



## CHAPTER 1

# Chemical Reactions and Equations

### Multiple Choice Questions

1. Which of the following is not a physical change?
  - (a) Boiling of water to give water vapour
  - (b) Melting of ice to give water
  - (c) Dissolution of salt in water
  - (d) Combustion of Liquefied Petroleum Gas (LPG)
2. The following reaction is an example of a
$$4\text{NH}_3(\text{g}) + 5\text{O}_2(\text{g}) \rightarrow 4\text{NO}(\text{g}) + 6\text{H}_2\text{O}(\text{g})$$
  - (i) displacement reaction
  - (ii) combination reaction
  - (iii) redox reaction
  - (iv) neutralisation reaction
  - (a) (i) and (iv)
  - (b) (ii) and (iii)
  - (c) (i) and (iii)
  - (d) (iii) and (iv)
3. Which of the following statements about the given reaction are correct?
$$3\text{Fe}(\text{s}) + 4\text{H}_2\text{O}(\text{g}) \rightarrow \text{Fe}_3\text{O}_4(\text{s}) + 4\text{H}_2(\text{g})$$
  - (i) Iron metal is getting oxidised
  - (ii) Water is getting reduced
  - (iii) Water is acting as reducing agent
  - (iv) Water is acting as oxidising agent
  - (a) (i), (ii) and (iii)
  - (b) (iii) and (iv)
  - (c) (i), (ii) and (iv)
  - (d) (ii) and (iv)
4. Which of the following are exothermic processes?
  - (i) Reaction of water with quick lime
  - (ii) Dilution of an acid
  - (iii) Evaporation of water
  - (iv) Sublimation of camphor (crystals)
  - (a) (i) and (ii)
  - (b) (ii) and (iii)
  - (c) (i) and (iv)
  - (d) (iii) and (iv)
5. Three beakers labelled as A, B and C each containing 25 mL of water were taken. A small amount of NaOH, anhydrous  $\text{CuSO}_4$  and NaCl were added to the beakers A, B and C respectively. It was observed that there was an increase in the temperature of the solutions contained in beakers A and B, whereas in case of beaker C, the temperature of the solution falls. Which one of the following statement(s) is(are) correct?
  - (i) In beakers A and B, exothermic process has occurred.
  - (ii) In beakers A and B, endothermic process has occurred.

- (iii) In beaker C exothermic process has occurred.
- (iv) In beaker C endothermic process has occurred.
- (a) (i) only                      (b) (ii) only  
(c) (i) and (iv)                  (d) (ii) and (iii)
- 6.** A dilute ferrous sulphate solution was gradually added to the beaker containing acidified permanganate solution. The light purple colour of the solution fades and finally disappears. Which of the following is the correct explanation for the observation?
- (a)  $\text{KMnO}_4$  is an oxidising agent, it oxidises  $\text{FeSO}_4$   
(b)  $\text{FeSO}_4$  acts as an oxidising agent and oxidises  $\text{KMnO}_4$   
(c) The colour disappears due to dilution; no reaction is involved  
(d)  $\text{KMnO}_4$  is an unstable compound and decomposes in presence of  $\text{FeSO}_4$  to a colourless compound.
- 7.** Which among the following is(are) double displacement reaction(s)?
- (i)  $\text{Pb} + \text{CuCl}_2 \rightarrow \text{PbCl}_2 + \text{Cu}$   
(ii)  $\text{Na}_2\text{SO}_4 + \text{BaCl}_2 \rightarrow \text{BaSO}_4 + 2\text{NaCl}$   
(iii)  $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$   
(iv)  $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$
- (a) (i) and (iv)                      (b) (ii) only  
(c) (i) and (ii)                      (d) (iii) and (iv)
- 8.** Which among the following statement(s) is(are) true? Exposure of silver chloride to sunlight for a long duration turns grey due to
- (i) the formation of silver by decomposition of silver chloride  
(ii) sublimation of silver chloride  
(iii) decomposition of chlorine gas from silver chloride  
(iv) oxidation of silver chloride
- (a) (i) only                          (b) (i) and (iii)  
(c) (ii) and (iii)                      (d) (iv) only
- 9.** Solid calcium oxide reacts vigorously with water to form calcium hydroxide accompanied by liberation of heat. This process is called slaking of lime. Calcium hydroxide dissolves in water to form its solution called lime water. Which among the following is (are) true about slaking of lime and the solution formed?
- (i) It is an endothermic reaction  
(ii) It is an exothermic reaction  
(iii) The pH of the resulting solution will be more than seven  
(iv) The pH of the resulting solution will be less than seven
- (a) (i) and (ii)                      (b) (ii) and (iii)  
(c) (i) and (iv)                      (d) (iii) and (iv)
- 10.** Barium chloride on reacting with ammonium sulphate forms barium sulphate and ammonium chloride. Which of the following correctly represents the type of the reaction involved?
- (i) Displacement reaction  
(ii) Precipitation reaction  
(iii) Combination reaction  
(iv) Double displacement reaction
- (a) (i) only                          (b) (ii) only  
(c) (iv) only                          (d) (ii) and (iv)

