rhizoids and leafy gametophyes are characteristic of – **Some bryophyte like mosses**

3.4 PTERIDOPHYTES

- A heterosporous pteridophyte is– **Salvinia**
- Ginger and Equisetum– **Similar in having rhizome**
- Main plant body is sporophyte which is differentiated into true stem roots and leaves - **Salvinia and Selaginella**
- Pteridophytic sporophytes bear sporangia that are subtended by leaf like appendages– **Sporophylls**
- Important in the development of seed habit– **Heterospory**
- In pteridophytes, reduction division occurs when– **Spores are formed**
- Haplo-diplontic condition is exhibited by– **Bryophytes**
- The main plant body is differential into true root, stem and leaves in– **Pteridophytes**
- In pteridophytes, fusion of gametes takes place in– **Archegonium**
- In selaginella the embryo develops into– **Sporophyte**
- In pteridophytes, the megaspore germinates to form– **Female gametophyte**
- The development of young embryos of pteridophytes within the female gametophytes is a precursor to the– **Seed habit**
- Genera like Selaginella, Salvinia produce two kinds of spores. Such plants are known as– **Heterosporous**

- In pteridophytes, a spore germinates to produce– **Prothallus**
- The spread of living pteridophytes is limited and is restricted to narrow geographical region because– **Gametophytic growth needs cool, damp and shady places** **There is requirement of water of fertilisation**
- In pteridophytes, prothallus produces– **Antheridia and archegonia**
- The heterosporous pteridophytes are– **Selaginella and Salvinia**
- Heterosporous pteridophytes show certain characteristics, ... are precursor to the 'seed habit' in gymnosperms. One of such characteristics is– **Development of embryo inside the female gametophyte**
- Does not belong to class Pteropsida– **Selaginella**
- Evolutionatily, the first terrestrial plants to possess vascular tissues are– **Pteridophytes**
- The main plant body in Pteridophyte is– **Sporophytic**
- Pteropsida includes – **Pteris and Adiantum**
- Equisetum belongs to **Sphenopsida**
- The dominant phase in the life cycle of a pteridophyte is– **Sporophyte**
- Heterosporous pteridophytes is– **Selaginella and Marsilea etc.**
- In pteridophytes, the sporophyte is produced by the– **Zygote**
- Pteridophyte is not a– **Ginkgo**
- In pteridophytes, water is required for transfer of– **Antherozoids**
- Economic importance of pteridophytes in– **Medicinal ornamentals, soil binder**
- Fusion of male gamete with the egg present in the archegonium result in the formation of– **Zygote**
- Prothallus is– **Photosynthetic**
- Heterosporous is– **Salvinia**
- Pteriophytes include– **Horsetails, Ferns**
- Pteridophyta differs from bryophyta in having– **Vascular tissue**
- Plants having spores, xylem and phloem but lacking seeds are– **Pteridophytes**
- Macrophyllous leaves are found in– **Ferns**
- Sporangia produce spores in spore mother cells, method is– **Meiosis**
- Class lycopsida includes– **Selaginella, Lycopodium**
- In pteridophytes, zygote results in the production of multicelluar well-differentiated, dominant phase which is– **Sporophyte**
- Seed habit is linked with– **Heterospory**
- Development of Seed habit considered– **Heterospory**
- Genera like Selaginella and Salvinia produces spores known as– **Heterosporous**
- Leaf like structure in Pteridophytes that bear spores are called– **Sporangia**
- Prothallus represents the– **Gametophytic phase in Pteridophytes**
- Consisting of all genera exhibiting homospory group– **Equisetum, Psilotum, Lycopodium, Pteris**

3.5 GYMNOSPERMS

- In gymnosperms, branched stem is found is– **Pinus and Cedrus**
- Produce ovules which are borne on megasporophylls- **Ginkgo, Pinus, Selaginella and Cycas**
- Common in all the three, Funaria, Dryopteris and Ginkgo– **Presence of archegonia**
- Female strobili are present in– **Some gymnosperms**
- Gymnosperms differ from angiosperms in the– **Formation of endosperm before fertilization**
- Constitutes the dominant vegetation in colder regions– **Gymnosperms**
- A Monoecious plant– **Pinus**
- Eucalyptus is different from Cedrus in the presence of– **Triple fusion**
- Gymnosperms have– **Naked seed plant**
- _____ has both the male and female cones on same plant body– **Pinus**
- Coralloid roots have a symbiotic association with– **Nitrogen-fixing cyanobacteria**
- The cones bearing microsporophylls are known as– **Male strobili**
- Conifers are adapted to tolerate extreme environmental conditions because of– **Thick cuticle**
- The giant Redwood tree (Sequoia sempervirens) is a/an– **Gymnosperm**
- Plants of this group are diploid and well adapted to extreme conditions. They grow bearing sporophylls in compact structures called cones. The group in reference is– **Gymnosperms**
- Plants ..... posseses seeds but not fruits are– **Gymnosperms**
- Gymnosperms do not include– **Herbs**
- Mycorrhizal roots of ..... are associated with some fungal symbionts– **Pinus**
- Coralloid roots of ..... have symbiotic association with N_2 – fixing cyanobacteria– **Cycas**
- Gymnosperms has branched stems– **Pinus, Cedrus**
- The leaves of gymnosperms are well-adapted to withstand extremes of temperature, humidity and wind, because of features– **Needle-like leaves, Thick cuticle, Sunken stomata**
- Gymnosperms are all– **Heterosporous**
- In Pinus, male strobilus bears a large number of– **Microsporophylls**
- Heterospory is found in some members of ..... and all members of .....– **Pteridophyta, Gymnospermae**
- Structures are haploid in gymnosperms– **Pollen grain, megaspore**
- ..... do not have free living gametophyte– **Gymnosperms**
- Male cones and megasporophylls borne on different trees in– **Cycas**
- ..... is not the characteristic of Cycas– **Absence of archegonia**
- Fruits are not found in gymnosperms because– **They have no ovary**
- Gymnosperms are called naked seeded plants due to the absence of– **Ovary wall**
- Antheridium is not found in– **Gymnosperms**
- In coralloid roots, roots are short and irregularly arranged and exist in symbiotic association with– **Cyanobacteria**

