

# NCERT

## Class XI-XII

# BIOLOGY

# Rapid Fire

**UP-TO-DATE Exam Pointer**  
**Chapter, Topic & Subtopic Wise**

**Useful for :** TGT/PGT/LT-GRADE/NVS/KVS/DSSSB/GIC/GDC/Assistant Professor  
EMRS/AWES/DIET/AEES/NEET/AIIMS/CUET (UG/PG)/EAPCET  
EAMCET/TSTAMCET and Other Competitive Exam

**Chief Editor**  
A.K. Mahajan

**Compiled & Edited by**  
YCT Expert Team

**Computer Graphics by**  
Balkrishna Tripathi, Charan Singh & Vinay Sahu

**Editorial Office**  
12, Church Lane Prayagraj-211002

 9415650134

**Email :** [yctap12@gmail.com](mailto:yctap12@gmail.com)

**website :** [www.yctbooks.com](http://www.yctbooks.com)/[www.yctfastbook.com](http://www.yctfastbook.com)/[www.yctbooksprime.com](http://www.yctbooksprime.com)

© All Rights Reserved with Publisher

**Publisher Declaration**

Edited and Published by A.K. Mahajan for YCT Publications Pvt. Ltd.  
and printed by Roop Printing Press Printers In order to Publish the book,  
full care has been taken by the Editor and the Publisher,  
still your suggestions and queries are welcomed.

**In the event of any dispute, the judicial area will be Prayagraj.**

**₹ : 495/-**

# INDEX

## Class- XI

<b>01 The Living World.....</b>	<b>7-15</b>
1.1 What is Living? .....	7
1.2 Diversity in Living World.....	7
1.3 Taxonomic Categories .....	8
1.4 Species .....	8
1.5 Genus .....	9
1.6 Family .....	9
1.7 Order and Class.....	9
1.8 Phylum.....	9
1.9 Herbarium.....	9
1.10 Botanical Garden and Museum.....	10
1.11 Zoological Parks .....	10
1.12 Keys and Other Taxonomical Aids.....	10
1.13 Miscellaneous .....	10
<b>02 Biological Classification.....</b>	<b>16-36</b>
2.1 Classification .....	16
2.2 Protista .....	17
2.3 Fungi.....	18
2.4 Kingdom Plantae and Animalia .....	18
2.5 Virus, Viroids and Lichens .....	19
2.6 Miscellaneous .....	19
<b>03 Plant kingdom.....</b>	<b>37-59</b>
3.1 Classification .....	37
3.2 Algae.....	37
3.3 Bryophytes.....	38
3.4 Pteridophytes .....	39
3.5 Gymnosperms .....	40
3.6 Angiosperms.....	41
3.7 Plant Life Cycles.....	41
3.8 Miscellaneous .....	41
<b>04 Animal kingdom.....</b>	<b>60-87</b>
4.1 Classification .....	60
4.2 Coelenterata .....	60
4.3 Ctenophora.....	60
4.4 Platyhelminthes.....	60
4.5 Aschelminthes.....	61
4.6 Annelida.....	61
4.7 Arthropoda.....	61
4.8 Mollusca .....	62
4.9 Echinodermata .....	62
4.10 Hemichordata.....	62
4.11 Chordata.....	62
4.12 Miscellaneous .....	63
<b>05 Morphology of flowering plants.....</b>	<b>88-109</b>
5.1 The Root .....	88
5.2 The Stem.....	88
5.3 The Leaf.....	89
5.4 The Inflorescence.....	89
5.5 The Flower.....	90

5.6	The Fruit .....	90
5.7	The Seed .....	90
5.8	Semi-technical Description of a Typical Flowering Plant .....	91
5.9	Description of Some Important Families .....	91
5.10	Miscellaneous .....	91
<b>06</b>	<b>Anatomy of Flowering Plants.....</b>	<b>110-122</b>
6.1	The Tissues .....	110
6.2	The Tissue System .....	110
6.3	Anatomy of Dicotyledonous and Monocotyledonous Plants .....	111
6.4	Secondary Growth .....	113
6.5	Miscellaneous .....	113
<b>07</b>	<b>Structural Organization.....</b>	<b>123-139</b>
7.1	Animal Tissues .....	123
7.2	Organ and Organ System .....	124
7.3	Earthworm .....	124
7.4	Cockroach .....	125
7.5	Frog .....	125
7.6	Miscellaneous .....	125
<b>08</b>	<b>An Overview of Cell &amp; Cell Theory.....</b>	<b>140-159</b>
8.1	An Overview of Cell & Cell Theory .....	140
8.2	Prokaryotic Cells .....	141
8.3	Eukaryotic Cells.....	141
8.4	Miscellaneous.....	143
<b>09</b>	<b>Biomolecules .....</b>	<b>160-167</b>
9.1	How to Analyze Chemical Composition .....	160
9.2	Primary and Secondary Metabolites .....	160
9.3	Biomacromolecules & Proteins .....	160
9.4	Polysaccharides.....	161
9.5	Nucleic Acids.....	161
9.6	Structure of Proteins and Nature of Bond Linking Monomers in a Polymer.....	161
9.7	Metabolic Basis and the Living State .....	162
9.8	Enzymes.....	162
9.9	Miscellaneous .....	162
<b>10</b>	<b>Cell cycle and cell division .....</b>	<b>168-177</b>
10.1	Cell Cycle .....	168
10.2	Phases of cell Cycle .....	168
10.3	M phase.....	168
10.4	Significance of Mitosis .....	169
10.5	Meiosis.....	169
10.6	Significance of Meiosis .....	171
10.7	Miscellaneous .....	171
<b>11</b>	<b>Photosynthesis in Higher Plants.....</b>	<b>178-189</b>
11.1	What do we know .....	178
11.2	Early Experiments .....	178
11.3	Where does Photosynthesis Take place .....	178
11.4	How Many Pigments are Involved in Photosynthesis .....	179
11.5	What is Light Reaction .....	179
11.6	The Electron Transport .....	180
11.7	Where are ATP and NADPH used .....	180
11.8	The C <sub>4</sub> Pathway .....	181
11.9	Photorespiration.....	181
11.10	Factors Affecting Photosynthesis .....	182
11.11	Miscellaneous .....	182