**11.** Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is

- (a) 1:1
- (b) 2:1
- (c) 4:1
- (d) 1:2

**12.** Which of the following is(are) an endothermic process(es)?

- (i) Dilution of sulphuric acid
  - (ii) Sublimation of dry ice
  - (iii) Condensation of water vapours
  - (iv) Evaporation of water
- (a) (i) and (iii)                      (b) (ii) only  
(c) (iii) only                          (d) (ii) and (iv)

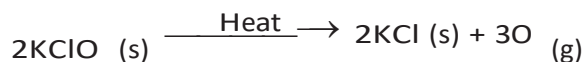
**13.** In the double displacement reaction between aqueous potassium iodide and aqueous lead nitrate, a yellow precipitate of lead iodide is formed. While performing the activity if lead nitrate is not available, which of the following can be used in place of lead nitrate?

- (a) Lead sulphate (insoluble)
- (b) Lead acetate
- (c) Ammonium nitrate
- (d) Potassium sulphate

**14.** Which of the following gases can be used for storage of fresh sample of an oil for a long time?

- (a) Carbon dioxide or oxygen
- (b) Nitrogen or oxygen
- (c) Carbon dioxide or helium
- (d) Helium or nitrogen

**15.** The following reaction is used for the preparation of oxygen gas in the laboratory



Which of the following statement(s) is(are) correct about the reaction?

- (a) It is a decomposition reaction and endothermic in nature
- (b) It is a combination reaction
- (c) It is a decomposition reaction and accompanied by release of heat
- (d) It is a photochemical decomposition reaction and exothermic in nature

**16.** Which one of the following processes involve chemical reactions?

- (a) Storing of oxygen gas under pressure in a gas cylinder
- (b) Liquefaction of air
- (c) Keeping petrol in a china dish in the open
- (d) Heating copper wire in presence of air at high temperature

**17.** In which of the following chemical equations, the abbreviations represent the correct states of the reactants and products involved at reaction temperature?

- (a)  $2\text{H}_2(\text{l}) + \text{O}_2(\text{l}) \rightarrow 2\text{H}_2\text{O}(\text{g})$
- (b)  $2\text{H}_2(\text{g}) + \text{O}_2(\text{l}) \rightarrow 2\text{H}_2\text{O}(\text{l})$
- (c)  $2\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{H}_2\text{O}(\text{l})$
- (d)  $2\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{H}_2\text{O}(\text{g})$

**18.** Which of the following are combination reactions?

- (i)  $2\text{KClO}_3 \xrightarrow{\text{Heat}} 2\text{KCl} + 3\text{O}_2$
  - (ii)  $\text{MgO} + \text{H}_2\text{O} \longrightarrow \text{Mg}(\text{OH})_2$
  - (iii)  $4\text{Al} + 3\text{O}_2 \longrightarrow 2\text{Al}_2\text{O}_3$
  - (iv)  $\text{Zn} + \text{FeSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Fe}$
- (a) (i) and (iii)                      (b) (iii) and (iv)  
 (c) (ii) and (iv)                      (d) (ii) and (iii)

## Short Answer Questions

**19.** Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.

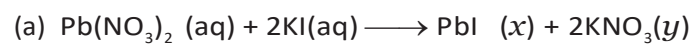
- (a) Nitrogen gas is treated with hydrogen gas in the presence of a catalyst at 773K to form ammonia gas.
- (b) Sodium hydroxide solution is treated with acetic acid to form sodium acetate and water.
- (c) Ethanol is warmed with ethanoic acid to form ethyl acetate in the presence of concentrated  $\text{H}_2\text{SO}_4$ .
- (d) Ethene is burnt in the presence of oxygen to form carbon dioxide, water and releases heat and light.

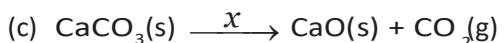
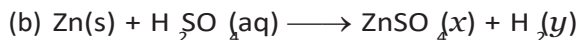
**20.** Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.

- (a) Thermit reaction, iron (III) oxide reacts with aluminium and gives molten iron and aluminium oxide.
- (b) Magnesium ribbon is burnt in an atmosphere of nitrogen gas to form solid magnesium nitride.
- (c) Chlorine gas is passed in an aqueous potassium iodide solution to form potassium chloride solution and solid iodine.
- (d) Ethanol is burnt in air to form carbon dioxide, water and

releases heat.

- 21.** Complete the missing components/variables given as  $x$  and  $y$  in the following reactions

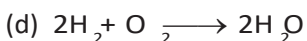
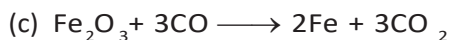




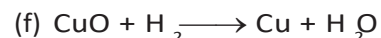
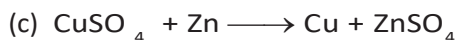
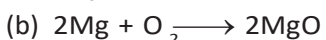
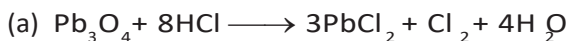
**22.** Which among the following changes are exothermic or endothermic in nature?

