SCIENCE

REVISION and MODEL QUESTIONS

53)(a) How ammeter and Voltmeter are connected in an electric circuit? Mention their function.

(b) "In domestic electric circuit, the electrical appliances are generally connected in parallel'' Give reason

Ans:- (a) Ammeter is connected in series while Voltmeter is connected in parallel.

Functions: Ammeter measures electric current.

Voltmeter measures potential difference between two points.

(b) * A parallel circuit divides the current through the electrical gadgets.

* When one component fails, the circuit will not break, the other components work.

* The total resistance is less in this circuit.

* More helpful in cases of different current is required for different electrical appliances.

54) Mention any two measures for preventing corrosion of iron

Ans: measures for preventing corrosion of iron.

* Painting
* Oiling
* Greasing
* Galvanising
* Making alloys
*Chromium plating

55) How is concentrated acid diluted?

Ans:- Concentrated acid is diluted by adding the acid slowly to the water with constant stirring

56) Give reasons:

(a) Zinc oxide is called as amphoteric oxide

(b) Sodium metal is stored in Kerosene.

OR

Given reasons:

(a) Gold is used to make jewellery.

(b) Ionic compounds in the solid state do not conduct electricity.

Ans:-

(a) Zinc oxide reacts with both acids and bases to produce salt and water.

(b) Sodium metal reacts violently with water and atmospheric oxygen but does not react with kerosene.

OR

(a) Gold is used to make jewellery because it is lustrous, has ductile and malleable property. It is also least reactive.

(b) Ionic compounds in the solid state do not conduct electricity because movement of ions in the solid is not possible due to their rigid structure. Free ions will not form.

57) What is rancidity? Mention any two methods of preventing rancidity

Ans:-. Rancidity is the condition in which oily or fatty foods get spoiled due to oxidation, giving them an unpleasant smell and taste.

Methods of preventing rancidity:

(i) Adding substances which prevent oxidation (antioxidants).

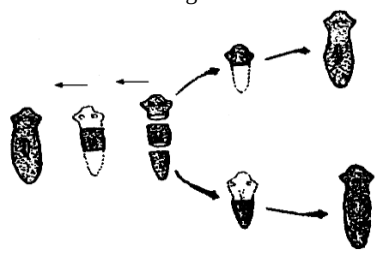
(ii) Keeping fried food materials in airtight containers.

(iii) Flushing bags of chips with nitrogen gas.

(Any two)

58) Illustrate the process of regeneration in Planaria with the help of suitable diagram.

Ans:- Planaria can be cut into any number of pieces and each piece grows into a complete Planaria. This development of pieces of an organism into an individual is known as Regeneration.



Regeneration in planaria

Regeneration is carried out by specialized cells. These cells proliferate and form large number of cells. In this mass of cells differentiation occurs to form various types of cells and tissues. These changes take place in an organised sequence referred to as development. This results in formation of an individual Planaria**.**

59) List *six* specific characteristics of sexual reproduction.

Ans: *Characteristics of sexual reproduction are:*

(i) In sexual reproduction, two parents are involved (male and female).

(ii) The new organism produced is genetically different from both parents.

(iii) During gamete formation meiosis occurs. After fertilization all divisions are mitotic.

(iv) Sexual reproduction helps in evolution.

(v) Fertilization of gametes leads to zygote formation. This zygote grows and develops to form a new organism.

(vi) Humans, fish, dogs, hens, cats, horses, deer, rabbit, lions and tigers all reproduce by the method of sexual reproduction. Most of the flowering plants also reproduce by sexual reproduction**.**

(Contd….)