

EVERYDAY SCIENCE
Practice Set 1

1.Q) Which of the following is the lightest metal?

- (a) Mercury
- (b) Silver
- (c) Lithium
- (d) Lead

2 Q) The most important ore of aluminium is

- (a) bauxite
- (b) calamine
- (c) calcite
- (d) galena

3 Q) The element present in the largest amount in rocks and minerals is

- (a) carbon
- (b) silicon
- (c) hydrogen
- (d) aluminium

4 Q) An alloy used in making heating elements for electric heating devices is

- (a) solder
- (b) alloy steel
- (c) nichrome
- (d) German silver

5 Q) German silver is an alloy of

- (a) copper, nickel and silver
- (b) silver, copper and aluminium
- (c) zinc, copper and nickel
- (d) silver, zinc and copper

6 Q) Match the following : ABCD will correctly match with

A.	Aluminum	1	Monazite
B.	Uranium	2	Pitchblende
C.	Thorium	3	Bauxite
D.	Lead	4	Galena
		5	Haematite

- (a) 5 3 2 4
- (b) 3 2 4 1
- (c) 3 2 1 4
- (d) 2 3 1 5

7 Q) Diamond is an allotropic form of

- (a) silicon
- (b) carbon
- (c) sulphur
- (d) germanium

8 Q) Air is a/an

- (a) compound
- (b) element
- (c) mixture
- (d) electrolyte

9 Q) Which of the following is the best conductor of electricity?

- (a) Ordinary water
- (b) Sea water
- (c) Boiled water
- (d) Distilled water

10 Q) Balloons are filled with

- (a) helium
- (b) oxygen
- (c) nitrogen
- (d) argon

11 Q) The charcoal use to decolourise raw sugar is

- (a) animal charcoal
- (b) sugar charcoal
- (c) coconut charcoal
- (d) wood charcoal

12 Q) The most abundant metal in the earth's crust is

- (a) zinc

- (b) copper
- (c) aluminium
- (d) iron

13 Q) Production of chlorofluorocarbons (CFC) gas which is proposed to be banned in India, is used in which of the following domestic products ?

- (a) Television
- (b) Tubelight
- (c) Cooking gas
- (d) Refrigerator

14 Q) The gas used to extinguish fire, is

- (a) neon
- (b) nitrogen
- (c) carbon dioxide
- (d) carbon monoxide

15 Q) In which of the following activities silicon carbide is used ?

- (a) Making cement and glass
- (b) Disinfecting water of ponds
- (c) Making casts for statues
- (d) Cutting very hard substances

16 Q) The element common to all acids is

- (a) carbon
- (b) hydrogen
- (c) oxygen
- (d) sulphur

17 Q) Gobar gas contains mainly

- (a) methane
- (b) carbon dioxide
- (c) butane
- (d) carbon monoxide

18 Q) The most malleable metal is

- (a) Silver
- (b) Gold
- (c) Aluminium
- (d) Sodium

19 Q) Tetraethyl lead is used as

- (a) mosquito repellent
- (b) painkiller
- (c) fire extinguisher
- (d) petrol additive

20 Q) Which of the following is used in beauty parlours for hair setting?

- (a) Chlorine
- (b) Sulphur
- (c) Phosphorus
- (d) Silicon

21 Q) What type of reaction is carried out by the lipase in the digestion of fats?

- (a) Reduction
- (b) Dehydration
- (c) Hydrolysis
- (d) Calcification

22 Q) "Assertion (A) Lithium is used in the light weight electrical batteries of the type found in clocks and watches. Reason (R) The mass of Li required to release 1 mole of electron is so small. "

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

23 Q) Which one of the following compounds is frequently found packed with drying tubes?

- (a) Calcium sulphate
- (b) Magnesium chloride
- (c) Calcium chloride
- (d) Sodium thiosulphate

24 Q) "Metal used to make wires for safety fuses must have "

- (a) very low resistivity and high melting point
- (b) high resistivity and low melting point
- (c) low resistivity and low melting point
- (d) high resistivity and high melting point

25 Q) Which of the following is not a natural polymer?

- (a) Wool
- (b) Silk
- (c) Cotton
- (d) Teflon

26 Q) The ultra pure metal is obtained by

- (a) calcination
- (b) sublimation
- (c) zone refining
- (d) None of these

27 Q) "Which one among the following polymers is used to make personal armour such as combat helmets, ballistic face masks, and ballistic vests?"