- (a) Decomposition of ferrous sulphate
- (b) Dilution of sulphuric acid
- (c) Dissolution of sodium hydroxide in water
- (d) Dissolution of ammonium chloride in water

**23.** Identify the reducing agent in the following reactions



**24.** Identify the oxidising agent (oxidant) in the following reactions



**25.** Write the balanced chemical equations for the following reactions

(a) Sodium carbonate on reaction with hydrochloric acid in equal molar concentrations gives sodium chloride and sodium hydrogencarbonate.

(b) Sodium hydrogencarbonate on reaction with hydrochloric acid gives sodium chloride, water and liberates carbon dioxide.

(c) Copper sulphate on treatment with potassium iodide precipitates cuprous iodide ( $\text{Cu}_2\text{I}_2$ ), liberates iodine gas and also forms potassium sulphate.

**26.** A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed. Write the chemical reaction involved and also mention the type of the chemical reaction?

**27.** Ferrous sulphate decomposes with the evolution of a gas having a characteristic odour of burning sulphur. Write the chemical reaction involved and identify the type of reaction.

**28.** Why do fire flies glow at night?

**29.** Grapes hanging on the plant do not ferment but after being plucked from the plant can be fermented. Under what conditions do these grapes ferment? Is it a chemical or a physical change?

**30.** Which among the following are physical or chemical changes?

- (a) Evaporation of petrol
- (b) Burning of Liquefied Petroleum Gas (LPG)
- (c) Heating of an iron rod to red hot.
- (d) Curdling of milk
- (e) Sublimation of solid ammonium chloride

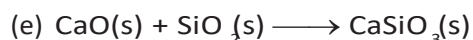
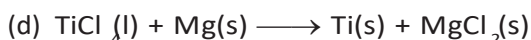
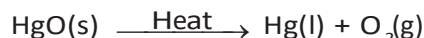
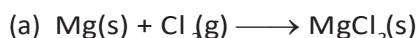
**31.** During the reaction of some metals with dilute hydrochloric acid,

following observations were made.

- (a) Silver metal does not show any change
- (b) The temperature of the reaction mixture rises when aluminium (Al) is added.
- (c) The reaction of sodium metal is found to be highly explosive
- (d) Some bubbles of a gas are seen when lead (Pb) is reacted with the acid.

Explain these observations giving suitable reasons.

- 32.** A substance X, which is an oxide of a group 2 element, is used intensively in the cement industry. This element is present in bones also. On treatment with water it forms a solution which turns red litmus blue. Identify X and also write the chemical reactions involved.
- 33.** Write a balanced chemical equation for each of the following reactions and also classify them.
- (a) Lead acetate solution is treated with dilute hydrochloric acid to form lead chloride and acetic acid solution.
  - (b) A piece of sodium metal is added to absolute ethanol to form sodium ethoxide and hydrogen gas.
  - (c) Iron (III) oxide on heating with carbon monoxide gas reacts to form solid iron and liberates carbon dioxide gas.
  - (d) Hydrogen sulphide gas reacts with oxygen gas to form solid sulphur and liquid water.
- 34.** Why do we store silver chloride in dark coloured bottles?
- 35.** Balance the following chemical equations and identify the type of chemical reaction.



- 36.** A magnesium ribbon is burnt in oxygen to give a white compound X accompanied by emission of light. If the burning ribbon is now placed in an atmosphere of nitrogen, it continues to burn and forms a compound Y.
- (a) Write the chemical formulae of X and Y.
  - (b) Write a balanced chemical equation, when X is dissolved in water.
- 37.** Zinc liberates hydrogen gas when reacted with dilute hydrochloric acid, whereas copper does not. Explain why?
- 38.** A silver article generally turns black when kept in the open for a few days. The article when rubbed with toothpaste again starts shining.
- (a) Why do silver articles turn black when kept in the open for a few days? Name the phenomenon involved.
  - (b) Name the black substance formed and give its chemical formula.

