

8<sup>th</sup> New Science 1<sup>st</sup> Term Book Back Questions in English

## 1. MEASUREMENT

Choose the best answer

1. Which one the following system of units is the British System of unit?

- a) CGS                      b) MKS                      c) **FPS**                      d) SI

2. Electric current belongs to \_\_\_\_\_ quantities

- a) **base**                      b) supplementary  
c) derived                      d) professional

3. SI unit of temperature is

- a) celsius                      b) Fahrenheit                      c) **kelvin**                      d) ampere

4. Amount of substance is

- a) **directly proportional to the number of atoms**  
b) inversely proportional to the number of atoms  
c) directly proportional to the square of number of atoms  
d) inversely proportional to the square of number of atoms

5. Luminous intensity is the intensity of

- a) Laser light                      b) UV light                      c) **visible light**                      d) IR light

7. SI unit stands for

- a) **International system of units**                      b) Integrated System of units  
c) International symbol of units                      d) Integrated symbol of units

8. Closeness of two or more measured values is called as

- a) accuracy                      b) **precision**                      c) error                      d) approximation

9. Quantities other than base quantities are called as

- a) supplementary quantities                      b) **derived quantities**  
c) professional quantities                      d) energy quantities

10. Which of the following statements about approximation is wrong?

- a) **Approximation gives accurate value.**  
b) Approximation simplifies the calculation.  
c) Approximation is very useful when little information is available.  
d) Approximation gives the nearest value only.

## II. Fill in the blanks.

1. The solid angle is measured in **Steradian**.
2. **Scientists** recognized the need of 'Standard Units' for physical quantities.
3. The coldness or hotness of a substance is expressed by **Temperature**.
4. **Ammeter** is used to measure electric current.
5. **Amount** of substance, contains  $6.023 \times 10^{23}$  atoms or molecules.
6. Luminous Intensity is the amount of visible light, that is emitted in unit area per unit **Solid angle**.
7. Quartz clock uses **Electronic** oscillations.
8. The uncertainty in measurement is called as **Error**.
9. **Accuracy** is the closeness of the measured value to the original value.
10. The intersection of two straight lines gives us **Plane angle**.

## III. True or False.

1. SI units are metric system of units -**True**.
2. Temperature is a measure of total kinetic energy of the particles in a system-**False**.
3. In thermometers, freezing point of water is taken as the Upper Fixed Point-**False**.
4. One coulomb of charge flowing per minute is called 'ampere'- **False**.

5. Amount of substance gives the number of particles present in the substance-**True**.
6. Intensity of light from a candle is approximately equal to one 'candela'-**True**.
7. Angle formed at the top of a cone is an example of 'Plane Angle'-**True**.
8. Quartz clocks are used in GPS Devices- **False**.
9. Candela is used to express electric field intensity-**False**.
10. The number 4.582 can be rounded off as 4.58- **True**.

IV. Match the following:

Column A		Column B		
1.	Temperature	a	Closeness to the Actual Value	<input type="text" value="4"/>
2.	Plane Angle	b	Measure of hotness or coldness	<input type="text" value="1"/>
3.	Solid Angle	c	Closeness to two or more measurements	<input type="text" value="5"/>
4.	Accuracy	d	Angle formed by the intersection of three or more planes	<input type="text" value="3"/>
5.	Precision	e	Angle formed by the intersection of two planes	<input type="text" value="2"/>

**2. FORCES AND PRESSURE**

I. Choose the correct answer for each of the following:

1. If we apply a force against the direction of motion of a body, then the body will
  - a) stop moving
  - b) move with an increased speed
  - c) move with a decreased speed
  - d) move in a different direction
2. Pressure exerted by a liquid is increased by
  - a) the density of the liquid
  - b) the height of the liquid column



5. Rolling friction is slightly greater than the sliding friction-**False**.

6. Friction is the only reason for the loss of energy- **False**.

**V. Match the following**

Match: I

Column I

Column II

- |  |   |                         |
|--|---|-------------------------|
| a) Static friction                       | - | viscosity 4             |
| b) Kinetic friction                      | - | least friction 3        |
| c) Rolling friction                      | - | objects are in motion 2 |
| d) Friction between<br>the liquid layers | - | objects are sliding 5   |
| e) Sliding friction                      | - | objects are at rest 1   |