- Cycas male cones and megasporophylls are borne on - **different trees**
- Megasporangium in Gymnosperms is also called as– **Female strobili**
- A plant having seeds but lacking flowers and fruits belongs to– **Gymnosperms**
- The gymnosperms are ..... that means they produce different male and female spores– **Heterosporous**
- Roots of which gymnosperm have fungal association in the form of mycorrhiza– **Pinus**
- Adaptations in gymnosperms to withstand unfavourable conditions are– **Thick cuticle, Needle-like leaves, Sunken stomata**
- Megasporophyll is the term used in gymnosperm to denote– **Carpels**
- The male and female gametophytes do not have an independent free-living existence in– **Gymnosperms**
- The male or female cones may borne on same tree in– **Pinus**
- In gymnosperms, megaspore mother cell divides meiotically to form four megaspores. Out of four megaspores, one develops into a multicellular structure termed as– **Female gametophyte**

3.6 ANGIOSPERMS

- _____ angiosperm is almost microscopic– **Wolffia**
- Endosperm of angiosperm is– **Triploid**
- The embryo sac of an angiosperm is made up of– **6 cells and B nuclei**
- Antheridia and archegonia are absent in– **Angiosperms**
- An exceptionally large group of plants occurring in wide range of habitats– **Angiosperms**
- The role of double fertilization in angiosperms is to produce– **Endosperm**
- Polar nuclei fuse to produce– **Diploid secondary nucleus**
- Angiosperms differ from gymnosperms as they show– **Triple fusion, Double fertilization**
- The fusion product of two polar nuclei is referred to as– **Secondary nucleus**
- Seeds are present inside the fruit wall in– **Angiosperms**
- Embryo sac represents– **Female gametophyte**
- The smallest angiospermic flower is– **Wolffia**
- Angiosperms differ from gymnosperms in having– **Fruits**
- Double fertilization and triple fusion are characteristics of– **Angiosperms**
- Seed formation in angiosperm for necessary– **Ovule, Pollination, Double fertilization**
- In angiosperms, ploidy of embryo sac is– **Haploid**

3.7 PLANT LIFE CYCLES

- Life cycle of gymnosperm is– **Diplontic**
- Life cycle is exhibited by fucus– **Diplontic**
- All plants exhibit alternation of generations. This means their life cycle– **Has both a multicellular haploid stage and a multicellular diploid stage**
- The life cycle of Ectocarpus and Polysiphonia is– **Haplo-diplontic**
- Water is essential to develop a new plant body with respect to sexual reproduction. This statement is true plant group for– **Bryophytes & Pteridophytes**
- Some plant groups exhibit intermediate condition with respect to life cycle pattern. Which characteristic will not be exhibited by such kind of plant– **Meiosis takes place in zygote**
- Funaria requires water because– **Fertilization occurs in presence of water only**
- Angiosperms have dominated the land flora primarily because of their– **Power of adaptability in diverse habitat**
- Blue green algae store food in the form of α-granules and β-granules, α-granules are composed of cyanophycean starch and β-granules are composed of fat droplets. This cyanophycean starch is structurally related to– **Glycogen**
- The members of rhodophyceae are commonly called red algae because– **They show prodominance of r-phycoerythrin in their body**
- A plant shows sporophyte as a main generation. Its gametophyte shows rhizoids and is haploid. It needs water to complete its life cycle because the male gametes are motile. Identify the group it belongs– **Bryophytes**

3.8 MISCELLANEOUS

- Karyogamy and meiosis takes place in the basidium of– **Puccinia and Agaricus**
- Fusion of two motile gametes which are dissimilar in size is termed as– **Anisogamy**
- A plant shows thallus level of organisation. It shows rhizoids and is haploid. It needs water to complete its life cycle because the male gametes are motile. Identify the group belongs to– **Bryophytes**
- Plants of this group are diploid and well adapted to extreme conditions. They grow bearing sporophylls in compact structures called cones. The group in reference is– **Gymnosperms**
- The embryo sac of an angiosperm is made up of– **7 cells and 8 nuclei**
- Protonema is– **Haploid and is found in mosses**
- Hydrocolloid carrageen is obtained from– **Rhodophyceae only**
- Algae produce Carrageen is– **Red algae**
- Genera like Selaginella and Salvinia produce two kinds of spores. Such plants are known as– **Heterosporous**
- Gemmae are present in– **Some Liverworts**
- The pairs is of unicellular algae– **Chlorella and Spirulina**
- Floridean starch has structure similar to– **Amylopectin and glycogen**
- Strobili or cones are found in– **Equisetum**
- Phycoerythrin is the major pigment in– **Red algae**
- From evolutionary point of view, retention of the female gametophyte with developing young embryo on the parent sporophyte for some time, is first observed in– **Pteridophytes**
- Pinus seed cannot germinate and established without fungal association. This is because– **It has obligate association with mycorrhizae**
- Winged pollen grains are present in– **Pinus**