## Long Answer Questions

- 39.** On heating blue coloured powder of copper (II) nitrate in a boiling tube, copper oxide (black), oxygen gas and a brown gas X is formed
- (a) Write a balanced chemical equation of the reaction.
  - (b) Identify the brown gas X evolved.
  - (c) Identify the type of reaction.
  - (d) What could be the pH range of aqueous solution of the gas X?
- 40.** Give the characteristic tests for the following gases
- (a)  $\text{CO}_2$
  - (b)  $\text{SO}_2$
  - (c)  $\text{O}_2$
  - (d)  $\text{H}_2$
- 41.** What happens when a piece of
- (a) zinc metal is added to copper sulphate solution?
  - (b) aluminium metal is added to dilute hydrochloric acid?
  - (c) silver metal is added to copper sulphate solution?
- Also, write the balanced chemical equation if the reaction occurs
- 42.** What happens when zinc granules are treated with dilute solution of  $\text{H}_2\text{SO}_4$ ,  $\text{HCl}$ ,  $\text{HNO}_3$ ,  $\text{NaCl}$  and  $\text{NaOH}$ , also write the chemical equations if reaction occurs.
- 43.** On adding a drop of barium chloride solution to an aqueous solution of sodium sulphite, white precipitate is obtained.
- (a) Write a balanced chemical equation of the reaction involved
  - (b) What other name can be given to this precipitation reaction?
  - (c) On adding dilute hydrochloric acid to the reaction mixture, white precipitate disappears. Why?
- 44.** You are provided with two containers made up of copper and aluminium. You are also provided with solutions of dilute  $\text{HCl}$ , dilute  $\text{HNO}_3$ ,  $\text{ZnCl}_2$  and  $\text{H}_2\text{O}$ . In which of the above containers these solutions can be kept?



# CHAPTER 10

## Light – Reflection and Refraction

8

EXEMPLAR PROBLEMS — SCIENCE

### Multiple Choice Questions

- Which of the following can make a parallel beam of light when light from a point source is incident on it?
  - Concave mirror as well as convex lens
  - Convex mirror as well as concave lens
  - Two plane mirrors placed at  $90^\circ$  to each other
  - Concave mirror as well as concave lens
- A 10 mm long awl pin is placed vertically in front of a concave mirror. A 5 mm long image of the awl pin is formed at 30 cm in front of the mirror. The focal length of this mirror is
  - 30 cm
  - 20 cm
  - 40 cm
  - 60 cm
- Under which of the following conditions a concave mirror can form an image larger than the actual object?
  - When the object is kept at a distance equal to its radius of curvature
  - When object is kept at a distance less than its focal length
  - When object is placed between the focus and centre of curvature
  - When object is kept at a distance greater than its radius of curvature
- Figure 10.1 shows a ray of light as it travels from medium A to medium B. Refractive index of the medium B relative to medium A is

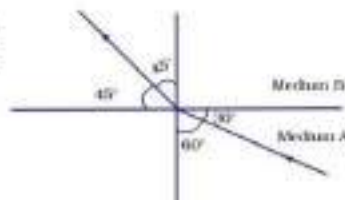


Fig. 10.1

- $\sqrt{3}/\sqrt{2}$
- $\sqrt{2}/\sqrt{3}$
- $1/\sqrt{2}$
- $\sqrt{2}$

Fig. 10.3

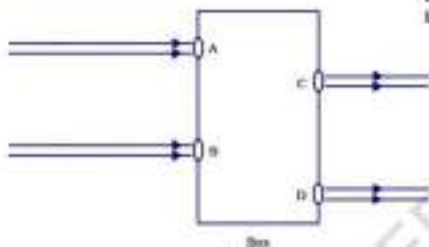


Fig. 10.3

- Beams of light are incident through the holes A and B and emerge out of box through the holes C and D respectively as shown in the Figure 10.3. Which of the following could be inside the box?

- A rectangular glass slab
- A convex lens
- A concave lens
- A prism

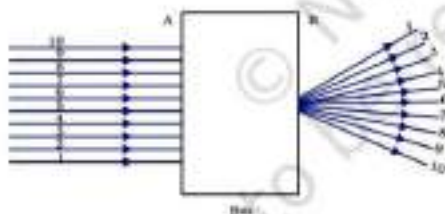


Fig. 10.4

- A beam of light is incident through the holes on side A and emerges out of the holes on the other face of the box as shown in the Figure 10.4. Which of the following could be inside the box?

- Concave lens
- Rectangular glass slab
- Prism
- Convex lens

- Which of the following statements is true?

- A convex lens has +4 dioptre power having a focal length 0.25 m
- A convex lens has –4 dioptre power having a focal length 0.25 m
- A concave lens has 4 dioptre power having a focal length 0.25 m
- A concave lens has –4 dioptre power having a focal length 0.25 m

11. A full length image of a distant tall building can definitely be seen by using

- (a) a concave mirror
- (b) a convex mirror
- (c) a plane mirror
- (d) both concave as well as plane mirror

12. In torches, search lights and headlights of vehicles the bulb is placed

- (a) between the pole and the focus of the reflector
- (b) very near to the focus of the reflector
- (c) between the focus and centre of curvature of the reflector
- (d) at the centre of curvature of the reflector

13. The laws of reflection hold good for

- (a) plane mirror only
- (b) concave mirror only
- (c) convex mirror only
- (d) all mirrors irrespective of their shape

14. The path of a ray of light coming from air passing through a rectangular glass slab traced by four students are shown as A, B, C and D in Figure 10.5. Which one of them is correct?