Match: II

Column I Column II

- |                      |   |                              |
|----------------------|---|------------------------------|
| a) Barometer         | - | reduce friction 4            |
| b) Increase friction | - | atmospheric pressure 1       |
| c) Decrease friction | - | cause of friction 5          |
| d) Lubricants        | - | increasing area of contact 2 |
| e) Irregular surface | - | decreasing area of contact 3 |

**3. LIGHT**

**I. Choose the best answer.**

1. Mirrors having a curved reflecting surface are called as

- |                   |                      |
|-------------------|----------------------|
| a) plane mirrors  | b) spherical mirrors |
| c) simple mirrors | d) None of the above |

2. The spherical mirror with a reflecting surface curved inward is called



10. The refractive index of water is

- a) 1.0                      b) 1.33                      c) 1.44                      d) 1.52

**II. Fill in the blanks.**

1. The spherical mirror used in a beauty parlour as make-up mirror is **Concave mirror**.
2. Geometric centre of the spherical mirror is **Pole**.
3. Nature of the images formed by a convex mirror is **Virtual image**.
4. The mirror used by the ophthalmologist to examine the eye is **Concave mirror**.
5. If the angle of incidence is  $45^\circ$ , then the angle of reflection is  $45^\circ$ .
6. Two mirrors are parallel to each other, then the number of images formed is **infinite**.

**III. Match the following.**

A)

- |                         |                           |
|-------------------------|---------------------------|
| 1. Convex mirror        | - a. Radio telescopes 2   |
| 2. Parabolic mirror     | - b. wall 4               |
| 3. Regular reflection   | - c. rear – view mirror 1 |
| 4. Irregular reflection | - d. Plane mirror 3       |

B)

- |                        |                                |
|------------------------|--------------------------------|
| 1. Snell's law         | - a. Kaleidoscope 4            |
| 2. Dispersion of light | - b. $\sin i / \sin r = \mu$ 1 |
| 3. Refractive index    | - c. Rainbow 2                 |
| 4. Multiple reflection | - d. $c/v = \mu$ 3             |

**4. MATTER**

**I. Choose the best answer.**


1. Matter is composed of

- a) atoms                      b) molecules                      c) ions                      d) all of the above

2. The liquid metal used in thermometers is

- a) Copper            **b) Mercury**            c) Silver            d) Gold

3. The Pictorial symbol for water given by the alchemists was

- a)             b)   
c)             d) 

**Ans: C**

4. Which one of the element name not derived from planet?

- a) Plutonium            b) Neptunium            c) Uranium            **d) Mercury**

5. Symbol of Mercury is

- a) Ag            **b) Hg**            c) Au            d) Pb

6. A form of non-metal which has high ductility is

- a) nitrogen            b) oxygen            c) chlorine            **d) carbon**

7. Which one of metal possess low tensile strength?

- a) Silver            b) Copper            **c) Zinc**            d) Aluminium

8. The property which allows metals to be hammered into their sheets is \_\_\_\_\_

- a) ductility            **b) malleability**            c) conductivity            d) tensile strength

9. The non-metal which conduct current is

- a) carbon**            b) oxygen            c) aluminium            d) sulphur

10. Pencil lead contains

- a) graphite**            b) diamond            c) aluminium            d) sulphur

## II. Fill in the blanks.

1. The element which possesses character of both metals and non metals are called **Metalloids**



2. The symbol of Tungsten **W**
3. Melting point of most metal is **higher** than non-metal.
4. Water contains **Hydrogen** and **Oxygen** element.
5. **Silicon and germanium** is used in semiconductor industry.