EXAM POINT

Some Basic Classification of Plant	
Angiosperms and Gymnosperms are grouped under– **Phanerogams**	**VMMC-2012, 2002, JIPMER-2009, CG PMT-2008 Uttarakhand PMT-2008 BVP-2007, BHU PMT-2004**
Linnaeus system of plant classification is based on– **Morphological characters**	**Rajasthan PMT-2009 CMC Vellore-2009 Punjab MET-2009 UP CPMT-2009**
Natural system of classification proposed in– **Genera plantarum**	**TS EAMCET-10.05.2023, Shift-II**
Four plants are observed 'A' is a primitive land plant. 'B' is embryophytic archegoniate phanerogam. 'C' is autotrophic thallophyte showing haplontic lifecycle. 'D' is nonflowering plant with heterosporous sporangium. The plants found respectively are– **Marchantia, Ginkgo, Spirogyra, Selaginella**	**AP EAPCET-23.05.2023, Shift-I**
Benthem & Hooker divided plants into 3 classes which includes– **Dicotyledonae, Gymnospermae, Monocotyledonae**	**AP EAMCET-03.09.2021 Shift-II**
One of the following scientists was the earliest to attempt more scientific basis for classification– **Aristotle**	**AP EAMCET-03.09.2021 Shift-I**
The book 'Die Naturlichen Pflanzenfamilien' was written by– **Engler and Prantl**	**AP EAPCET-07.09.2021 Shift-I**
Systema Naturae books were contributed by– **Linnaeus**	**AP EAMCET-05.10.2021 Shift-I BCECE-2012**
New systematics introduced by Sir Julian Huxley is also called– **Biosystematics**	**AP EAMCET-25.09.2020 Shift-I**
Floral characters such as single whorl of perianth or no perianth and unisexual flowers pollinated by wind were considered as primitive characters in _____ system of classification– **Phylogenetic**	**SRM JEEE-2019**
The placement of order Ranales in the beginning is a merit in the– **Bentham and Hooker's system of classification**	**Kerala PMT-2008**
In Bentham and Hooker's system of classification the sub-class polypetalae and Gamopetalae have the cohorts in the ratio of– **1 : 1**	**AP EAMCET-2014**
Chromatophores take part in– **Photosynthesis**	**AIPMT (Re-Exam)-2015**
Tracheophyta consists of– **Pteridophytes, gymnosperms and angiosperms**	**UP CPMT-2009**
Plants reproducing by spores such as mosses and ferns are grouped under the general term– **Cryptogams**	**AIPMT-2003**
Organisms which obtain energy by the oxidation of reduced inorganic compounds are called– **Chemoautotrophs**	**AIPMT-2002**
Artificial system of classification was first used by– **Linnaeus**	**AIIMS-1999,1998 AIPMT-1989**
Phylogenetic classification is one which is based on– **Common evolutionary descent**	**AIPMT-1994**
Phytochrome is found in– **Bryophytes, pteridophytes and angiosperms**	**AFMC-2003**
Father of botany is– **Theophrastus**	**Punjab MET-2008**
A group of plants which are autotrophs, their sex organs are non-jacketed and whose zygotes secrete thick wall are called– **Thallophytes**	**Punjab MET-2007**
Systema naturae is concerned with– **Classification of plants and animals**	**CG PMT-2005**
Five kingdom classification includes– **Monera, Protista, Fungi, Plantae, Animalia**	**DUMET-2006**
Mosses are– **Amphibians of plant kingdom**	**Karnataka CET-2013**
The natural system of classification proposed by– **Bentham and Hooker**	**BVP-2011 DUMET-2003, AIPMT-1988**
Oswald and Tippo has divided plant kingdom in to– **Two sub kingdoms**	**Rajasthan PMT-1997**
The basis of phenetic classification is– **Observable characteristic of existing organisms**	**Manipal-2014**
Sub-phyla are present in tracheata according to Tippos classification of kingdom plantae are– **4**	**Manipal-2001**
Botanical herbarium of India are classified according to classification of– **Bentham and Hooker**	**Rajasthan PMT-2001**

In the prothallus of a vascular cryptogam, the antherozoids and eggs mature at different times. As a result– **Self-fertilization is prevented**	**BCECE-2012**
The division of the plant kingdom into Prokaryota and Eukaryota is based on the character of– **Nucleus**	**CG PMT-2004**
Order - Inferae belongs to– **Gamopetalae**	**BVP-2011**
Archegonia are found in– **Gymnosperm**	**BVP-2011**
Bentham and Hooker proposed their classification in book– **Genera Plantarum**	**WB JEE-2008**
A system of classification in which a large number of traits are considered is– **Natural system**	**Punjab MET-2010**
Two plants can be conclusively said to belong to the same species if they– **Can reproduce freely with each other and form seeds**	**AIPMT-2007**
According to classification of Ostwald Tippo; plant kingdom is divided into– **Thallophyta and Embryophyta**	**UP CPMT-2014**
Heterothalism was discovered by– **Blakeslee**	**UP CPMT-2006**
Methodical study of plants, dealing with identification, naming and classification- **Systematic botany**	**J&K CET-2009**
A plant which lives for a few days is called– **Ephemeral**	**JCECE-2010**
Diversification in plant life appeared– **Due to long periods of evolutionary changes**	**Manipal-2007**
Classification based on chromosome number is– **Cytotaxonomy**	**BCECE-2005**
Heterospory is the production of– **Large and small spores**	**Punjab MET-2003**
Heterospory is considered important in the development of– **Seed habit**	**Kerala PMT-2015**
The non-nucleated, unicellular organisms of Whittaker's (1969) classification are included in the kingdom– **Monera**	**CG PMT-2007**
Two kingdom system of classification was given by– **Linnaeus**	**Haryana PMT-2002**
Five-kingdom scheme to classify living beings has been proposed by– **R. H. Whittaker**	**CG PMT-2011, 2009**
System of classification proposed by Linnaeus– **Sexual system of classification**	**Haryana PMT-2008** **CG PMT-2006**
Gall nuts on plants in produced by– **larva of dipterous insects**	**BHU PMT (Screening)-2011**
One of the example of non- embryophyta is **Ulothrix**	**BHU PMT (Screening)-2011**
In Bentham and Hooker's classification the way of arrangement of the three series of polypetalae reflects. This gradual evolution of flower from– **Hypogyny to epigyny**	**AP EAMCET-2002**
Huxley is father of– **Neo-taxonomy**	**Haryana PMT-2008**
Hutchinson taxonomist described classification of plant in families of– **Flowering plant**	**BVP-2013**
The book Historia Plantarum was written by– **Theophrastus**	**AP EAMCET-2000**
The vascular cryptogames are– **Pteridophytes**	**Rajasthan PMT-2000**
Term New Systematic was given by– **Julian Huxley**	**BCECE-2008**
Dense evergreen vegetation of broad sclerophyllous leaves and shrubs with fire resistant resinous plants is known as– **Chaparral vegetation**	**Haryana PMT-2011**
The genera that lacks cotyledons but is placed with dictoyledonous plants, in classification is– **Cascuta**	**AMU-2001**
Algae	
Agar-agar is obtained from– **Red algae (Gracilaria, Gelidium)**	**VMMC-2012, 2011, 2010** **UP CPMT-2012, 2008** **BVP-2012, JIPMER-2009** **MGIMS Wardha-2008** **CMC Ludhiana-2008** **AFMC-2003, BCECE-2002** **BVP-2001** **Rajasthan PMT-2006, 2000** **AMU-2006, 1996, 1995**