- (a) A
- (b) B
- (c) C
- (d) D

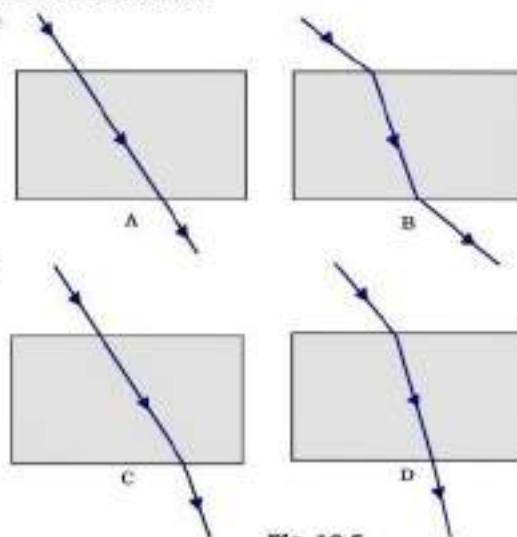
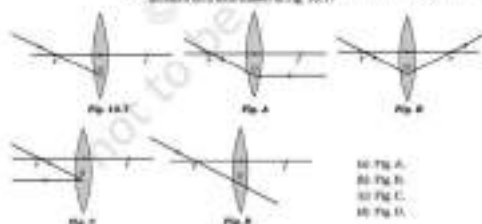


Fig. 10.5

15. Which of the following ray diagrams is correct for the ray of light incident on a lens shown in Fig. 10.7?



24. Refractive index of diamond with respect to glass is 1.6 and absolute refractive index of glass is 1.5. Find out the absolute refractive index of diamond.

16. A child is standing in front of a magnifying glass. He holds the image of his hand bigger. The middle part of the lens is the centre of curvature and that of the lens is the focus. The following is the order of construction for the image formed by the lens.
- (a) Focus, centre and optical centre
  - (b) Optical centre and focus
  - (c) Optical centre and centre of curvature
  - (d) Optical centre and focus
17. In which of the following, the image of an object placed at infinity will be highly diminished and point sized?
- (a) Concave mirror only
  - (b) Concave lens only
  - (c) Convex lens only
  - (d) Convex mirror only

#### Short Answer Questions

20. Identify the device used as a spherical mirror in the following cases, where the image formed is virtual and erect in each case.
- (a) Object is placed between device and focus. Image formed is enlarged and virtual.
  - (b) Object is placed between the focus and device. Image formed is enlarged and virtual on the same side as that of the object.
  - (c) Object is placed between focus and device. Image formed is diminished and between focus and optical centre on the same side as that of the object.
  - (d) Object is placed between focus and device. Image formed is diminished and between pole and focus, behind it.
21. Why does a light ray incident on a rectangular glass slab immersed in any medium emerge parallel to itself? Explain using a diagram.
22. A pencil when dipped in water in a glass tumbler appears to be bent at the surface. Explain. Will the pencil appear to be bent to the same extent, if instead of water we use kerosene, turpentine or sugar? Support your answer with reason.
23. How is the refractive index of a medium related to the speed of light? Obtain an expression for refractive index of a medium with respect to another in terms of speed of light in these two media?
24. Refractive index of diamond with respect to glass is 1.6 and absolute refractive index of glass is 1.5. Find out the absolute refractive index of diamond.

25. A convex lens of focal length 20 cm can produce a magnified virtual as well as real image. Is this a correct statement? If yes, where should the object be placed in each case for obtaining these images?
26. Sudha finds out that the sharp image of the window pane of her science laboratory is formed at a distance of 15 cm from the lens. She now tries to focus the building visible to her outside the window instead of the window pane without disturbing the lens. In which direction will she move the screen to obtain a sharp image of the building? What is the approximate focal length of this lens?
27. How are power and focal length of a lens related? You are provided with two lenses of focal length 20 cm and 40 cm respectively. Which lens will you use to obtain more convergent light?
28. Under what condition in an arrangement of two plane mirrors, incident ray and reflected ray will always be parallel to each other, whatever may be angle of incidence. Show the same with the help of diagram.
29. Draw a ray diagram, showing the path of rays of light when it enters with oblique incidence (a) from air into water (b) from water into air.

#### Long Answer Questions

30. Draw ray diagrams showing the image formation by a concave mirror when an object is placed
- (a) between pole and focus of the mirror
  - (b) between focus and centre of curvature of the mirror
  - (c) at centre of curvature of the mirror
  - (d) a little beyond centre of curvature of the mirror
  - (e) at infinity
31. Draw ray diagrams showing the image formation by a convex lens when an object is placed
- (a) between optical centre and focus of the lens
  - (b) between focus and twice the focal length of the lens
  - (c) at twice the focal length of the lens
  - (d) at infinity
  - (e) at the focus of the lens
32. Write laws of refraction. Explain the same with the help of ray diagram, when a ray of light passes through a rectangular glass slab.

