



# BIOLOGY

## VMC MODULES ENGLISH

### THE LIVING WORLD

#### Illustration

1. What is growth?



Watch Video Solution

2. What is metabolism?



**Watch Video Solution**

3. Why growth and reproduction cannot be taken as defining property of all living organisms



**Watch Video Solution**

4. The term 'systematics' refers to



**Watch Video Solution**

5. What do you mean by nomenclature?



**Watch Video Solution**

6. What does 'Linn.' refer to in *Mangifera indica* Linn ?



**Watch Video Solution**

7. What do you understand by taxonomic hierarchy?



**Watch Video Solution**

8. Define species.



**Watch Video Solution**

9. Differentiate between Taxon and category



**Watch Video Solution**

**10. What is a 'Pinetum'?**



**Watch Video Solution**

**11. What is the difference between Botanical Garden and Herbarium ?**



**Watch Video Solution**

**12. What do you mean by taxonomic key?**



Watch Video Solution

## Solved Examples

1. Which of the following pairs is correctly matched?

(i) Fungi - Regeneration

(ii) Mosses - Fragmentation

(iii) Planaria - Budding

A. a and b

B. b and c

C. Only B

D. Only C

**Answer: 3**



**Watch Video Solution**

**2. A natural system of classification is**

A. 2- dimensional

B. A horizontal system

C. Based on typological species concept

D. ( Both (1) and (2)

**Answer: 4**



**Watch Video Solution**

**3. Match the following and choose the correct option :**



**View Text Solution**



4. In living organisms, the chemicals/biomolecules are constantly being made and changed from one form to the another Such activity is

- A. Metabolism
- B. Catabolism
- C. Reproduction
- D. Irritability

**Answer: 1**



**Watch Video Solution**

5. Species is

- A. Population of individuals having same genotypes and phenotypes
- B. A group of individuals inhabiting a geographical area
- C. A group of interbreeding populations
- D. Population of one type

**Answer: 3**



Watch Video Solution

6. Twin characteristics of growth are

A. Decrease in mass and increase in number

B. Increase in mass and decrease in number

C. Decrease in mass and number

D. Increase in mass and number

**Answer: 4**



**Watch Video Solution**

7. Which of the following groups consists of organisms which multiply by fragmentation ?

A. Earthworm, Amoeba, fungi

B. Earthworm, fungi, bacteria

C. Fungi, filamentous algae, protonema of  
mosses

D. Population of one type

**Answer: 3**



**Watch Video Solution**

**8. Extrinsic growth can be seen in**

Mountains

Animals

Viruses

Boulders

Sand mounds

Rolling ice

A. A, D, E, F

B. B, C, D, E

C. C, D, E, F

D. A,B,D, E

**Answer: 1**



**Watch Video Solution**

9. Process of regeneration is seen in

A. Fungi

B. Yeast

C. Algae

D. Planaria

**Answer: 4**



**Watch Video Solution**

**10. Assertion :** Consciousness is a defining property of living organisms.

**Reason :** Human being is the only organism that has self consciousness.

A. Only human being

B. All animals

C. It All organisms

D. All plants

**Answer: 1**



**Watch Video Solution**



11. \_\_\_\_\_ is the defining character of all living organism

A. Reproduction

B. Metabolism

C. Consciousness

D. Growth

**Answer: B**



**Watch Video Solution**

12. Aristotle divided animals into

- A. Protozoa and metazoa
- B. Vertebrata and invertebrata
- C. Chordata and non-chordata
- D. Enaima and Anaima

**Answer: 4**



**Watch Video Solution**

**13.** Binomial nomenclature for plants became effective from

A. 06-07-1736

B. 01-05-1753

C. 01-08- 1758

D. 05-08-1771

**Answer: 2**



**Watch Video Solution**

**14.** Genus as unit of classification was first employed by

- A. Huxley
- B. De Candolle
- C. Tournfort
- D. Linnaeus

**Answer: 4**



**Watch Video Solution**

**15.** Read the following statements. How many of the given statements is(are) correct?

A. In unicellular organisms term growth and reproduction are used interchangeably

B. Reproduction cannot be a defining character of living organism

C. Mules and worker bee are sterile

D. Regeneration is a kind of asexual reproduction in which fragmented organism regenerates the lost part

**Answer: 4**



**Watch Video Solution**

## **Practice Exercise 1**

**1. Growth in living organisms occurs by**

- A. Division of cells
- B. Increase in mass of the living structure
- C. Accumulation of material by external agency
- D. Both (1) and (2)