<b>12</b>	<b>Respiration in Plants .....</b>	<b>190-198</b>
12.1	Do Plants Breathe .....	190
12.2	Glycolysis .....	190
12.3	Fermentation .....	190
12.4	Aerobic Respiration .....	191
12.5	The Respiratory Balance Sheet .....	193
12.6	Amphibolic Pathway and Respiratory Quotient .....	193
12.7	Miscellaneous .....	193
<b>13</b>	<b>Plant Growth and Development.....</b>	<b>199-209</b>
13.1	Growth .....	199
13.2	Differentiation, Dedifferentiation and Redifferentiation .....	199
13.3	Development.....	200
13.4	Plant Growth Regulators.....	200
13.5	Photoperiodism .....	202
13.6	Vernalization.....	203
13.7	Seed Dormancy.....	203
13.8	Miscellaneous .....	203
<b>14</b>	<b>Breathing and Exchange of Gases .....</b>	<b>210-221</b>
14.1	Respiratory Organs .....	210
14.2	Mechanism of Breathing.....	210
14.3	Exchange of Gases.....	211
14.4	Transport of Gases.....	211
14.5	Regulation of Respiration .....	212
14.6	Disorders of Respiratory System .....	213
14.7	Miscellaneous .....	213
<b>15</b>	<b>Body Fluids and Circulation .....</b>	<b>222-236</b>
15.1	Blood.....	222
15.2	Lymph (Tissue Fluid) .....	224
15.3	Circulatory Pathways.....	224
15.4	Double Circulation.....	226
15.5	Regulation of Cardiac Activity .....	226
15.6	Disorders of Circulatory System.....	226
15.7	Miscellaneous .....	226
<b>16</b>	<b>Excretory Products and Their Elimination .....</b>	<b>237-246</b>
16.1	Excretory Products.....	237
16.2	Human Excretory System .....	237
16.3	Urine Formation.....	238
16.4	Functions of the Tubules.....	238
16.5	Mechanism of Concentration of the Filtrate .....	239
16.6	Regulation of Kidney Function.....	239
16.7	Micturition Role of Other Organs in Excretion .....	240
16.8	Disorders of Excretory System .....	240
16.9	Miscellaneous .....	240
<b>17</b>	<b>Locomotion and movement .....</b>	<b>247-256</b>
17.1	Types of Movement.....	247
17.2	Muscle.....	247
17.3	Skeletal System.....	248
17.4	Disorders of Muscular & Skeletal Muscle.....	249
17.5	Miscellaneous .....	249
<b>18</b>	<b>Neural Control and Coordination .....</b>	<b>257-272</b>
18.1	Human Neural System .....	257
18.2	Central Neural System .....	258
18.3	Reflex Action and Reflex Arc .....	259
18.4	Sensory Reception and Processing .....	260
18.5	Miscellaneous .....	260

<b>19 Chemical coordination and integration.....</b>	<b>273-287</b>
19.1 Endocrine Glands and Hormones .....	273
19.2 Thyroid and Parathyroid Gland .....	274
19.3 Thymus and Adrenal Gland.....	274
19.4 Hormones of Pancreas, Testis and Ovary.....	275
19.5 Hormones of Heart, Kidney and Gastrointestinal Tract .....	275
19.6 Mechanism of Hormone action.....	276
19.7 Miscellaneous .....	276