Laminaria is a– **Phaeophycean algae**	**Kerala PMT-2012 UP CPMT - 2010 Punjab MET - 2009 AFMC-2000, BVP-2000**
Zygote of Spirogyra produces four haploid nuclei, in which– **One is functional**	**Uttarakhand PMT-2004 Manipal-2004 UP CPMT-2001, AMU-2005**
Iodine is obtained from– **Laminaria**	**CMC Vellor -2013 Haryana PMT - 2011 MGIMS Wardha-2008 JIPMER-2008 BHU PMT (Screening)-2007**
Spirogyra is known as– **Pond silk**	**HP CET-2011, CG PMT-2010 BCECE-2006, VMMC-2005 AMU-2004**
Cephaleuros is a– **Parasitic alga**	**JIPMER-2018 Rajasthan PMT - 2005 Uttarkhand-2005 BVP - 2002, BHU PMT-2001**
Floridean starch is the stored food in– **Gracilaria**	**TS EAMCET-10.05.2023, Shift-II**
Female sex organ in Polysiphonia of Rhodophyceae– **Carpogonium**	**TS EAMCET 10.05.2023 Shift-I**
Phaeophyceae and Rhodophyceae classes of algae possess– **Pigment fucoxanthin and pigment phycoerythrin, respectively**	**RE-NEET (UG)-06.06.2023 (Manipur)**
Reserve food in the form of floridean starch and the soluble sugar-floridoside is found in– **Rhodophyta**	**Karnataka CET - 2023 AMU-1998**
Agarose is a natural polymer extracted from– **Sea Weeds**	**AP EAPCET-11.07.2022 Shift-I**
Air bladders are found in the following plant– **Fucus**	**AP EAPCET-11.07.2022 Shift-I**
Hydrocolloid carrageen is obtained from– **Rhodophyceae**	**NEET-2022, 2021**
In Oogamy, fertilization involves– **A large non motile female gamete and a small motile male gamete**	**AP EAMCET-03.09.2021 Shift-II**
Ectocarpus algae contains mannitol as reserve– **Food material**	**NEET-2021**
The plant body having holdfast, stipe and frond is a characteristic of– **Laminaria (Phaeophyceae)**	**Karnataka CET-2021**
Female reproductive structure of chara is– **Nucule**	**AP EAMCET-25.09.2020 Shift-II**
Floridean starch has structure similar to– **Amylopectin and glycogen**	**NEET-2020 Phase-I BHU PMT (Mains)-2011**
Isogametes are found in– **Cladophora**	**GUJCET-2020**
The major pigments present in the members of Rhodophyceae are– **Chlorophyll a, d and phycoerythrin**	**TS EAMCET-03.05.2018 Shift-I AFMC - 2007, AIPMT-2000**
Shape of chloroplast of Ulothrix is– **Girdle-shaped**	**JIPMER-2018**
Eyespot is seen in– **Chlamydomonas**	**JIPMER-2018**
Palmella stage is present in– **Chlamydomonas**	**JIPMER-2018, BHU PMT - 2002**
Motile zoospores are produced by– **Chlamydomonas**	**MHT CET-2017**
Rhodophyceae class of Algae reproduces asexually by non-motile spores and sexually by– **Non-motile gametes**	**Karnataka CET-2017**
Mac-Conkey medium is an example of– **Differential medium**	**SRM JEEE -2017**
A nitrogen fixing blue green alga is– **Anabaena**	**SRM JEEE -2017**
The simple type of plant body in which a single cell performs all the vital functions of life is referred to as– **Unicellular**	**SRM JEEE -2017**
Zygotic meiosis is characteristic of– **Chlamydomonas**	**NEET-2017, Manipal-2011**
An example of colonial alga is– **Volvox**	**NEET-2017, Manipal-2010**
Sargassam algae exhibits– **Gametic meiosis**	**Uttarakhand PMT-2011**
Cyanophycean algae are much important from point of view of– **Soils fertility**	**Uttarakhand PMT-2011**
Cell wall of Chlamydomonas contains– **Glycoproteins**	**J&K CET-2002**
The thallus of Volvox is called– **Coenobium**	**JCECE-2005, Manipal-2000 AIIMS-1994**
Iodine is obtained from the members of– **Brown algae**	**CMC Vellore-2013**
Hormogonia are vegetative reproductive structure of– **Nostoc, Oscillatoria etc.**	**BHU PMT (Mains)-2010, 2006 Manipal - 2002**