**Answer: D**



**Watch Video Solution**

2. When green plants capture sunlight and utilise it to synthesize glucose, the reaction-involved during this process are said to be

- A. Catabolic reactions
- B. Anabolic reactions
- C. Decomposition reactions
- D. Chain reactions

**Answer: B**



**Watch Video Solution**



3. Which is not a feature of all living organisms?

- A. Metabolism
- B. Cellular organisation
- C. Self-consciousness
- D. Consciousness

**Answer: C**



**Watch Video Solution**

## Practice Exercise 2

1. Identification is the process of

A. Naming living organism

B. ) Recognizing the characteristic features  
of an organism

C. Categorizing living organism

D. Discovering new species of plants and  
animals

**Answer: B**



Watch Video Solution

2. Naming system accepted universally, is known as

- A. Vernacular names
- B. Zoological nomenclature
- C. Binomial nomenclature
- D. Biological nomenclature

**Answer: C**



3. Classification of organisms is required because

A. It makes the study of organisms easier and simpler

B. It enables us to study geographical distribution of some organisms

C. It makes the study of organisms complex

D. t leads to ambiguity in study of various organisms

**Answer: A**



**Watch Video Solution**

### Practice Exercise 3

**1. Find the correct match**

A. tuberosum - Panthera

B. pardus - Canis

C. lupus – Canis

D. aureus - Solanum

**Answer: D**



**Watch Video Solution**

**2. Carnivora includes**

A. Group of organisms belonging to  
related genera

B. Group of organisms belonging to related species

C. Group of organisms belonging to related families

D. Group of organisms belonging to related families

**Answer: C**



**Watch Video Solution**

**3.** The group of organisms belonging to one or more related orders are assigned to

A. Different class but same family

B. Same class on basis of a few similar characters

C. Any taxa lower to order, in taxonomical hierarchy

D. Same family due to similar morphological characters



**Answer: B**



**Watch Video Solution**

## **Practice Exercise 4**

**1. Herbarium sheets provide information about**

**A. Place from where animal specimen is  
collected**

B. Place and date on which plant specimen was collected

C. Only botanical name of the plant specimen mounted or it

D. Date, place and local name of acellular organism mounted on such sheets

**Answer: B**



**Watch Video Solution**

2. In museums, insects are preserved by

A. Pinning without killing them and then preserving in containers

B. Killing, pinning and then mounting in special boxes

C. Mounting them alive in jars with various preservative solutions

D. Killing, pinning and then stuffing them

**Answer: B**

---



[Watch Video Solution](#)

3. Each statement of the key is calle

A. Couplet

B. Taxon

C. Lead

D. Category

**Answer: C**



[Watch Video Solution](#)

## Chapter Exercise A

1. All living organisms are linked to one another because

A. They have common genetic material of same type

B. They share common genetic material but to varying degrees

C. All have common cellular organisation

D. All of above

**Answer: C**



**Watch Video Solution**

2. Which of the following is a defining characteristic of living organisms?

A. Growth

B. ability to make sound

C. reproduction

D. response to external stimuli

**Answer: D**



**Watch Video Solution**

**3. Metabolism is feature of:**

A. Living beings

B. Non-Living

C. Both (1) and (2)

D. Vírus

**Answer: A**



**Watch Video Solution**

#### **4. Living and non-living objects of nature**

- A. Have similar materials
- B. Obey same physiochemical laws
- C. Both A and B
- D. Have same materials but obey different  
physio-chemical and biochemical laws

**Answer: D**





[Watch Video Solution](#)

5. Which of the following is a defining characteristic of living organisms ?

- A. Growth
- B. Reproduction
- C. Metabolism
- D. Unconsciousness

**Answer: C**



[Watch Video Solution](#)

6. Apoplastic growth is through the formation

- A. Cells walls and cell junctions
- B. Matrix and fibres of connective tissue
- C. Intake of water
- D. Both A and B

**Answer: B**



**Watch Video Solution**

7. Homeostasis can be defined as

A. Tendency of the animals to change with  
the surroundings

B. Tendency of the living organism to  
change the external environment as per  
their requirements

C. Tendency of the living organism to resist  
changes in the external environment

D. Tendency of the biological systems to resist changes

**Answer: D**



**Watch Video Solution**

8. The living organisms can be unexceptionally distinguished from the non-living things on the basis of their ability for