- 33.** Draw ray diagrams showing the image formation by a concave lens when an object is placed
- (a) at the focus of the lens
  - (b) between focus and twice the focal length of the lens
  - (c) beyond twice the focal length of the lens
- 34.** Draw ray diagrams showing the image formation by a convex mirror when an object is placed
- (a) at infinity
  - (b) at finite distance from the mirror
- 35.** The image of a candle flame formed by a lens is obtained on a screen placed on the other side of the lens. If the image is three times the size of the flame and the distance between lens and image is 80 cm, at what distance should the candle be placed from the lens? What is the nature of the image at a distance of 80 cm and the lens?
- 36.** Size of image of an object by a mirror having a focal length of 20 cm is observed to be reduced to  $\frac{1}{3}$ rd of its size. At what distance the object has been placed from the mirror? What is the nature of the image and the mirror?
- 37.** Define power of a lens. What is its unit? One student uses a lens of focal length 50 cm and another of -50 cm. What is the nature of the lens and its power used by each of them?
- 38.** A student focussed the image of a candle flame on a white screen using a convex lens. He noted down the position of the candle screen and the lens as under
- Position of candle = 12.0 cm
- Position of convex lens = 50.0 cm
- Position of the screen = 88.0 cm
- (i) What is the focal length of the convex lens?
  - (ii) Where will the image be formed if he shifts the candle towards the lens at a position of 31.0 cm?
  - (iii) What will be the nature of the image formed if he further shifts the candle towards the lens?
  - (iv) Draw a ray diagram to show the formation of the image in case (iii) as said above.

# **Holiday Assignment**

**Class: X (Ms Smita Pant)**

**Subject: IT**

**Topic: Advanced Digital Documentation**

## **\*Note:**

Do the given 4 questions practically using Libre office Writer Application and paste the screen shots on a word file with relevant heading (Session no. and the complete question) at the top. Save it as a pdf, then take print outs and arrange the sheets in a file. The template of the cover page has already been shared in your class group.

**Submit the work on July 04, 2024 positively.**

Use Writer application of Libre Office.

### **Session 1: STYLES IN A DOCUMENT**

**Q1.** Create a Paragraph style namely '**My Style**' with these settings: Font size: 10 Font color: Blue  
Before and After paragraph spacing :0.06" Font name: Verdana;  
First line indent: 0.04" : Line spacing: 1.5 lines

### **Session 2: IMAGES IN A DOCUMENT**

**Q2.** Create a Poster on Health and Hygiene

1. Open Writer
2. In a blank document, load a clipart from gallery and an image of your choice.
3. Arrange these two loaded elements next to one other horizontally.
4. Add a line below these two.
5. Group the clipart, image and the line.
6. Change the size of grouped elements.
7. Try cropping grouped elements. Can you do so? (Write on the screen Yes /No)
8. Add some text to the screen and let it flow on the image. (Use text wrapping)
9. Save your work.

**OR**

Make a Family tree related to your family in an interactive way. You can put pictures also to make it more relatable. Use drawing toolbar and then format it at your best.

### **Session 3: CREATE AND USE TEMPLATE**

**Q3.** Create a template for a formal letter to some government authority.

**OR**

Create a template for an informal letter.

### **Session 4: TABLE OF CONTENTS**

**Q4.** Q. Create a TOC for topics of any subject of your choice that can store 5 level of headings. The document should include

- a) Chapter headings
- b) A bulleted or numbered list as subheadings
- c) A picture as the background
- d) A header with student name & date
- e) A footer with pagination

## **Class 10 (IT) Practical Work**

### **Advanced Digital Documentation**

Use **Writer** application of **Libre Office**.

**10 Marks**

#### **Session 1: STYLES IN A DOCUMENT**

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Before and After paragraph spacing :0.06" Font name: Verdana;  
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- c) A picture as the background
- d) A header with student name & date
- e) A footer with pagination

**\*Note:** You have to take screen shots of every question done practically using Libre office Writer and paste all screen shots in a word file with proper headings (Session no. and question no. with complete question), save it as pdf and then take printouts.

## SUMMER VACATION HOMEWORK

### CLASS X (Ms. Madhumita Das)

#### Question bank on the Poem 'Fire and Ice'

**Instructions:** Read the whole story carefully and refer to the extracts given below to answer the questions.

Consult an English to English dictionary (preferably Oxford) to get the meanings of the words used in the text.

#### I. RTCs

##### Extract-1

Question

1.

I was really worried about Tricki this time. I had pulled up my car when I saw him in the street with his mistress and I was shocked at his appearance. He had become hugely fat, like a heated sausage with a leg at each corner. His eyes, bloodshot and rheumy, stared straight ahead and his tongue lolled from his jaws.

