

Extra

NES High School, Bhandup

Std: X : Div: _____
Date : 03/11/2018

I Semester examination
Sub: Science & Technology- I
No. of pages : 03

Roll No: _____
Marks : 40
Time: 2hrs

I A. 1) Name the following:

3M

- a) Alloy of sodium with mercury.
- b) The cells of eye respond to the colour & give information about the colour of the object to the brain.
- c) The method in which a less reactive metal is coated on a more reactive metal by electrolysis.

2. Draw an electron dot structure of the following molecules (without showing the circles)

2M

- a) Methane
- b) Water

B) Rewrite the following statement by choosing correct alternative:

5M

1. The saturated hydrocarbon from the following carbon compounds is _____
a) Ethene b) Ethyne c) Ethane d) Benzene

2. At what distance a watch maker must hold his lens from the watch?

- a) at the focal length
- b) at less than focal length
- c) at more than the focal length
- d) at zero distance

3. Which of the following contains- COOH functional group?

- a) Butanone
- b) Butanol
- c) Butanoic acid
- d) Butanal

4. Light rays parallel to the principal axis of a _____ lens diverge after refraction

- a) concave
- b) convex
- c) plano convex
- d) double convex

5. Two nitrogen atoms in the N₂ molecule are joined with each other by _____ covalent bond

- a) single
- b) double
- c) triple
- d) four

Pg No. 01

II. Answer any five of following :

10M

1. Distinguish between Farsightedness and Nearsightedness
2. Draw neat & labelled diagram of Froth Floatation method
3. What is meant by the orbit of a satellite? How are the orbits of artificial satellite classified?
4. Explain Wilfley table method of separation.
5. Unsaturated hydrocarbon are classified into two types. Write these names & give one example each
6. Write structural formulae for following IUPAC names
a) 2-Chloro butane b. butanane
7. Give scientific reason: We cannot clearly see an object kept at a distance less than 25cm from the eye.

III. Answer any five of following:

15M

1. Define Ores give scientific reason Lemon or tamarind is used for cleaning copper vessels turned greenish.
2. Write the names of functional groups
a) $-Br$ b) $-NH_2$ c) $\begin{array}{c} -C-H \\ || \\ O \end{array}$
3. Draw electron dot structures of following molecules (without showing the circles)
a) Methane b) Oxygen c) Water
4. Write note on 'Sunita Williams'.
5. Write full forms of following:
a) INSAT b) TRNSS c) GSLV
6. Write the IUPAC names of following.
a) CH_3-CH_2-COOH
b) $CH_3-CHOH-CH_3$
c) CH_3-CHO
7. Explain Bayer's method in Separation of impurities

IV. Answer any one of following:

5 M

1. Explain electrolytic reduction of alumina with respect to following
 - a) Draw neat & labelled diagram of electrolytic reductions of alumina 2M
 - b) Write cell reactions at anode & cathode 2M
 - c) Which materials are used as electrolyte during this reduction process? 1M

Pg. No. 02

a) Distinguish between saturated and unsaturated Hydrocarbon

2M

b) Complete the following table

3M

Type of Satellite	Name of Indian satellite series & their launch vehicles	Function of satellite
Earth Observation Satellite	_____	_____

-----X-----