- (a) Teflon
- (b) PVC
- (c) Bakelite
- (d) Kevlar

28 Q) "Assertion (A) A buffer solution is a mixture of a strong acid and its conjugate base or a strong base and its conjugate acid. Reason (R) Buffer solutions keep the pH at a nearly constant value."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

29 Q) "Which of the following gases in the atmosphere is/are responsible for acid rains? I. Oxides of sulphur II. Oxides of nitrogen III. Oxides of carbon Select the correct answer using the codes given below"

(a) I and II

(b) I and III

(c) Only II

(d) All of these

30 Q) Match the Following

List I	List II
(Elements)	(Ores/Minerals)
A. Copper	1. Corundum, Bauxite
B. Iron	2. Malachite, Azurite

C. Lead	3. Galena, Lanarkite
D. Aluminium	4. Haematite, Limonite

(a) 2 4 3 1

(b) 2 3 4 1

(C) 4 3 1 2

(d) 4 1 3 2

31 Q) Vermicompost is a/an

(a) inorganic fertilizer

(b) toxic substance

(c) organic bio fertilizer

(d) synthetic fertilizer

32 Q) Which one of the following is involved for desalination of sea water?

(a) Simple osmosis

(b) Reverse osmosis

(c) Use of sodium aluminium silicate as zeolite

(d) Use of ion selective electrode

33 Q) "Soaps are important cleansing agent and this property is due to their emulsifying action. How does soap enhance the cleansing action? "

(a) It has a strong acidic character which can dissolve the dirt

(b) It rises the temperature of the reaction

(c) It breaks triple bond formed between dirt and cloth

(d) It has capacity to render more prolonged the mixing of oil and water

34 Q) The animal fats undergo 'auto-oxidation' under ordinary temperature which gives the fats a rancid taste and odour. Which one of the following causes the rancid taste and odour of the fats?

(a) Platinum

(b) Carbon monoxide

(c) Carbon dioxide

(d) Aldehydes

35 Q) "The pungent smell of garlic is due to "

(a) a phosphate compound

(b) a nitrate compound

(c) a sulphur compound

(d) a chlorine compound

36 Q) Which one among the following statement about an atom is not correct?

(a) Atoms always combine to form molecule

(b) Atoms are the basic units from which molecules and ions are formed

(c) Atoms are always neutral in nature

(d) Atoms aggregate in large numbers to form the matter that we can see, feel and touch

37 Q) "The light emitted by firefly is due to "

(a) a radioactive substance

(b) chemiluminescence process

(c) a photoelectric process

(d) burning of phosphorus

38 Q) Which one among the following metals is used in fireworks to make a brilliant white light?

(a) Sodium

(b) Magnesium

(c) Aluminium

(d) Silver

39 Q) "Consider the following statements.

I. In the titration between weak bases and strong acids, the indicator such as methyl orange is commonly used.

II. In the titration between a weak acid and a strong base, the indicator such as phenolphthalein is commonly used. Which of the statements given above is/are correct?"

(a) Only I

(b) Only II

(c) Both I and II

(d) Neither I nor II

40 Q) Which one of the following reactions is responsible for the

transformation of inexpensive liquid vegetable fats into commercially important solid fats (e.g. ghee)?

(a) Hydrogenation

(b) Oxidation

(c) Halogenation

(d) Saponification

41 Q) Which one of the following is the softest?

(a) Sodium

(b) Iron

(c) Aluminium

(d) Copper

42 Q) Ethanol mixed petrol is being sold in various states w.e.f. January 1, 2003. The percentage of ethanol in petrol is

(a) 10%

(b) 7%

(c) 6%

(d) 5%

43 Q) A polymer which is used for making ropes and carpet fibres is

(a) polyacetylene

(b) polypropylene

(c) polyacrylonitrile

(d) PVC

44 Q) Which one among the following salts causes hardness to the water?.

(a) Calcium bicarbonate

(b) Calcium carbonate

(c) Sodium sulphate

(d) Potassium chloride

45 Q) Why is the meat preserved in the brine solution is not spoil as quickly as fresh meat?

(a) The bacteria will fall victim to osmosis and shrivel up and die

(b) The brine solution makes the meat acidic, so growth of bacteria is prevented

(c) The brine solution is an unfavourable medium for the reproduction of bacteria

(d) None of the above

46 Q) Assertion (A) Phenol is used for the manufacture of bakelite.

Reason (R) Bakelite is heat resistant thermosetting plastic used for making electric switches and switch board.