- (a) Who is I referred in the above extract?
- (b) Why was he worried?
- (c) Which word in the above extract means the same as excessively?
- (d) Why was the author shocked? (1×4=4)

##### Extract-2

Mrs. Pumphrey hastened to explain, He was so listless, Mr. Herriot. He seemed to have no energy. I thought he must be suffering from malnutrition so I have been giving him some little extras between meals to build him up, some malt and cod-liver oil and a bowl of Horlicks at night to make him sleep-nothing much really

- (a) What did Mrs. Pumphrey want to explain and to whom?
- (b) Why was she giving little extra between meals to him?
- (c) Which word in the above extract means the same as Tacking energy and enthusiasm.
- (d) What did Mrs. Pumphrey think? (1×4=4)

##### Extract 3

It was a temptation to keep Tricki on as a permanent guest, but I knew Mrs. Pumphrey was suffering and after a fortnight, felt compelled to phone and tell her that the little dog had recovered and was awaiting collection.

- (a) Why was it a temptation to keep Tricki on as a permanent guest?
- (b) What was informed to Mrs. Pumphrey on phone?
- (c) Which word in the above extract means a period of fifteen days?
- (d) Was Dr. Harriot a greedy Doctor? (1×4=4)

##### Extract 4

I tried to sound severe: Now ! really mean this. If you dont cut his food right down and give him more exercise he is going to be really ill. You must harden your heart and keep him on a very strict diet. [CBSE 2014]

- (a) Why did the speaker try to sound severe?
- (b) For whom was the advice given and why?
- (c) Find the word in the extract which is a synonym of the word serious.
- (d) What is the antonym of hardened?

##### Extract 5

Poor old lad, I said. You havent a kick in you but I think I know a cure for you. [CBSE 2012]

- (a) Why does the speaker say poor old lad.
- (b) What cure did the speaker know?
- (c) What is the meaning of a kick in the extract?



(d) Write a synonym of cure.

**II. Multiple Choice Questions:**

1. According to Mr. Herriot Tricki looked like a –

- (a) Wolf
- (b) Chicken roll
- (c) Sausage
- (d) Tiger

2. The color of the eyes of Tricki was –

- (a) Black
- (b) Yellow
- (c) White
- (d) Red

3. Tricki's owner used to give a bowl of apart from his regular diet along with malt and cod liver oil –

- (a) Milk
- (b) Horlicks
- (c) Water
- (d) Juice

4. The narrator Mr. Herriot instructed Mrs. Pumphrey to cut down — from the diet of Tricki

- (a) Sweets
- (b) Meat
- (c) Milk
- (d) Rice

5. The reason behind the gardener's not coming to take Tricki out for playing was –

- (a) Fever
- (b) Cold
- (c) Lower back pain
- (d) Stomach pain

**III. Answer the following questions in 40-50 words :**

1. How did Mr. Pumphrey and her servant behave when Tricki was being sent to the Surgery?

2. Why was Dr. Herriot confident that Tricki will be in hospital soon?

3. What suggestions were given by Dr. Herriot to Mrs. Pumphrey at the initial stage?

4. Why was the narrator shocked at Tricki's appearance?

5. Why was Dr. Herriot worried about Tricki?

**IV. Answer the following questions in 100-120 words:**

1. In the end of the lesson, Mrs. Pumphrey says "This is a triumph of surgery." Why?

2. Distinguish between Mrs. Pumphrey's method and Mr. Herriot's method in looking after the dog. Whose method could be regarded the better of the two and why?

3. Was Tricki also to be blamed in more ways than one ? How?

4. Why does Mrs Pumphrey think the dog's recovery is ' A Triumph of Surgery '?

5. What treatment was given to Tricki by Dr. Herriot?

## **'Dust of Snow'**

### **Instructions:**

Read the poem thoroughly before attempting any question. Consult an English to English dictionary( preferably Oxford) to get the meanings of the words used in the text.

### **I.RTCs**

1. *The way a crow*

*Shook down on me*

*The dust of snow*

*From a hemlock tree*

- (i) What do you mean by 'dust of snow'?
- (ii) Where and how do you find the poet in the beginning of the poem?
- (iii) Where is the crow at that time and what does it do to the tree?
- (iv) What is a hemlock tree? What does it signify?
- (v) Give a synonym of the word 'way' in the sense it has been used in the poem.
- (vi) How has the dust of snow affected the poet? (CBSE 2015)

2. *Has given my heart*

*A change of mood*

*And saved some part*

*Of a day I had rued.*

- (i) How did the crow change the poet's mood?
- (ii) What does the poet try to suggest?
- (iii) What saved some part of the day?
- (iv) Why had the poet rued the day?
- (v) Name the poem and the poet.
- (vi) Find the rhyme scheme of the stanza. (CBSE 2013)

### **II. MCQs:**

(i) *Dust of snow refers to the particulate matter of snow that settles on surfaces after ....*

- (a) rainfall      (b) storm      (c) snowfall      (d) cyclone

(ii) *The poet did not waste his time in...*

- (a) regretting      (b) repenting      (c) lamenting      (d) all of these

(iii) *The tree had snow on its....*

- (a) leaves      (b) flowers      (c) branches      (d) none of these

(iv) *Of the many symbols the hemlock tree represents, choose the one that the poet drew upon in all likelihood, for this poem.*

- (a) Symbol of longevity      (b) Symbol of healing  
(c) Symbol of togetherness      (d) Symbol of protection.



