

First Terminal Examination 2015 - 2016

Class – VIII

Subject – Science

Amity

Time : 3 Hours

Max. Marks : 90

General Instructions :

(a) This paper is divided into four sections :

Section – 'A' : Physics – 25 marks (To be done in main sheet)

Section – 'B' : Chemistry – 25 marks (To be done in supplementary sheet)

Section – 'C' : Biology – 25 marks (To be done in supplementary sheet)

Section – 'D' : MCQ – 15 marks (To be done in supplementary sheet)

(b) Read the questions carefully before attempting them.

(c) All questions are compulsory.

SECTION – 'A' (PHYSICS)

(25 Marks)

1. Answer the following questions in one word : (1×2=2)

(a) Name the star closest to planet earth.

(b) Name the instrument used to measure liquid pressure.

2. Answer the following questions in brief : (1×3=3)

(a) Why is a wide steel belt provided over the wheels of army tanks ?

(b) Why does the sun appear to be larger and brighter than other stars ?

(c) Why is it said that worn out tyres should be discarded ?

3. Give reasons : (2×2=4)

(a) Sliding friction is less than static friction.

(b) Ball bearing reduces friction.

4. Differentiate between meteors and meteorites. (2)

5. Draw and explain the following phases of moon : (1×3=3)

(a) New moon

(b) First quarter

(c) Full moon

6. (a) Find the magnitude and direction of resultant force : (2+1=3)



- (b) Define Vector quantity. Give an example.

7. State and explain any three advantages of friction. (3)

8. (a) A rectangular sheet is 30 cm long and 10 cm wide. It weighs 24 N and is lying on the ground. Find the pressure exerted by the sheet on the ground.

- (b) Write the properties of the pressure exerted by the liquids. (3+2=5)

SECTION - 'B' (CHEMISTRY)

(25 Marks)

9. Name the synthetic fibre / plastic obtained from the following raw materials : ($\frac{1}{2} \times 4 = 2$)

(a) Coal

(b) Ester

(c) Wood pulp

(d) Vinyl chloride

10. Define the following : (1×3=3)

(a) Reactivity series

(b) Thermosetting plastics

(c) Electrolytes

11. Give reasons for the following : (1×4=4)

(a) Aluminium foils are used to wrap food items.

(b) Parachutes are made up of nylon.

(c) Phosphorous is stored in water.

(d) Pickles are not stored in aluminium containers.

12. Differentiate between (one point only) : (1+1=2)
- (a) Poor Conductor and Insulator
 - (b) Malleability and Ductility
13. Give one use of each of the following : (1×3=3)
- (a) Melamine
 - (b) Acrylic
 - (c) PVC
14. Give equations for the following reactions : (1×3=3)
- (a) Zinc with sulphuric acid
 - (b) Iron with copper sulphate solution
 - (c) Magnesium with hydrochloric acid
15. (a) What are the factors on which the chemical effects produced by an electric current depend ? (1×3=3)
- (b) Why do firemen shut off electrical supply before using water hoses on fire ?
 - (c) What properties of chromium make it suitable for electroplating it on iron objects ?
16. (a) Why should handles and bristles of a toothbrush not be made from same material ? (1+1+3=5)
- (b) What is meant by concentration of ore ?
 - (c) Explain electroplating with an example and a well labelled diagram.

SECTION - 'C' (BIOLOGY)

(25 Marks)

17. Name the following : (½×4=2)
- (a) Process of preserving milk
 - (b) Power house of a cell
 - (c) Colourless Plastids
 - (d) Group of microorganisms causing typhoid and cholera

18. Define the following : (1×3=3)
- (a) Drip Irrigation
 - (b) Fermentation
 - (c) Prokaryotic cell
19. Give reasons for the following : (2+2=4)
- (a) Cell is the structural and functional unit of life.
 - (b) Microorganisms are found in hot sulphur springs and even in polar region.
20. Differentiate between (one point only) : (1+1=2)
- (a) WBC and Amoeba
 - (b) Cytoplasm and Protoplasm
21. Answer briefly : (1+1+1=3)
- (a) What is weeding? Why is it required?
 - (b) Why do farmers in northern India grow legumes as fodder in one season and wheat in the next season?
 - (c) What are the advantages of sowing seeds with a seed drill?
22. Why are the following structures important to a plant cell? (1+1+1=3)
- (a) Cell wall
 - (b) Chloroplast
 - (c) Nucleus
23. (a) What are antibiotics? (1+1+1=3)
- (b) Give examples of two commonly known antibiotics.
 - (c) How are microorganisms responsible for cleaning of environment?
24. (a) A farmer is not able to purchase fertilizers as he is running short of money. His friend suggests him another alternative for fertilizer : (2+2+1=5)
- (i) Name the alternative source.
 - (ii) Mention one disadvantage of using this alternative source.

(b) Draw a well-labelled diagram of ANY ONE of the following :

Plant Cell OR Animal Cell

(c) How is food preserved using sugar ?

SECTION - 'D' (MCQ)

(15 Marks)

25. Choose the correct option :

(1×15=15)

(a) The S.I. unit of frictional force is :

- (i) Kg
- (ii) Pascal
- (iii) m/sec
- (iv) Newton

(b) The material used to make coating on nonstick cookware is :

- (i) Polyester
- (ii) Teflon
- (iii) Polythene
- (iv) Bakelite

(c) The microorganisms which live in the root nodules of leguminous plants are :

- (i) Rhizobium
- (ii) Lactobacillus
- (iii) Blue-green algae
- (iv) Spirogyra

(d) Which metal amongst the following can displace hydrogen from acid :

- (i) Copper
- (ii) Platinum
- (iii) Magnesium
- (iv) Silver

(e) Which of the following is a contact force ?

- (i) Muscular force
- (ii) Magnetic force
- (iii) Electrostatic force
- (iv) Gravitational force

(f) In which of the following, current is not conducted :

- (i) Copper
- (ii) Aluminium
- (iii) Distilled water
- (iv) Silver

(g) A car is moving towards West direction. The force of friction will act towards

- (i) North
- (ii) East
- (iii) South
- (iv) West

(h) The single cell of unicellular organism performs :

- (i) All basic functions
- (ii) Single basic function
- (iii) Both of these
- (iv) None of these

(i) Thermoplastics are used in making :

- (i) Toys
- (ii) Switches
- (iii) Clothes
- (iv) None of these

(j) A nerve cell is :

- (i) Long and branched
- (ii) Short and thick
- (iii) Spherical and unbranched
- (iv) Rod shaped

(k) The red planet of the solar system is :

- (i) Mercury
- (ii) Earth
- (iii) Jupiter
- (iv) Mars

(l) The process of decomposition of electrolyte into ions by passing current through a conducting liquid is called :

- (i) Dialysis
- (ii) Galvanization
- (iii) Electrolysis
- (iv) Electroplating

(m) Plough does not consist of :

- (i) Beam
- (ii) Ploughshaft
- (iii) Ploughshare
- (iv) Grip

(n) The S.I. unit of pressure is :

- (i) Newton
- (ii) Square metre
- (iii) Pascal
- (iv) Kilogram

(o) Our body produces to fight a disease carrying microbe, when it enters our body.

- (i) Antibiotics
- (ii) Antiseptic
- (iii) Antigen
- (iv) Antibody