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

47 Q) "Consider the following statements

I. Washing soda is used as a water softener.

II. Saltpeter is used for heat transfer in solar power plants.

Which of the statements given above is/are correct?"

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

48 Q) "Consider the following substances.

I. Cadmium

II. Boron

III. Nickel

Which of the substances given above is/are used as controlling rod in nuclear reactor? "

- (a) All of these
- (b) I and II
- (c) II and III
- (d) Only II

49 Q) "Assertion (A) In the alkali metals, potassium is the second lightest element in the group.

Reason (R) Potassium imparts yellow colour to the flame."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

50 Q) Consider the following statements

I. Jet fuel is a mixture of a large number of different hydrocarbons.

II. Kerosene-type jet fuel (Jet A and Jet A-1) has a carbon number between 8 and 16.

III. Naphtha-type jet fuel (including Jet B), has carbon numbers between 5 and 15.

Which of the statements given above is/are correct?

(a) I, II and III

(b) I and III

(c) II and III

(d) Only II

51 Q) "Which one of the following is used as a mordant in dyeing and tanning industry? "

- (a) Magnesium oxide
- (b) Magnesium chloride
- (c) Magnesium sulphate
- (d) Magnesium carbonate

52 Q) Which one of the following is the reason for keeping the chloroform in brown-tinted glass containers?

- (a) Its brilliance colour hurts eyes
- (b) Its deep red colour is piercing
- (c) With UV-rays and O₂, it forms poisonous gas phosgene
- (d) With IR-rays, it forms a poisonous cyanide

53 Q) "Consider the following statements

I. Acid rain is caused by emission of carbon dioxide, sulphur dioxide and nitrogen oxides.

II. The most important gas which leads to acidification is sulphur dioxide.

Which of the statements given above is/are correct?"

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

54 Q) "Consider the following statements

I. All the enzymes found in the organisms are protein in nature.

II. Enzymes do not need any cofactor to perform their functions.

Which of the statements given above is/are correct?. "

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

55 Q) The flavour of apple is mainly due to which one of the following?

- (a) Formalin
- (b) Ethanol
- (c) Benzene
- (d) Benzaldehyde

56 Q) The ability of geckos which can hang on a glass surface using only one toe and to climb on sheer surfaces has been attributed to the

- (a) hydrophobic interaction
- (b) van der Waals' force
- (c) electrostatic interaction
- (d) covalent bond

57 Q) KO_2 (Potassium superoxide) is used in oxygen cylinders in space and submarines because it

- (a) eliminates moisture
- (b) absorbs CO_2
- (c) produces ozone

(d) produces CO_2

58 Q) "Consider the following statements

I. Mustard gas are a class of related cytotoxic and vesicant chemical warfare agents with the ability to form large blisters on the exposed skin and in the lungs.

II. Mustard gas is the organic sulphur compound.

Which of the statements given above is/are correct?"

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

59 Q) Which one among the following is the chief compound used in Pepper spray, a riot control agent?

- (a) Capsaicin
- (b) Black pepper
- (c) Sulphur dioxide
- (d) Hydrogen sulphide

60 Q) " Assertion (A) On mixing with water, plaster of Paris hardens.

Reason (R) By combining with water, plaster of Paris is converted into gypsum."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

61 Q) "The bleaching action of chlorine occurs in the presence of "

(a) moisture

(b) sunlight

(c) pure oxygen

(d) pure sulphur dioxide

62 Q) Which one among the following polymers is re-

synthesised from the naturally occurring polymer?

(a) Kevlar

(b) Teflon

(c) Rayon

(d) Cellulose

63 Q) Which one of the following chemicals released along with domestic wastes has caused the phenomenon of Eutrophication' which leads to high productivity of water bodies?