A. Reproduction

B. Growth and movement

C. Responsiveness to touch

D. Interaction with environment and  
progressive evolution

**Answer: D**



**Watch Video Solution**

**9.** Hinny is a hybrid produced under captive conditions by crossing

A. Female donkey and male horse

B. Male donkey and female horse

C. Male tiger and female lion

D. Female tiger and male lion

**Answer: B**



**Watch Video Solution**

**10.** Which one of the following statement is correct w.a.t. growth?

- A. A unicellular organism does not grow
- B. In plants, growth by cell division does not occur throughout their life span
- C. In animals, the growth due to cell division is seen only upto certain age
- D. Unicellular organism shows growth by cell elongation

**Answer: C**



**Watch Video Solution**

## Chapter Exercise B

1. The term 'systematics' refers to

A. Identification and classification of organisms

B. Nomenclature and identification of organisms

C. Diversity of kinds of organisms and their relationship



D. Different kinds of organisms and their classification

**Answer: C**



**Watch Video Solution**

2. New systematics introduced by Sir Julian Huxley is also called

A. Phenetics

B. Cladistics

C. Biosystematics

D. Numerical taxonomy

**Answer: C**



**Watch Video Solution**

**3. Binomial nomenclature was first issued in**

A. Systema Naturae

B. Genera Plantarum

C. Genera Animalium

## D. Historia Plantarium

**Answer: A**



**Watch Video Solution**

**4. ICZN was adopted in**

A. 1960

B. 1970

C. 1964

D. 1974

**Answer: C**



**Watch Video Solution**

**5. Systema Naturae was written by**

- A. Linnaeus
- B. Aristotle
- C. Hippocrates
- D. Darwin

**Answer: A**



Watch Video Solution

6. Antonym is valid in

A. Option1 Only in botanical nomenclature

B. Option2 Only in zoological  
nomenclature

C. Option3 Both in botanical & zoological  
nomenclature

D. Option4 Only in bacteriological  
nomenclature

**Answer: C**



**Watch Video Solution**

7. Taxonomy without phylogeny may be linked to bones without flesh is a statement given by Parkin (1934) and supported by

- A. John Hutchinson
- B. Takhtajan
- C. Oswald Tippo
- D. Bentham and Hooker

**Answer: B**



**Watch Video Solution**

**8.** The classification of plants and animals on the basis of chromosome number is called

- A. Biochemical taxonomy
- B. Numerical taxonomy
- C. Chemo taxonomy
- D. Karyotaxonomy

**Answer: D**



**Watch Video Solution**

**9. What is the basic unit of taxonomy ?**

A. Class

B. Order

C. Genus

D. Species

**Answer: D**





Watch Video Solution

**10. ICNCP is:**

A. International code for nomenclature of  
cultivated plants

B. Indian code for nomenclature of  
cultivated plants

C. International code for natural  
conservation project

D. International code for naming conserved  
plants

**Answer: A**



**Watch Video Solution**

## Chapter Exercise C

**1. Which statement is true?**

A. Tautonyms are not allowed in plants

B. Tautonyms are not allowed in animals

C. Tautonyms normally allowed in animals

and sometimes allowed in plants

D. Tautonyms allowed only in bacteria

**Answer: A**



**Watch Video Solution**

2. Which of the following is a correct name?

A. Solanum Tuberosum

B. Solanum tuberosum

C. Solanum tuberosum Linn

D. solanum tuberosum

**Answer: B**



**Watch Video Solution**

**3. Scientific names are generally taken from**

A. Sanskrit language

B. Latin language

C. Hindi language

D. Greek language

**Answer: B**



**Watch Video Solution**

**4. Match the following and choose the correct option :**

Column - I						Column - II			
[A]	Family					I	<i>Tuberosum</i>		
[B]	Kingdom					II	Polymoniales		
[C]	Order					III	<i>Solanum</i>		
[D]	Species					IV	Plantae		
[E]	Genus					V	Solanaceae		
	I	II	III	IV	V		I	II	III
(1)	D	C	E	B	A	(2)	E	D	B
(3)	D	E	B	A	C	(4)	E	C	B



