

VRINDRA BHATT
B 5
Gpd

M-3

Summative Assessment-I 2014-15

Subject : Gen. Science (Set 1)

Time : 2½ hrs.

Marks : 90

CHEMISTRY

M.M. : 30

1. Name the following : (1x2)

- (a) A synthetic fibre which is used for making parachutes. Nylon
- (b) A special plastic which is used for non stick coating on cookwares.

2. Answer briefly : (Any three) (2x3)

- (a) What is green house effect ? Name two green house gases.
- (b) Avoid plastics as far as possible. Justify giving two reasons.
- (c) Name a metal which is stored in kerosene and why ?
- (d) Differentiate between thermoplastics and thermosetting plastics. Give examples also.

3. (A) (i) Name a synthetic fibre which has texture like that of silk. (1)

(ii) How is this fibre made ? (1)

(iii) Write its one use. (1)

P.T.O.

- (B) Write any three characteristics of the synthetic fibres. (3)
- (C) Complete the following equations. (1x3)
- (i) Magnesium Oxide + Water \rightarrow
- (ii) Sulphur + Oxygen \rightarrow
- (iii) Aluminium + Hydrochloric acid \rightarrow
- (D) What is acid rain ? Write two ill effects of acid rain. (1+2)
4. (a) What happens when zinc granules are added to the copper sulphate solution ? (2)
- (b) Write the word equation involved. (1)
- (c) Arrange the following metals in the order of their increasing reactivity. (1)
- Zinc, Iron, Copper
- (d) Write the Latin names of Copper and Iron. (1)
5. Choose the correct option : (1x5)
- (a) The gas produced when charcoal is burnt :
- (i) Oxygen
- (ii) Carbon dioxide
- (iii) Nitrogen
- (iv) Hydrogen

(b) A polyester which is used for making sweaters, shawls, blankets etc :

(i) Terylene

(ii) Acrylic

(iii) Nylon

(iv) Rayon

(c) Marble Cancer is caused by :

(i) Chlorofluorocarbons

(ii) Sulphurdioxide and nitrogen dioxide

(iii) Ozone

(iv) Smog

(d) An air pollutant which reduces the oxygen carrying capacity of blood.

(i) Carbon monoxide

(ii) Carbon dioxide

(iii) Ozone

(iv) Nitrogen dioxide

(e) Which of the following is lustrous in nature ?

(i) Phosphorus

(ii) Copper

(iii) Carbon

(iv) Sulphur

P.T.O.

BIOLOGY

M.M. : 30

- ✓ 1. Name any one unicellular alga and one unicellular fungus. (0.5+0.5)
- ✓ 2. Name a vaccine which can be given orally. Name any one disease which can be prevented by vaccination. (0.5+0.5)
- ✓ 3. How does dehydration help in the preservation of food? (2)
- ✓ 4. Why are chromosomes termed as the bearers of heredity? (2)
- ✓ 5. (A) What is the term given to the process of loosening and turning soil?
✓ (B) Mention any two advantages of this process. (1+1)
- ✓ 6. (A) What do you understand by Nitrogen Fixation?
✓ (B) Name any two organisms which carry out this process.
✓ (C) Why is nitrogen needed in the plant body? (1+1+1)
- ✓ 7. (A) Which microbe causes malaria? Which organism spreads malaria in the community?
✓ (B) Mention any two precautions which can be taken to prevent the spreading of this disease. (2+1)
- ✓ 8. (A) Give any two points of difference between a cell wall and a cell membrane.

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- (B) Mention any two advantages of manures over fertilizers. (2+1)
9. (A) Explain how a vaccine works ?
(B) Name any two antibiotics. (2+1)
10. Draw a Neat and well labeled diagram of a plant cell and only label the parts which perform the following functions :
- (A) Acts as a control centre.
 - (B) Stores the cell sap
 - (C) Photosynthesis
 - (D) Allows only some selected substances to move in and out of the cell. (3+2)
- 10. IN LIEU OF THE ABOVE QUESTION (FOR VISUALLY CHALLENGED STUDENTS)**
- (A) Name any two chemicals which are used as preservatives. (1)
 - (B) Which layer forms the outermost covering in a plant cell ? (1)
 - (C) What is Pasteurization? What is its use ? (2)
 - (D) Name any one organelle exclusively found a in plant cell. (1)
- P.T.O.

11. Which one of the following is a viral disease ? (1)

- (a) Polio
- (b) Cholera
- (c) Typhoid
- (d) Tuberculosis

12. One of these is a modern method of irrigation : (1)

- (a) Dhekli
- (b) Rahat
- (c) Moat
- (d) Drip Irrigation

13. Which one of the following is the longest cell in the human body ? (1)

- (a) Nerve Cell
- (b) Red Blood Cell
- (c) Muscle Cell
- (d) White Blood cell

14. Which stain is used to prepare a slide of the onion peel ? (1)

- (a) Safranin
- (b) Iodine
- (c) Glycerine
- (d) Methylene blue

15. Disease causing microorganisms are called : (1)

- (a) Pathogens
- (b) Carriers
- (c) Vectors
- (d) None of these

PHYSICS

M.M. : 30

1. Name a force that always opposes motion. (1)
2. Write the full form of LED. (1)
3. Why is one end of a drawing pin wide, while the other end is very sharp and pointed ? (2)
4. Give any two applications of ultrasonic waves. (2)
5. Why should we not touch an electrical appliance with wet hands ? (2)
6. Calculate the pressure exerted on the ground by a girl weighing 500 N standing on pencil heels, each of area of cross-section of 1 cm^2 . (3)
7. What do you understand by the term friction ? List any two methods to reduce friction. (3)
8. State the factor that determines the pitch of sound.

P.T.O.

$$\frac{500}{1 \text{ cm}^2}$$

$$\frac{500}{1 \text{ cm}}$$

- (4) A boy heard a sound of frequency of 100 Hz at a distance of 500 m from the source of sound. What is the time period of oscillating particles ? (3)
9. List any three uses of electroplating. (3)
10. (a) Why is it difficult to move a cycle with breaks on ?
(b) Give any three advantages and disadvantages of friction. (5)

MCQ's.

(1x5=5)

11. ✓ A box weighing 2 kg exerts a force of 20 N on the ground. The box covers an area of 2m^2 on the ground. The pressure exerted by the box on the ground is :
- (a) 40 N / m^2
(b) ✓ 80 N / m^2
(c) 10 N / m^2
(d) 200 N / m^2
12. ✓ The decreasing order of static, rolling and sliding friction is :-
- (a) Sliding, static and rolling
(b) ✓ Rolling, static and sliding
(c) Static, rolling and sliding
(d) Static, sliding and rolling

Contd.....

13. In which medium does sound travel faster ?

- (a) Air
- (b) Water
- (c) Wool
- (d) Cemented wall

14. A sound of frequency nearly 30,000 Hz could have been produced by a :

- (a) Young Child
- (b) Human Male
- (c) Bat
- (d) Human Female

15. The S.I. unit of electric current is :

- (a) Ampere
- (b) Coulomb
- (c) Volt
- (d) Newton

9/40
finished !!
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