(a) Phosphates and nitrates

(b) Sulphates and chlorides

(c) Chlorides and carbonates

(d) Bicarbonates and carbonates

64 Q) Which one of the following has been producing/can produce light by a chemical change?

(a) Electric bulb

(b) Moon

(c) Sun

(d) Lightning and thunder

65 Q) Which one of the following chemical compounds is responsible for the stimulation of tear glands by the onion?

(a) A phosphate compound

(b) A nitrate compound

(c) A sulphide compound

(d) A chloride compound

66 Q) "Many communities put salt on their roads after a snowfall, Why? "

(a) To enhance the freezing and hardening of snow

(b) To control the slipping of vehicles

(c) To keep the melted snow from refreezing

(d) None of the above

67 Q) "Assertion (A) All liquids are conductors of Electricity.

Reason (R) Under the condition of low pressure and high voltage, liquids can be made conducting."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

68 Q) "Assertion (A) Apples have an anti-tumour action.

Reason (R) The benzene compounds contain in the apple have a great medicinal value."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

69 Q) "Consider the following statements

I. Glass wool has tensile strength greater than steel,

II. Glass wool is fire powder.

III. Glass wool has high electrical conductivity and absorbs moisture.

IV. Glass wool is used to prepare fire glass.

Which of the statements given above are correct?"

(a) I, II, III and IV

(b) I, II and III

(c) I, II and IV

(d) III and IV

70 Q) "Why hard water does not give lather with soap? "

(a) Hard water contains calcium and magnesium ions, which form precipitate with soap

(b) Hard water contains sulphate and chloride ions, which form precipitate

(c) pH of hard water is high

(d) pH of hard water is less

71 Q) The most abundant metal in the Earth's crust is

(a) Si

(b) Fe

(c) Al

(d) Cu

72 Q) A pale blue gas with a fish-like odour restores the colour of a blackened lead painting. The gas is also used as rocket fuel. It is

(a) oxygen

(b) ammonia

(c) sulphur dioxide

(d) ozone

73 Q) Which one of the following is used to slow down the speed of the neutrons in the nuclear reactor?.

(a) Controlling rod

(b) Moderator

(c) Coolant

(d) Accelerator

74 Q) "Assertion (A) During setting of cement, the structure has to be cooled by spraying water.

Reason (R) The constituents of the cement undergo hydration during setting of cement and it is an exothermic reaction."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

75 Q) "Which one among the following substances evolved heat when dissolved in water? "

(a) Glucose

(b) Fructose

(c) Quick lime

(d) Salt peter

76 Q) Which one of the following is correct? Butter is?

(a) a supercooled oil

(b) an emulsion

(c) a molecular solid

(d) a gel

77 Q) "Consider the following statements

I. Photochromic lenses are lenses that darken on exposure to ultraviolet light.

II. Photochromic properties is due to embedded microcrystalline of silver chloride in the glass.

Which of the statements given above is/are correct?."

(a) Only I

(b) Only II

(c) Both I and II

(d) Neither I nor II

78 Q) Match the Following

List 1 (Names)	List II (Compounds)
A. Baking soda	1. Sodium nitrate
B. Washing soda	2. Calcium hydroxide
C. Chile saltpeter	3. Sodium carbonate

D. Slack lime

4. Sodium bicarbonate

(a) 2 4 3 1

(b) 2 3 4 1

(c) 4 3 1 2

(d) 4 1 3 2

79 Q) "Assertion (A) Atomic hydrogen is stronger reducing agent than nascent hydrogen.

Reason (R) Atomic hydrogen is obtained by thermal decomposition of molecular hydrogen."

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

80 Q) The rusting of iron nail

(a) decreases its weight

(b) increases its weight

(c) does not affect weight but iron is oxidised

(d) does not affect weight but iron is reduced

81 Q) Which one of the following pollutants contains in water due to modern agricultural practices lead to 'methemoglobinaemia' when combines with our blood haemoglobin?

(a) Bicarbonates

(b) Sulphates

(c) Phosphates

(d) Nitrates

82 Q) "What is the role of positive catalyst in a chemical reaction? "

(a) It increases the rate of reaction

(b) It decreases the rate of reaction

(c) It increases the yield of the products

(d) It provides better purity of the products

(d) II and III

83 Q) The pH of fresh groundwater slightly decreases upon exposure to air because

- (a) carbon dioxide from air is dissolved in the water
- (b) oxygen from air is dissolved in the water
- (c) the dissolved carbon dioxide of the groundwater escapes into air
- (d) the dissolved oxygen of the groundwater escapes into air

84 Q) "Consider the following statements

I. Brent Crude is a major trading classification of sweet light crude oil.

II. Brent Crude is sourced from the North Sea.

III. Brent Crude contains sulphur.

Which of the statements given above are correct?."

