
NCERT

Class XI-XII

BIOLOGY

Rapid Fire

1,00,000 Exam Pointer
Chapter, Topic & Subtopic Wise


Useful for : NEET/AIIMS/CUET (GU/PG)/EAPCET/EAMCET/TSTAMCET/
TGT/PGT/LT/GRADE/NVS/KVS/DSSSB/GIC/GDC/
Assistant Professor 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, Solanaceae**
- 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 18th 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 interpolated 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 where 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, hierarchical 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 in 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 contribute 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 known 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**
- Archaeobacteria 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 archaeobacteria 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— **Archaeobacteria**
- 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 (45-60⁰C)— **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**
- Archaeobacteria 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, multinucleated 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, Paramecium 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 Basidiomycetes**
- 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**
- Archaeobacteria 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– **Archaeobacteria**
- 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 alga**

2.6 MISCELLANEOUS

- Infectious agents which possess low molecular weight genetic material lacks– **Peplomeres**
- 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–	Archaeobacteria	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 Solanaceae 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 archaeobacteria–	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
Archaeobacteria 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 plotted 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– Archaeobacteria	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 <i>Bacillus polymyxa</i> are the examples of– Non-symbiotic N₂ fixer	AIPMT-1996
The hereditary material present in the bacterium <i>E.coli</i> 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 <i>Treponema pallidum</i> 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
Archaeobacteria is also called–	Halophiles	WB JEE-2007
Actinomycetes is not a–	Bacteria	MGIMS Wardha-2015
Organisms found in extreme temperature are–	Archaeobacteria	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– H₂S		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. coli chromosomal 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 (<i>Clostridium botulinum</i>) 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- Archaeobacteria 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 °C to 106°C	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- Archaeobacteria	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 VMC-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-phycoyanin	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– Archaeobacteria	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– Archaeobacteria	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–	Mycoplasma	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 <i>Entamoeba histolytica</i> 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 silica 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 Anopheles 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 <i>Plasmodium vivax</i> 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
<i>Nosema bombycis</i> 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 <i>Plasmodium falciparum</i> 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 in 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 papatasi	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 Somatogamy 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– Cleistothecium	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– Sphaelotheca 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 <i>Penicillium</i> and <i>Rhizopus</i> 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 + CO₂	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–	Zygosporangium	AP EAMCET-2001
Common bread mould is–	Rhizopus	CG PMT-2006
Zygosporangium, progametangium, gametangium, zygosporangium 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 <i>Rhizopus oryzae</i> 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 -B₂)	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
Zygosporangium 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
Jatropha 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
Urticaurens 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–	H₅N₁	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 <i>Escherichia coli</i> 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–	T₄	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

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 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 CO₂ 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– **N₂ 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 alga– **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 Volvox 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 gametophytes 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
- Evolutionarily, 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
- Pteridophytes 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 multicellular 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 homosporous 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 possesses 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 8 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 predominance 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	VMCM-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
Bentham & 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 Natürlichen 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 Tippo's 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 - Infracelasma 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
Heterothalms were 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 are produced by– larva of dipterous insects	BHU PMT (Screening)-2011
One of the examples 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 dicotyledonous plants, in classification is– Casuta	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 Vellore -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 Uttarakhand-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, phycoerythrin 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 multiciliate 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 VMC -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 VMC-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 VMC-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 VMC-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, VMC-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	VMC-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 meristematic zone, paraphyses, Elaters are the characters of these Bryophytes respectively– Anthocerotopsida, Bryopsida, Hepaticopsida	AP EAMCET-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
Elaters 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 ancestry 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– Bryophytes	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 phases 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 Pteridophytes is– Inconspicuous, 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