(v) *Choose the option that lists the possible feelings of the poet prior to the experiences shared in the poem.*

1.Reassured 2.Disappointed 3.Curious 4.Demotivated 5.Thankful 6.Disheartened

(a) 1,3 and 6 (b) 2,4 and 6 (c) 2,5 and 6 (d) 1,3 and 5

(vi) *Identify the option that DOES NOT use the word 'rue' correctly.*

(a) The film was a disaster and he rued his decision to act in it.

(b) I am sure she rued the day she listened to a fortune-teller.

(c) It was'nt long before I rued my disobedience and my deceit.

(d) Others finally rue the one who is dishonest and heartless.

(vii) *Choose the option showing the reason NOT corresponding to the falling of dust of snow on the poet.*

(a)The crow's landing on the branch of the tree.

(b) The shivering of the crow, due to extreme cold.

(c) The readjustment of positions of the crow on the branch.

(d) The cawing of the crow hidden in the foliage.

(viii) *Choose the proverb that goes best with the poem.*

(a) Slow and steady wins the race.

(b) Nothing ventured nothing gained..

(c) Every cloud has a silver lining.

(d) Save for a rainy day.

**III. Answer the following questions in 40-50 words :**

(i) What is the motivating idea behind the poem, 'Dust of Snow'?

(ii) Enlist the literary devices used in the poem giving examples of each.

(iii) Bring out the irony in the poem.

**IV. Answer the following questions in 100-120 words:**

(i) Our mental condition depends on our surroundings and it can be changed according to it. Explain and prove the statement w.r.t the poem.

(ii) Set a contrast between the various symbols used by the poet such as a crow, hemlock tree, dust of snow etc. in the poem.

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### **'A Letter to God'**

#### **Instructions:**

Read the whole story carefully and refer to the extracts given below to answer the questions. Consult an English to English dictionary (preferably Oxford) to get the meanings of the words used in the text.

#### **I. RTCs**

**1. *But in the hearts..... there was a single hope..... in the middle of the valley ..... No one dies of hunger.***

(i)Who lived in the solitary house?

(ii) What single hope they 'had' left with?

(iii) How did the speaker console his family?

**2. The moment the letter fell into..... . It said: “God, Of the money..... . Send me the rest..... because the post office employees are a bunch of crooks.”**

- (i) What does the speaker mean by ‘the rest’?
- (ii) What was in the speaker’s mind when he was writing the letter?
- (iii) Find out a word from the passage which is the opposite of ‘honest’.

**3. ....God could not have made ..... went up to the window to ask ..... he started to write, with much ..... which he licked and then affixed to ..... a blow of his fist.**

- (i) Which two reasons did the speaker give to satisfy his anger?
- (ii) Why did he go to the window to ask for paper and ink?
- (iii) What did he do with the stamp?

**II. Multiple Choice Questions:**

- (i) The field of corn dotted with flowers means that...
  - (a) not a single flower was bigger than a dot.
  - (b) the flowers were scattered across.
  - (c) the flowers were shaped like dots.
  - (d) the flowers had shrunk in size.
- (ii) *No leaf remained on the trees because....*
  - (a) it was fall season.
  - (b) the hailstones left the field bare.
  - (c) of a lethal storm.
  - (d) there was a plague of locusts
- (iii) *What did the hailstones resemble?*
  - (a) Snow balls
  - (b) Gold coins
  - (c) Silver coins
  - (d) White pearls
- (iv) *Lencho’s second letter included....*
  - (a) details of his problems.
  - (b) description of the post office.
  - (c) belief of being looted.
  - (d) list of further demands.
- (v) *What was the most likely response that the postmaster expected in Lencho’s second letter?*  
**1.Sorrow      2 Gratitude      3.Disappointment      4.Elation      5.Shock**
  - (a) 2 and 5
  - (b) 1 and 3
  - (c) 2 and 4
  - (d) 3 and 5

**III. Answer the following questions in 40-50 words :**

- (i) Why did Lencho keep watching towards the north-east in the sky?
- (ii) Describe Lencho’s house and its surroundings as viewed from a hill.
- (iii) How was Lencho’s life affected by the rain?
- (iv) Did Lencho’s letter reach at the right place? What happened then?
- (v) Discuss the irony at the end of the story.

**IV. Answer the following questions in 100-120 words:**

- (i) Discuss the personality of Lencho.
- (ii) Pensketch the character of the postmaster.

- (iii) Lencho seemed to be an impulsive man. Did he lack tolerance? Elucidate it discussing the values one must possess to face any type of difficult situation.
- (iv) Pick out and explain all the metaphors and similies present in the story.
- (v) Why did Lencho say the raindrops were new coins? How did the same rain change the face of Lencho's field?

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