**Watch Video Solution**

5. Species as unit of classification was first employed by

A. Huxley

B. De Candolle

C. John Ray

D. Linnaeus

**Answer: C**



**Watch Video Solution**

6. Order primata and carnivora are placed in the same class, i.e.

A. Hominidae

B. Mammalia

C. Insecta

D. Chordata

**Answer: B**



**Watch Video Solution**

7. A genus having single species is known as

A. Monotypic

B. Typical

C. Atypical

D. Polytypic

**Answer: A**



**Watch Video Solution**



8. Common and generic names are similar in case of

A. Felis

B. Gorilla

C. Mangifera

D. Saccharum

**Answer: D**



**Watch Video Solution**

9. Taxon Tiger represents

A. Species

B. Genus

C. Family

D. Glass

**Answer: A**



**Watch Video Solution**

10. Roundworms is a taxon that denotes

A. Genus

B. Family

C. Phylum

D. Class

**Answer: C**



**Watch Video Solution**

**Chapter Exercise D**

1. Which of the following taxonomical aid is related with quick referral systems in taxonomic studies?

A. National Zoological Park, Delhi

B. NMNH, Delhi

C. Central National Herbarium, Calcutta

D. Both (1) and (2)

**Answer: C**



**Watch Video Solution**

2. Select the odd one out w.r.t. Botanical gardens

A. vernacular names

B. Indian Botanical Garden is at Howrah

C. It is a method of ex-situ study

D. Collections of preserved plants and animals specimens

**Answer: D**



**Watch Video Solution**

**3.** Read the following statements carefully and select correct option

(a) In zoological parks, conditions similar to natural habitats are provided to animals

(b) Keys are generally analytical in nature

(c ) In herbarium sheet, local names are not mentioned

(d) Taxonomical aids are useful in knowing bioresources

- A. In zoological parks, conditions similar to natural habitats are provided to animals
- B. Keys are generally analytical in nature
- C. In herbarium sheet, local names are not mentioned
- D. Taxonomical aids are useful in knowing bioresources

**Answer: C**



**Watch Video Solution**

4. Which of the following includes the alphabetical arrangement of species of a particular place describing features?

A. Periodical

B. Catalogues

C. Monograph

D. Flora

**Answer: A**



**Watch Video Solution**



## 5. Select the incorrect statement

- A. Museums often have collections of skeletons
- B. Separate taxonomic keys are required for each taxonomic category
- C. Taxonomic keys are based on the contrasting characters
- D. Monograph is useful in providing information for identifications of names

of species found in an area

**Answer: D**



**Watch Video Solution**

**6.** Study following statements regarding the preparation of herbarium sheets.

- (i) Plant should be collected in flowering stage.
- (ii) Every detail regarding the plant such as locality, ecological conditions, vegetative and floral characters, etc. should be noted.

(iii) Plants are evenly pressed by unfolding all the plant parts between blotting papers (or newspapers) with the help of plant pressers.

(iv) Blotting papers need not be changed until the plant gets dried.

(v) After drying, the plant specimen is carefully mounted/pasted on the herbarium sheets.

(vi) The herbarium sheet is labelled on the lower right hand corner representing the number of plant specimen, data of collection, etc.

Which of the above statements is/are correct ?

A. I only

B. IV only

C. I and IV

D. III and IV

**Answer: B**



**Watch Video Solution**

7. Read the following statements regarding biological museums.

(i) Biological museums are generally set up in

educational institutes such as schools and colleges.

(ii) Museums have collections of preserved plant and animal specimens for study and reference.

(iii) Specimens are preserved in the containers or jars in preservative solutions.

(iv) Insects are preserved in insect boxes after collecting, killing and pinning.

(v) Larger animals like birds and mammals are usually stuffed and preserved.

(vi) Skeletons of mammals are not allowed to be kept in museums.

Which of the above statements is/are not correct ?

A. Biological museums are generally set up in educational institutes such as schools and colleges

B. Museums have collections of preserved plant and animal specimens for study and reference

C. Specimens are preserved in the containers of jars in preservative

solutions.

D. Insects are preserved in insect boxes after collecting, killing and pinning

**Answer: D**



**Watch Video Solution**

**8. An example of ex situ conservation is**

A. National Park

B. Seed Bank

C. Wildlife Sanctuary

D. Sacred groove

**Answer: B**



**Watch Video Solution**

**9. Largest herbaria of India is at**

A. Lloyd Botanical Garden, Darjeeling

B. Indian Botanical Garden, Sibpur

C. Forest Research Institute, Dehradun



D.

**Answer: B**



**Watch Video Solution**