**IV. Match the substance given in column A with their use given in Column B.**

1. Match the following:

A	B
1. Iron	- For making wires <b>2</b>
2. Copper	- Sewing needle <b>1</b>
3. Tungsten	- As a fuel for ignition in rocket. <b>4</b>
4. Boron	- Making the filament of a bulb <b>3</b>

2. Match the following:

1. Atom	-	A. building block of matter <b>1</b>
2. Element	-	B. atoms of different kinds <b>2</b>
3. Compound	-	C. atoms of the same kind <b>3</b>

**III. True or False , if false correct the statement**

1. Metals are generally good conductors of electricity, but not good conductors of heat- **False**.
2. Gallium metal is in solid state at or just above room temperature- **False**.
3. Compounds can be made up of one atom- **False**.
4. Coal can be drawn into wires- **False**.
5. Zinc is highly ductile in nature- **True**.

**5. CHANGES AROUND US****I. Multiple choice questions.**

1. Burning of paper is a\_\_\_\_\_ change.

- a) Physical            **b) chemical**            c) physical & chemical    d) neutral

2. The burning of matchstick is an example for chemical reaction based on\_\_\_\_\_

- a) Contact**            b) electricity            c) light            d) catalyst

3. \_\_\_\_\_ metal undergoes rusting.

- a) tin            b) sodium            c) copper            **d) iron**

4. The pigment responsible for browning of apples is\_\_\_\_\_.

- a) Hydrated iron (II) oxide            **b) melanin**

- c) starch            d) ozone

5. Brine is a concentrated solution of \_\_\_\_\_.

- a) Sodium sulphate            **b) sodium chloride**

- c) calcium chloride            d) sodium bromide

6) Limestone contains \_\_\_\_\_ mainly.

- a) Calcium chloride            **b) Calcium carbonate**

- c) Calcium nitrate            d) Calcium sulphate

7. Which of the following factor induces electrtolysis?

- a) Heat            b) light            **c) Electricity**            d) catalysis

8. In Haber's process of producing ammonia \_\_\_\_\_ is used as a catalyst.

- a) Nitrogen            b) hydrogen            **c) Iron**            d) nickel

9. Dissolved gases like Sulphur dioxide, nitrogen oxides in rain water causes\_\_\_\_\_

- a) Acid rain**            b) base rain            c) Heavy rain            d) neutral rain

10. \_\_\_\_\_ is responsible for Global warming.



A

B

- |                  |                        |
|------------------|------------------------|
| 1. Rancidity     | a) Decomposition 2     |
| 2. Ozone         | b) biocatalyst 4       |
| 3. Tarnishing    | c) oxygen 1            |
| 4. Yeast         | d) chemical reaction 3 |
| 5. Calcium Oxide | e) fish                |

## 6. MICRO ORGANISMS

### I. Multiple choice questions.

1. Micro organisms are measured in \_\_\_\_\_.  
a) cm                      b) mm                      c) **micron**                      d) meter.
2. \_\_\_\_\_ shows both living and nonliving characteristics.  
a) Protozoa              b) **virus**                      c) bacteria                      d) Fungi
3. \_\_\_\_\_ is a prokaryotic micro organism.  
a) Virus                      b) algae                      c) fungi                      d) **bacteria**
4. Based on shape, the bacteria are classified into \_\_\_\_\_ types.  
a) **2**                      b) 3                      c) 4                      d) 5
5. The plant body of algae is called as \_\_\_\_\_.  
a) stem                      b) **thallus**                      c) leaf                      d) root

### II. Fill in the blanks.

1. **Penicillin** is prepared from a mould called Penicillium.
2. **Prion** is the infectious protein particles.
3. The intact virus particle found outside the host cell is **Virion**.
4. Micro organism can be seen with the help of a **microscope**.
5. Bacteria, which have a flagellum at one end is classified as **Monotrichous**.