Sexual reproduction in Spirogyra is morphologically characterized by– **Isogamy**	**BVP-2002**
Cell wall contains cellulose pectin and polysulphate esters are a character of– **Rhodophyceae**	**Kerala PMT-2012**
The green algae rich in proteins used as food supplements even by space travellers is– **Chlorella**	**Kerala PMT-2012** **AIPMT-1997**
Green, Red and Brown the correct order of colours with respect to– **Pigments, chlorophyll, phycoerythin and fucoxanthin**	**Kerala PMT-2012**
Trichodesmium erythrium which gives colour to red sea is a– **Blue green alga**	**AP EAMCET-2014**
Incipient nucleus is present in– **Myxophyceae**	**BVP-2000**
Triphasic life cycle is found in– **Polysiphonia**	**AIIMS-1995**
Reticulate chloroplast is found– **Oedogonium**	**AIIMS-1995**
Spirogyra shows isogamy with– **Non-flagellated gametes**	**AIPMT-2014**
Spirogyra is an example of– **Chlorophyllous thallophyte**	**Karnataka CET-2011**
Sexual reproduction in Spirogyra is an advanced feature because it shows– **Physiologically differentiated sex organs**	**AIPMT-2003**
Ulothrix filaments produce– **Isogametes**	**AIPMT-1997, BVP - 2001**
Brown algae is characterised by the presence of– **Fucoxanthin**	**AIPMT-1997**
The pyrenoids are made up of– **Proteinaceous centre and starchy sheath**	**UPCPMT-2011, JIPMER-1996** **AIPMT-1995, 1993**
In Chlorophyceae, the mode of sexual reproduction is– **Isogamy, anisogamy and oogamy**	**AIPMT-1994, JIPMER-2004** **Punjab MET-2003**
Chloroplast of Chlamydomonas is– **Cup-shaped**	**AIPMT-1993**
In Ulothrix/Spirogyra, reduction division (meiosis) occurs at the time of– **Zygospore germination**	**AIPMT-1993**
The common mode of sexual reproduction in Chlamydomonas is– **Isogamous**	**AIPMT-1991**
The product of conjugation in Spirogyra or fertilization of Chlamydomonas is– **Zygospore**	**AIPMT-1991**
Zygospore formed in Spirogyra is different based on its– **Nucleus**	**AP EAMCET-2008**
Algae are useful because they– **Purify the atmosphere**	**AIIMS-2002**
In blue-green algae, photosystem-II contains important pigment concerned with photolysis of water. It is a– **Phycocyanin**	**AIIMS-2015**
Water blooms are formed by– **Planaktonic algae**	**J&K CET-2000**
In chlamydomonas the life cycle– **Haplontic**	**J&K CET-2000**
Spirogyra algae shows– **Physiological anisogamy**	**JCECE-2002**
There exists a close association between the alga and the fungus within a lichen. The fungus– **provides protection, anchorage and absorption for the alga**	**Uttarakhand PMT-2010**
In Spirogyra, a brief period of tetranucleate condition is found in– **Germinating zygote**	**Uttarakhand PMT-2010**
Phycology is the study of– **Algae**	**AMU-2009, Punjab MET-2008**
A ring of multicilliate zoogonidium is found in– **Oedogonium**	**Punjab MET-2007**
Blue green algae groups of algae have– **Prokaryotic organization**	**Karnataka CET-2005**
Algae have cell wall made up of– **Cellulose, hemicellulose and pectins**	**AIPMT (Screening)-2010**
PGA as the first CO_2 fixation product was discovered in photosynthesis of–**Algae**	**AIPMT (Screening)-2010**
In Spirogyra sometimes a ladder like structure is present due to– **Scalariform conjugation**	**JIPMER-2004** **Punjab PMT - 2003** **Punjab MET-2003**
Mannitol is reserve food in– **Phaeophyceae**	**JIPMER-2004** **PUNJAB - MET - 2003** **AIPMT - 2009**
Multiplication by fragmentation is common to multicellular fungi, filamentous algae and– **Protonema of mosses**	**AIPMT (Screening)-2012**
Specialized cells for fixing atmospheric nitrogen in Nostoc are– **Heterocysts**	**NEET (Karnataka)-2013**
If you are asked to classify the various algae into distinct groups– **Types of pigments present in the cell**	**AIPMT-2007**
The lower most cell of filamentous algae Ulothrix is characterised by–	**UP CPMT-2014**

Presence of nucleus and non-chlorophylls	
Smallest plant which contain green pigment such as higher green plant is– **Chlorophyceae**	**UPCPMT-2002 VMMC -2007**
Experiment to demonstrate importance of nucleus in the controlling growth and heredity were performed on– **Acetabularia**	**BVP-2006**
Reserve food material of algae is– **Starch**	**BCECE-2005**
Phycocolloids are obtained from– **Brown algae**	**UP CPMT-2010**
Pigments common to all algae are– **Chlorophyll-a and carotenoids**	**BVP-2012 MGIMS Wardha-2007 BCECE-2009**
Hormogonia are vegetative reproductive structures of– **Oscillatoria**	**Manipal-2012**
In algae, the bacteriological filter is– **Cosmarium**	**AFMC -2011**
Presence of basal rhizoidal cell in Ulothrix is an example of– **Beginning of division of labour**	**BHU PMT (Mains)-2009**
The plants of Cladophora crispata occur as– **Epizoic**	**BHU PMT (Mains)-2005**
Chloroplasts of Spirogyra have– **Smooth or waxy at the margins**	**HP CET-2011 BCECE-2006**
Chlorophyceae classes is not a representative of– **Green - algae**	**MGIMS Wardha-2013**
Major pigments found in Phaeophyceae, i.e. brown algae are– **Chlorophyll a, c and fucoxanthin**	**HP CET - 2013 J&K CET-2014**
Carrageen is obtained from– **Red Algae**	**CMC Ludhiana - 2007 VMMC-2002**
Mannitol is a stored food material found in members– **Phaeophyceae**	**J&K CET-2012**
Solar energy transducer is– **Chlorella**	**AMU-2011**
Algae which are called gulf weed are– **Sargassum**	**AMU-2011**
The commercially exploited algae include– **Gelidium, Laminaria and Porphyra**	**AMU-1999**
The red colour of rhodophyta is due to the preponderance of– **Phycoerythrin**	**AMU-1999, 2012**
A protein rich green alga is– **Chlorella**	**MGIMS Wardha-2004 UP CPMT-2004**
Cell wall of red algae contains– **Cellulose + pectin + polysulphate esters**	**HP CET-2013**
Cell wall of green algae is made up of– **Cellulose**	**Rajasthan PMT-1998**
Laminaria (kelp) and Fucus (rock weed) are the example of– **Brown algae**	**UP CPMT-2001**
Chlorophyll - b differs from chlorophyll - a in that it does not have– **CHO**	**BVP-2013 CG PMT-2007**
Cladophora occurs in fresh as well as– **Marine water**	**Uttarakhand-2005**
Source of kelp is– **Brown algae**	**Haryana PMT-2007**
A term helotism is used for the symbiosis of– **Algae and fungi**	**AMU-2006**
Heterotrichous habit is shown by– **Stigeoclonium**	**JIPMER-2000**
The diploid phase in the life cycle of Spirogyra is represented by– **Zygospore**	**AP EAMCET-2001**
Characteristics of Cyanophyceae is– **Phycocyanin**	**CG PMT-2006**
Synzoospore is found in– **Vaucheria**	**BHU PMT (Screening)-2011**
External fertilization occurs in majority of– **Algae**	**DUMET-2009**
Genera belong to the same class of algae– **Volvox, Spirogyra, Chlamydomonas**	**BVP-2013 DUMET-2009**
Conjugation occurs in– **Spirogyra**	**DUMET-2001**
In Spirogyra a brief period of tetranucleate condition is found in– **Germinating zygote**	**AP EAMCET-2002**
A water fern which is used as a green manure in rice fields is– **Azolla**	**Haryana PMT-2010**
Spirulina is used as a source of– **Proteins**	**CMC Ludhiana-2014**
The narrow middle part of chromatophore in Euglena is– **Pyrenophore**	**AP EAMCET-2000**
The red colour of red sea is due to– **Trichodesmium blue-green algae**	**Rajasthan PMT-2006**
Sexual reproduction in Spirogyra is an advanced feature because it shows– **Physiologically differentiated sex organs**	**JCECE-2015**