## Class- XII

<b>01 Sexual reproduction in flowering plants .....</b>	<b>288-302</b>
1.1 Flower – A Fascinating Organ of Angiosperms .....	288
1.2 Pre-fertilization : Structures and Events .....	288
1.3 Double Fertilization .....	291
1.4 Post-Fertilization - Structures and Events.....	291
1.5 Apomixis and Polyembryony .....	292
1.6 Miscellaneous .....	292
<b>02 Human Reproduction .....</b>	<b>303-319</b>
2.1 Male Reproductive System.....	303
2.2 Female Reproductive System .....	304
2.3 Gametogenesis.....	304
2.4 Menstrual Cycle.....	305
2.5 Fertilization and Implantation.....	305
2.6 Pregnancy and Embryonic Development .....	306
2.7 Parturition and Lactation .....	307
2.8 Miscellaneous .....	307
<b>03 Reproductive health .....</b>	<b>320-326</b>
3.1 Reproductive Health - Problems and Strategies .....	320
3.2 Population Explosion and Birth Control.....	320
3.3 Medical Termination of Pregnancy .....	321
3.4 Sexually Transmitted Diseases .....	321
3.5 Miscellaneous .....	321
<b>04 Principles of inheritance and variation .....</b>	<b>327-347</b>
4.1 Mendel's Law of Inheritance .....	327
4.2 Inheritance of One Gene.....	327
4.3 Inheritance of Two Genes.....	329
4.4 Polygenic Inheritance and Pleiotropy .....	330
4.5 Sex Determination .....	330
4.6 Mutation.....	330
4.7 Genetic Disorders .....	331
4.8 Miscellaneous .....	332
<b>05 Molecular Basis of Inheritance .....</b>	<b>348-367</b>
5.1 The DNA .....	348
5.2 Search for Genetic Material .....	348
5.3 RNA World.....	349
5.4 Replication.....	349
5.5 Transcription.....	350
5.6 Genetic Code .....	350
5.7 Translation.....	351
5.8 Regulation of Gene Expression .....	351
5.9 Human Genome Project.....	352
5.10 DNA Fingerprinting.....	352
5.11 Miscellaneous .....	352

<b>06 Evolution .....</b>	<b>368-384</b>
6.1 Origin of Life.....	368
6.2 Evolution of Life Forms – A Theory.....	368
6.3 What are the Evidence for Evolution.....	369
6.4 What is Adaptive Radiation.....	370
6.5 Biological Evolution.....	370
6.6 Mechanism of Evolution.....	370
6.7 Hardy-Weinberg Principle.....	370
6.8 Origin and Evolution of Man.....	371
6.9 Miscellaneous .....	371
<b>07 Human health and disease.....</b>	<b>385-399</b>
7.1 Common Diseases in Humans.....	385
7.2 Immunity.....	386
7.3 AIDS.....	387
7.4 Cancer.....	388
7.5 Drugs and Alcohol Abuse.....	388
7.6 Miscellaneous .....	389
<b>08 Microbes in Human Welfare.....</b>	<b>400-408</b>
8.1 Microbes in Household Products.....	400
8.2 Microbes in Industrial Products.....	400
8.3 Microbes in Sewage Treatment .....	401
8.4 Microbes in Production of Biogas.....	402
8.5 Microbes in Biocontrol Agents.....	402
8.6 Microbes as Biofertilizers.....	402
8.7 Miscellaneous .....	403
<b>09 Biotechnology principles and processes .....</b>	<b>409-416</b>
9.1 Principles of Biotechnology.....	409
9.2 Tools of Recombinant DNA Technology.....	410
9.3 Processes of Recombinant DNA Technology.....	412
9.4 Miscellaneous .....	413
<b>10 Biotechnology and its applications.....</b>	<b>417-423</b>
10.1 Biotechnological Applications in Agriculture.....	417
10.2 Biotechnological Applications in Medicine.....	419
10.3 Transgenic Animals.....	420
10.4 Ethical Issues .....	420
10.5 Miscellaneous .....	420
<b>11 Organisms and populations.....</b>	<b>424-432</b>
11.1 Organism and its Environment.....	424
11.2 Populations .....	426
11.3 Miscellaneous .....	427
<b>12 Ecosystem.....</b>	<b>433-442</b>
12.1 Ecosystem-Structure and Function.....	433
12.2 Productivity.....	433
12.3 Decomposition.....	434
12.4 Energy Flow.....	434
12.5 Ecological Pyramids.....	435
12.6 Ecological Succession.....	436
12.7 Nutrient Cycling .....	436
12.8 Ecosystem Services .....	437
12.9 Miscellaneous .....	437
<b>13 Biodiversity and Conservation.....</b>	<b>443-448</b>
13.1 Biodiversity.....	443
13.2 Biodiversity Conservation .....	445
13.3 Miscellaneous .....	445

# 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- **Polyoniales, 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 18<sup>th</sup> 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, mako 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

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

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

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

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

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

# 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 (45-60<sup>0</sup>C)– **Thermoacidophiles**
- Specialized cells for fixing atmospheric nitrogen in Nostoc and Anabaena are– **Heterocyst**
- Currently bacteria are included in– **Monera**
- During unfavourable conditions, bacteria produce– **Spores**
- The organisms that completely lack a cell wall– **Mycoplasma**
- Archaeobacteria can survive in extreme conditions because of the– **Rigid cell wall**