**III. Match the following:**

- |                             |   |                             |
|-----------------------------|---|-----------------------------|
| 1. Nitrogen fixing bacteria | - | Vaccine 5                   |
| 2. Tuberculosis             | - | Prion 3                     |
| 3. Kuru                     | - | Lactobacillus acidophilus 4 |
| 4. Probiotics               | - | Bacteria 2                  |
| 5. Edward Jenner            | - | Rhizobium 1                 |

**IV. True or False.**

1. Diseases causing micro organisms are called pathogens- **True**.
2. Female anopheles mosquito is a carrier of dengue virus-**True**.
3. Chicken pox is a communicable disease- **True**.
4. Citrus canker is transmitted by insects-**False**.
5. Yeast is used in the large scale production of alcohol- **True**.

**7. PLANT KINGDOM**

**I. Fill in the blanks:**

1. The word 'Taxonomy' is derived from **Greek word (Taxis Nomos)**
2. Binomial Nomenclature was first introduced by **Gaspard Bauhin**
3. The book "Genera Plantarum" was written by **Bentham and Hooker**
4. Monocotyledon seeds bear only **one** cotyledon.
5. Brown algae belongs to **phaeophyceae** class.
6. Agar Agar is obtained from **red** algae.
7. The reserve food material of fungi are **glycogen** and **oil**.
8. The first true land plant is **Pteridophytes**.
9. Xylem and phloem are absent in **Bryophyte** plants.
10. Reticulate venation is present in **Dicotyledon** plants.

**II. Choose the correct answers:**

1. Solanum trilobatum is the binomial name of Thoothuvalai. Here the word 'Solanum' refers to

- a) Species      **b) Genus**      c) Class      d) Orders

2. \_\_\_\_\_ is an example for colonial form of algae.

- a) Oscillatoria      b) Nostac      **c) Volvox**      d) Chlorella

3. Floridian starch is a reserve food material of \_\_\_\_\_

- a) Chlorophyceae      b) Phaeophyceae  
**c) Rhodophyceae**      d) Cyanophyceae

4. The edible mushroom is \_\_\_\_\_

- a) Polyporus      **b) Agaricus**      c) Pennicillium      d) Aspergillus

5. Soil erosion is prevented by \_\_\_\_\_ plants.

- a) Algae      b) Fungi      **c) Bryophytes**      d) Pteridophytes

6. The first vascular cryptogams in land plants are \_\_\_\_\_

- a) Bryophytes      **b) Pteridophytes**  
c) Gymnosperm      d) Angiosperm

7. The well-developed sporophytic plant body is seen in

- a) Bryophytes      **b) Pteridophytes**  
c) Gymnosperms      d) Angiosperms

8. Binominal Nomenclature was first introduced in the year of \_\_\_\_\_

- a) 1970      b) 1975      c) 1978      **d) 1623**

9. Penicillin is an antibiotic, which is extracted from \_\_\_\_\_

- a) Algae      **b) Fungi**      c) Bryophytes      d) Pteridophytes

**III. True of False**

1. In polypetalae, the petals are free - **True**.
2. Binomial name should contains more than two words - **False**.
3. Artificial system of classification is based on the vegetative characters of the plant- **False**.
4. Cell wall of fungi is made up of chitin -**True**.
5. Pinus is a closed seeded plant-**False**.
6. All bryophytes are hydrophytes-**False**.
7. Dicotyledons have well developed characters than the monocotyledons-**True**.
8. Mosses are the well developed plant in bryophytes-**True**.
9. The dominant phase of the bryophytes is sporophytes.
10. The dominant phase of the pteridophytes is diploid(2n)-**True**.
11. Seeds of angiosperm are produced inside the ovary-**True**.
12. In gymnosperms ovules are developed from the flowers-**True**.

**IV Match the following**

1. Which of the following pairs are in correct?

- a) Laminaria – Iodins
- b) Nostoc – N<sub>2</sub> fixation
- c) Polysiphonia – Green algae
- d) Rhodophyceae – Fucoxanthin

i) a, b, c 2) c,d c) a, c, d d) a ,b ,c, d

2. Find out the correct pairs:

Phyllanthus amarus – Euphorbiaceae

Solomum trilobatum – Solanaceae

Acalypha indica – Malvaceae

Aegle marmelos – Rutaceac

- i) a,b      ii) c,d      iii) a,b,c      d) a,b,d

3. Which of the following characters are not suitable to angiosperm?

- a) Reticulate / parallel venation, closed seeded plants, sieve tubes are present in phloem.
- b) Seeds are open, ovary is not present, gametes are produced in cones.
- c) Tracheids are the conducting cells, companion cells not are present in phloem.
- d) Trimerous or tetramerous, closed seed, seed with seed coat, bears fruit.