Neuromotor apparatus is not visible through electron microscope in– **Chlamydomonas**	**Rajasthan PMT-2000**
Ulothrix releases zoospore during– **Morning**	**BCECE-2008, UP CPMT-2006**
Calcium encrustation and larvicidal properties are present in– **Chara**	**AMU-2003**
Filaments, in which lateral conjugation occur are homothallic in- **Spirogyra**	**AMU-2003**
Bryophytes	
The amphibians of plant kingdom are– **Bryophytes**	**TS EAMCET-10.08.2021 Shift-I HP CET-2013, BCECE-2009 JIPMER-2004 VMMC-2003, 2002 DUMET-2001 Haryana PMT - 2000 AIPMT - 1996**
In Funaria capsule, dispersal of spores takes place through– **Peristomial teeth**	**CMC Ludhiana-2011 AP EAMCET-2011 VMMC-2011 BHU PMT (Screening)-2009 Uttarakhand PMT-2009 MP CPMT-2009, AMU-2005 Manipal-2004, UP CPMT-1995**
Protonema occurs in the life cycle of– **(Moss) Funaria**	**JIPMER-2012, BVP-2012 Manipal-2012, VMMC-2011 Uttarakhand PMT-2009 BHU PMT (Screening)-2009 CG PMT-2006 AIPMT-1993, 1990**
Sphagnum is known as– **Bog moss**	**AIPMT-2014, Manipal - 2012 AFMC - 2010, UP CPMT-2010 CG PMT-2009 Haryana PMT-2009**
In Funaria, stomata are present on the– **Capsule**	**CG PMT-2010, BCECE-2010 CMC Vellore-2009 Punjab MET-2009 Rajasthan PMT-2009 MGIMS Wardha-2008 Haryana PMT-2007 UP CPMT-2001**
In bryophytes– **Sporophytes are dependent upon gametophytes**	**Punjab MET-2003 AFMC - 2000, AIPMT-1994 Rajasthan PMT-1998**
Bryophytes can be separated from algae, because they– **Possess archegonia**	**VMMC-2002 Haryana PMT-2000,2001 AIPMT-1997, 1999 AIPMT-1997**
Calyptra develops from– **Venter wall of archegonium**	**JIPMER-2012, 2009 BHU PMT (Screening)-2009 Uttarakhand PMT-2009 Rajasthan PMT - 1998**
Funaria gametophyte is– **Monoecious and autoecious**	**MGIMS Wardha-2010 MP PMT-2004, 2001 AIIMS-2001, AMU-1990**
In bryophytes, the posterior part of archegonium grows to protect the embryo. It is– **Calyptras**	**BHU PMT (Mains)-2009 Haryana PMT-2008 Rajasthan PMT-2006 BHU PMT-2002 Rajasthan PMT-1998**
Selaginella belongs to class– **Lycopsida**	**TS EAMCET-10.05.2023, Shift-II**
Capsule producing spores and Pseudo-elaters are found in– **Anthoceros**	**TS EAMCET 10.05.2023 Shift-I**
Intercalary meristamatic zone, paraphyses, Elaeters are the characters of these Bryophytes respectively– **Anthocerotopsida, Bryopsida, Hepaticopsida**	**AP EAPCET-23.05.2023, Shift-I**
The Juvenile stage in Mosses is called as– **Protonema**	**AP EAMCET-12.07.2022 Shift-II**
Riccia fluitans is an example of– **Aquatic floating bryophytes**	**Tripura JEE-2021**
Gemmae are present in– **Some Liverworts**	**NEET-2021**
Sphagnum bryophytes is used as a– **Fuel**	**AP EAMCET-25.09.2020 Shift-II**