- (a) I, II and III
- (b) I and II
- (c) I and III

85 Q) Which one of the following carbohydrates is used for silvering of mirror?

- (a) Sucrose
- (b) Maltose
- (c) Fructose
- (d) Glucose

86 Q) Which bioinsecticide was first developed on commercial scale?

- (a) Morphine
- (b) Quinine
- (c) DDT
- (d) Sporeine

87 Q) Which one among the following will you put into pure water in order to pass electric current through it?

- (a) Kerosene
- (b) Mustard oil

(c) Sugar

(d) Lemon juice

88 Q) What is "Agent orange"?

(a) An insecticide

(b) A weedicide

(c) A fertilizer

(d) A biofertilizer

89 Q) "Consider the following statements

I. One water molecule forms four H-bonds.

II. Water has high boiling point due to high dipole moment.

III. When ice is melt, collapse of structure leads to increase in density.

Which of the statements given above is/are correct?"

(a) I, II and III

(b) I and III

(c) II and III

(d) II only

90 Q) "Select the correct answer about "Ajinomoto"

I. It is a tasty powder and makes a great difference to the way of food taste.

II. Chemically, it is monosodium glutamate.

III. It causes the "kwok's disease" in man.

Which of the following statements given above is/are correct?"

(a) Only I

(b) Only II

(c) I, II and III

(d) II and III

91 Q) "Consider the following statements

I. A chalcogenide glass is a glass containing sulphur, selenium or tellurium.

II. Chalcogenide glass form the basis of re-writable CD and DVD solid-state memory technology. Which of the statements given above is/are correct?"

(a) Only I

(b) Only II

(c) Both I and II

(d) Neither I nor II

92 Q) Match the Following

List 1	List II
(Elements)	(Colour on flame)
A. Barium	1. Yellow
B. Sodium	2. Greenish
C. Silver	3. Turns black
D. Lead Codes	4. Apple green

(a) 2 4 3 1

(b) 2 3 4 1

(c) 4 3 1 2

(d) 4 1 3 2

93 Q) "Which of the following is correct for the semiconductor? "

(a) A large gap between filled band and vacant band

(b) An impurity band present between filled band and vacant band.

(c) A small gap between filled band and vacant band.

(d) Filled band and vacant band overlap with one another

94 Q) Making of chappathi is based on

(a) Graham's law

(b) Henry's law

(c) Charles' law

(d) Boyle's law

95 Q) The hair dye available in the market contains two bottles, one containing dye and other containing hydrogen peroxide. The bottles are mixed before applying the dye. The function of hydrogen peroxide is

(a) to dilute the dye

(b) to oxidise the dye to give desired colour

(c) to reduce the dye to give desired colour

(d) to acidify the dye solution

96 Q) Which one of the following pairs of metals is present in the cytochrome-c and chlorophyll respectively?

- (a) Fe and Zn
- (b) Mg and Mn
- (c) Fe and Mg
- (d) Mg and Zn

97 Q) "Consider the following statements

I. Rust is formed by the reaction of iron and oxygen in the presence of water or air moisture.

II. In salt water, iron tends to rust more quickly.

Which of the statements given above is/are correct?"

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

98 Q) **The coil in a heater is made of**

- (a) nichrome
- (b) tungsten
- (c) copper
- (d) iron

99 Q) "Assertion (A) Thorium is an efficient nuclear fuel widely used throughout the world.

Reason (R) India is richly endowed with thorium mineral."

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

100 Q) **From which one among the following water source, the water is likely to be contaminated with fluorine?**

- (a) Ground water
- (b) Rain water
- (c) River water
- (d) Pond water

ANSWERS:

1 .C,

2 A,3 B

4 C

5C6C7B,8C9B10A, 11D 12C 13D,

14C 15D 16B, 17A 18B 19D, 20B

21C 22A, 23C 24B 25D, 26C 27D

28D, 29A 30 A 31 C, 32B, 33D 34D,

35C 36D 37D, 38B 39C 40A, 41A

42D 43B, 44A 45A 46B, 47C 48B

49C ,50A 51C 52C, 53C 54A 55B,

56B 57B 58C, 59A 60A 61A, 62C

63A 64C, 65C 66C 67D, 68C 69C

70D, 71C 72B 73B, 74A 75C

76D,77C 78C 79B,80B 81D 82C,83A

84A 85D, 86D 87D 88B, 89A 90A

91C,92D 93B 94C,95B 96C 97C,98A

99B 100C