- 1) a,b      2) b,c      3) e,d      4) a,d

4. Which of the following sequences are correct

- a) In Bryophytes – Gametophytes - Sex organ – Gamete fusion – Zygote - Spore mother cell – spore – Thallus.
- b) In Angiosperm – pollination – fertilization – zygote – new plant.
- c) In Gymnosperm – male cone, and female cone – microspore and megaspore – Zygote – new sporophytes plant.
- d) In pteridophytes – pollination by wind, fertilization in the presence of water – zygote prothallus, new plant.

- 1) a, b, c      2) a, b      3) c, d      4) b, d

5. Match column I with coloumn II

Column I	Column II
A. <i>Penicillium chrysogenum</i>	1) Blast disease of paddy.
B. <i>Ginko biloba</i>	2) Ornamental plants
C. <i>Araucaria bidwilli</i>	3) Athlet foot.
D. <i>Tinea pedis</i>	4) Penicillin
E. <i>Pyricularia oryzae</i>	5) Living fossil

- a) A-4, B-5, C-2, D-3, E-1



- b) A-4, B-5, C-1, D-2, E-1
- c) A-3, B-2, C-4, D-5, E-1
- d) A-4, B-2, C-1, D-5, E-3

**8. ORGANIZATION OF LIFE**

**I. Choose the best answer.**

1. ----- is tough and thick white sheath that protect the inner parts of the eye.

- a) Sclera                      b) conjunctiva                      c) Cornea                      d) iris

2. Maintenance of constant internal environment of the body is known as -----

- a) Homeostasis                      b) Homeophytes
- c) Homeokinesis                      d) Homeophilics

3. In the absence of oxygen, glucose is broken down in to -----

- a) Lactic acid                      b) Citric acid                      c) Acetic acid                      d) Nitric acid

4. ----- cells are specialized cells that can be transformed into any kind of cells.

- a) Nerve                      b) Stem                      c) Heart                      d) Bone

5. The process of air passing in and out the lungs is called -----.

- a) Inhalation                      b) Exhalation                      c) Breathing                      d) None of these

6. Osmosis is the movement of water molecules from a -----.

- a) Higher concentration to a region of lower concentration.
- b) Lower concentration to a region of higher concentration.
- c) Both of these
- d) None of these

7. The erythrocyte is placed in ----- solution which has lesser concentration of solutes and greater concentration of water than in the cytoplasm.

- a) Hypotonic      b) Hypertonic      c) Neutral      d) Acidic

**II. Fill in the blanks.**

1. **Cell** is the structural and functional unit of living organisms.
2. The largest cell is, egg of an **ostrich**.
3. **Yeast** is a good example for anaerobic respiration.
4. **Optic** nerve is located at the end of the eyes behind the retina.
5. The size of the cells are measured in units of **micron**.

**III. Write true or False. If false, give the correct answer.**

- 1) In hypotonic condition, concentration of the external and the internal solution of the organism are same- **False**.
- 2) Diffusion is the movement of particles from an area of lower concentration to higher concentration- **False**.
- 3) Human beings are warm blooded in nature- **True**.
- 4) The larynx has fold of tissue which vibrate with the passage of air to produce-**True**.
- 5) Aqueous humour plays an important role in maintaining the shape of the eye-**False**.

**IV. Match the following.**

I. Match the following examples for catabolism.

1. Carbohydrates      -      CO<sub>2</sub>, water and heat 2
2. Glucose      -      amino acid 3
3. Protein      -      glucose 1

II. Match the following examples for anabolism:

1. Glucose      -      cholesterol and other steroid 3
2. Amino acids      -      glycogen and other sugars 1
3. Fatty acids      -      enzymes, hormone, protein 2