Plants like Marchantia and Funaria produce gametes by mitosis, because– **Plant body is haploid**	**Karnataka CET-2019**
Walking fern propagates through– **Leaf tip**	**AIPMT-2004**
Female reproductive organ of Riccia is known as– **Archegonium**	**Rajasthan PMT-1996**
The sporophyte of Funaria begins development within– **Archegonium**	**UP CPMT-2010**
Vegetative reproduction in Funaria takes place by– **Fragmentation and budding in the secondary protonema**	**UP CPMT-2011**
Funaria's male gametes are– **Biflagellate**	**AIPMT-1999**
Apophysis in the capsule of Funaria is– **Lower part**	**AIPMT-1990**
In a moss the sporophyte is– **Partially parasitic on the gametophyte**	**AIPMT-2006**
Moss has the largest– **Gametophyte**	**AIPMT-1991**
The plant group that produces spores and embryo but lacks vascular tissues and seeds is– **Bryophyta**	**Manipal - 2013** **AIPMT-1992**
Multicellular branched rhizoids and leafy gametophytes are the characteristics of– **Some bryophytes**	**AIPMT-1997**
Elater mechanism for spore dispersal is exhibited by– **Marchantia**	**AIIMS - 2002, AIPMT-1996**
Buxbaumia aphylla is a– **Saprophytic bryophyte**	**JIPMER-2008**
Chlorenchyma is known to develop in the– **Spore capsule of a moss**	**AIIMS-2008**
Vascular tissues is not a characteristic feature of– **Algae and Bryophytes**	**Karnataka CET-2005**
Meiosis in Funaria occurs in– **Spore mother cells**	**AP EAMCET-1998**
In bryophytes and pteridophytes, transport of male gametes requires– **Water**	**NEET-2016 Phase-I**
Male and female gametophytes are independent and free-living in– **Sphagnum**	**AIPMT (Screening)-2010**
The plant body is thalloid in– **Marchantia**	**NEET (Karnataka)-2013**
Compared with the gametophytes of the bryophytes, the gametophytes of vascular plants tend to be– **Smaller and to have smaller sex organs**	**AIPMT (Screening)-2011**
Marchantia is considered as a heterothallic plant because it is– **Dioecious**	**Karnataka CET-2014**
Bryophytes resemble algae aspects– **Thallus like plant body, lack of vascular tissues and autotrophic nutrition**	**Karnataka CET-2009** **Manipal - 2009**
Spore dissemination in some liverworts is aided by– **Elaters**	**Rajasthan PMT-2010** **AIPMT-2007**
Mosses are attached to substratum by– **Rhizoids**	**HP CET - 2012** **UP CPMT-2005**
Spore (n) is pioneer in gametophyte generation of– **Bryophytes**	**UP CPMT-2014**
Mosses occurs in moist places because– **Their gametes fuse in water**	**VMMC-2006, UPCPMT-2002**
In ferns and mosses, movement of antherozoids towards female component is called– **Chemotactic movement**	**Rajasthan PMT-1998** **Haryana PMT-2006**
At the base of seta of capsule of moss, there is a haploid brownish growth called– **Veginula**	**CMC Ludhiana-2007** **Manipal-2006**
In capsule of moss, shock absorbers are– **Trabeculae**	**Manipal-2006**
Calyptra and spore in moss capsule is– **Haploid/gametophytic tissue**	**Manipal-2006**
Difference between algae and bryophyte is– **Sterile jacket**	**Rajasthan PMT-2004**
The positive evidence of aquatic ancestory of bryophytes is– **Ciliated sperms**	**BHU PMT-2002**
In Funaria, calyptra is derived from– **Archegonium**	**AFMC-2002**
Formation of sperms from small clumps of cells is not a case of– **Epimorphosis**	**Rajasthan PMT 2009** **MGIMS Wardha-2004**
In Sphagnum, the gametophyte structure compensating for the absence of seta is known as– **Pseudopodium**	**VMMC-2006**
The protective device over the developing sporophyte is shoot calyptra in– **Frullania**	**VMMC-2006**
Bryophytes lack true– **Roots, leaves and stem**	**Uttarakhand-2005**
Sex organs in Funaria develop– **At tip of gametophore**	**Uttarakhand-2005**
Largest moss is– **Dawsonia**	**MGIMS Wardha-2009** **Haryana PMT-2009** **CG PMT-2009**
Thallus of Riccia is– **Haploid**	**JIPMER-2001**
Mosses are indicator of– **Air pollution**	**Manipal-2013**

The peculiar feature of Marchantia palmata is– **Presence of androgynous receptacles**	**VMMC-2005 AMU-2004**
Embryo is found in– **Funaria**	**CG PMT-2006**
Diatoms do not decay easily because– **They have siliceous walls**	**BHU PMT (Screening)-2011**
The brown hairs present at the base of the petiole of Pteris are called– **Ramenta**	**AP EAMCET-2002**
SR Kashyap is regarded as father of– **Indian Bryology**	**BVP-2013**
The sporogenous tissue is originated from amphithecium in– **Anthoceros**	**Rajasthan PMT-2000**
Spore of Funaria on germination gives rise to– **Protonema**	**BCECE-2008**
Tissue differentiation is well developed in– **Bryophyrtes**	**UP CPMT-2013**
Unicellular smooth and tuberculated type of rhizoids are present in– **Riccia**	**Rajasthan PMT-2006**
Pteridophytes	
Aquatic fern is used to increase the yield in paddy crop– **Azolla**	**Tripura JEE-2022 AMU-2007, BCECE-2003 AIPMT-2001, AIPMT-2000**
If a sporangium is derived from a single cell, it is called– **Leptosporangiate**	**AMU-2005, Manipal-2004 Uttarakhand PMT-2004 AMU -2000**
Walking fern propagates through– **Leaf-tip**	**CMC Ludhiana-2009 JCECE-2009, Manipal-2007 AIPMT-1998**
In Selaginella, the adaxial outgrowth, from the base of leaf, is called– **Ligule**	**BHU PMT (Mains)-2009 AMU-2005, Manipal-2004 Uttarakhand PMT-2004**
Genera like Selaginella and salvinia produce two kinds of spores. Such plants are known as– **Heterosporous**	**NEET-2021 BHU PMT (Screening)-2010 AIPMT-2008, BHU PMT-2002**
Plant that possess characters like ramenta, archaegonia, circinate– **Dryopteris**	**AP EAPCET-22.05.2023, Shift-I**
Silent features like Embriophytic, Tracheophytic, Cryptogams refers to– **Pteridophytes**	**AP EAMCET-03.09.2021 Shift-I UP CPMT-2012**
From evolutionary point of view, retention of the female gametophyte with developing young embryo on the parent sporophyte for some time, is first observed in– **Pteridophytes**	**NEET-2019**
A well developed archegonium with neck consisting of 4-6 rows and neck canal cells, characterises– **Bryophytes and pteridophytes**	**AIPMT-1995**
Pteridophytes differ from mosses/bryophytes in possessing– **Well developed vascular system**	**MP PMT-2013 AIPMT-1993**
Ectophloic siphonostele is found in– **Osmunda and Equisetum**	**AIIMS-2008, AIPMT-2005**
Prothallus of the fern produces– **Gametes**	**JIPMER-2012 BHU PMT (Screening)-2009**
In ferns, Meiosis takes place at the time of– **Spore formation**	**AIPMT-2000**
Selaginella and Salvinia are considered to represent a significant step toward evolution of seed habit because– **Embryo develops in female gametophyte which is retained on parent sporophyte**	**AIPMT (Mains)-2011**
In eusporangiate ferns, sporangium is produced from– **A group of sporangial initial cells**	**AP EAMCET-2011**
Pteridophytes are called vascular cryptogams, because they are non-seeded plants containing– **Xylem and Phloem**	**Karnataka CET-2012**
Dryopteris differs from Funaria in having– **An independent sporophyte**	**J&K CET-2004**
Coal is the fossil wood of– **Cryptogamic plants**	**BVP-2011**
The branch of biology that deals with the study of fossil is called– **Palaeontology**	**J&K CET-2010**
The trabeculae found in Selaginella are the modification of– **Endodermal cells**	**VMMC-2011 BHU PMT (Screening)-2009 Uttarakhand PMT-2009**
Antherozoids of Dryopteris are– **multiciliated and coiled**	**Punjab MET-2009**
Gametophytic and sporophytic phasess are independent in– **Pteridophyte**	**JCECE-2008**
In pteridophytes, phloem is without– **Companion cells**	**JIPMER-2013, Manipal-2010**

The circinate vernation is the characteristic feature of ferns. It refers to– **Coiling of young leaves**	**Rajasthan PMT-2005 UP CPMT-2004**
Mesarch xylem is commonly found in– **Ferns**	**Punjab MET-1999**
Dispersal of spores in fern takes place through– **Annulus and stomium**	**AFMC-2005**
Antherozoids of pteridophyta are– **Much coiled and multiciliated, Pear-shaped**	**BCECE-2011**
Sometimes, the fern plant arises from fern prothallus without fertilisation. This is an example of– **Apogamy**	**BVP-2010**
The species of the following plant, are sometimes described as 're-surrection plants'– **Selaginella**	**BHU PMT (Mains)-2005**
A venter is a part of– **Archegonium**	**BHU PMT (Mains)-2005**
The dominant generation in pteridophytes is– **Sporophytic**	**UP CPMT-2012**
The bladder serving as floats and for trapping insects is found in– **Utricularia**	**J&K CET-2009**
Prothallus of Petridophytes is– **Iinconspicuous, small, multicellular, free-living, photosynthetic thalloid gametophyte**	**J&K CET-2014**
The green upright sterile hair-like structures among the antheridia of are known as– **Paraphyses**	**JIPMER-1997**
A fern differs from a moss in having– **Independent sporophytes**	**JIPMER-2012 BHU PMT (Screening)-2009 Uttarakhand PMT-2009**
Club moss is the common name of– **Lycopodium**	**JIPMER-2003**
In the prothallus of a vascular cryptogam, the antherozoids and eggs mature at different times. As a result of which– **Self - fertilization is prevented**	**Rajasthan PMT-2010**
Azolla is used as a biofertilizer because it– **Has association of nitrogen - fixing cyanobacteria**	**Rajasthan PMT-2010**
Dryopteris and moss does show– **Homospory**	**AMU-2011**
The present day higher green plants are believed to have evolved from– **Ferns**	**AMU-1999**
Telome theory of Zimmerman (1930) applies only to– **Pteridophytes**	**VMMC-2006**
Seed habit is developed first time in– **Some ferns**	**Rajasthan PMT-1998**
Fern gametophyte bears– **Antheridia and archegonia**	**Manipal-2000**
Leaf in young condition in fern is called– **Circinate ptyris**	**CMC Ludhiana-2008 AMU-2007**
Haploid brown, hairlike, delicate unicellular outgrowths are– **Rhizoids of fern plants**	**AP EAMCET-2004**
A tree fern is– **Cyathea**	**Haryana PMT-2002**
A mature ligule having a prominent basal portion is called– **Glossopodium**	**Manipal-2013**
Sporophyte of Dryopteris produces– **Spores**	**JIPMER-1995**
Sex organs in Pteris are produced on– **Ventral side of the prothallus**	**AP EAMCET-2001**
Reduction (meiotic) division in Pteridophyta occurs– **During spore formation**	**AFMC-2004**
Dictyostele is found in– **Fern**	**CG PMT-2006**
A tree growing in Indian Botanical Garden, Sibpur (Howrah, Calcutta) with age over 200 year, circumference 404m, prop roots 1,600 and whose main stem has decayed is– **Ficus benghalensis**	**CMC Vellore-2007**
Rhizophore of Selaginella is– **Organ sui generis**	**CG PMT-2011**
Equisetum pteridophyte is called as– **Horse tail**	**Manipal-2010**
Tracheophyta consists of– **Pteridophytes, gymnosperms and angiosperms**	**CMC Vellore-2009**
Leaf gap in the vascular cylinder in ferns is– **Parenchymatous zone**	**CMC Ludhiana-2011**
Botanical name of 'Sanjeevani' is– **Selaginella bryopteris**	**CMC Ludhiana-2008**
The rhyniophytes have– **Sporangia at the tips of thin branches**	**JCECE-2014**
Seed habit was first originated in members of– **Ferns**	**BVP-2006**
Most primitive members in which roots are not present, is– **Rhynia**	**BHU PMT (Screening)-2005**
Fern and Funaria pairs of plants are not– **Seed producers**	**JIPMER-2013**
Heterospory and seed habit are exhibited by a non - flowering plant which also possess– **Ligule**	**VMMC-2006, 2003 AMU-2006**