KENDRIYA VIDYALAYA, NDA, PUNE 23

Marking scheme class VII

Half yearly exam 2018-19.

SUBJECT : SCIENCE   MM - 80

A 1) The process of taking out thread from the cocoon for use as silk is called reeling .   1

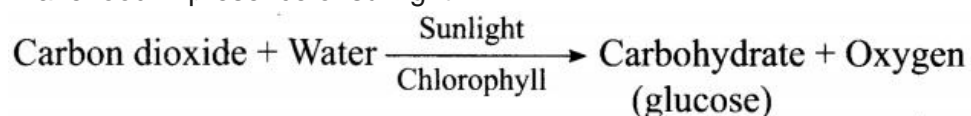A2) 37 degree C.   1

A3) Turmeric and Litmus.   1

A4) Anemometer.   1

A5) The green plants have chlorophyll in the leaves. The leaves use C02 and water to   2

 make food in presence of sunlight.

$$\text{Carbon dioxide} + \text{Water} \xrightarrow[\text{Chlorophyll}]{\text{Sunlight}} \underset{\text{(glucose)}}{\text{Carbohydrate}} + \text{Oxygen}$$

A6) Cellulose is the carbohydrate that can be digested by ruminants. Ruminants have large sac like structure between the small intestine and large intestine. The cellulose of the food is digested by the action of certain bacteria which are not present in humans.   2

A7) Pg no.28 in text book.   2

A8)The reaction between an acid and a base is known as neutralisation. Salt and water are produced in this process with the evolution of heat.
Antacids like milk of magnesia (magnesium hydroxide), baking soda, etc. which contain a base are used for reducing acidity in stomach when excessive acid released by glands.   2

A9) It is known that for rusting the presence of oxygen and moisture is essential. Painting prevents the iron gate from coming in contact with oxygen and moisture. 2

A10) In a physical change no new substance is formed.It is reversible in nature.

Example—conversion of ice to water.

 In a chemical change a new substance is formed.It is irreversible in nature.

Example—Burning of wood.   2

A11) .Air exerts pressure. Due to this pressure banners and hoarding flutter and torn when wind is blowing fast. Holes are made in banners and hoardings so that wind passes through the holes and they do not become loose and fall down.   2

A12) 1.Weathering –Breaking of rocks by the action of water,heat and wind.

Humus---The dead organic matter present in soil which makes it fertile.   2

A13) The no. of times a person breathes in a minute is termed as breathing rate. 2

A14) Some organisms live together and share both shelter and nutrients.This relationship is called Symbiosis.Example---Some fungi live inside the roots of plants. 3

A15) 1.Removal of fleece called shearing.

2.Scouring—washing of sheared skin.

3.Sorting.

4.Removal of burrs.

5.Dying of fibres.

6.Fibres are straightened,combed an drolled to yarns.   3

A16)1. The materials which allow heat to pass through them are conductors.Ex—metals

 The materials which do not allow heat to pass through them are Insulators.Ex—wood 2

2.The process by which heat is transferred from the hotter end to colder end of an object is known as conduction.   1

A17 1))Acids are substances which are sour in taste and can turn blue litmus red.

    Example—Acetic acid .   2

2) lactic acid.   1

A18)Because of continuous warmth and rain, the tropical region supports an enormous number and a wide variety of animals   3

A19)1. hot vapours when condense upside release energy. this heat will warm the air around..the air tends to rise and causes a drop in pressure. More air rushes towards centre.this cycle is repeated. The chain of events ends with the formation of a very low pressure system with high speed winds revolving around it. This is called cyclone.   2

2.)Properties---i)Air has mass.   Ii) air expands on heating.   1

A20)1. Respiration in presence of oxygen is called aerobic respiration.whereas

Respiration in absence of oxygen is called anaerobic respiration.   2

2.Tracheae are the network of air tubes for gas exchange.   1

A21)1. Parasites feed on living organisms whereas saprophytes feed on dead matter.

The organism on which parasite feed is called host wheras saprophytes do not feed on living organisms.   3

2.Food is needed by all organisms for many purposes:
(a) The main function of food is to help in growth.
(b) Food provides energy for movements such as running, walking or raising our arm.
(c) Food is also needed for replacement and repairing damaged parts of body.
(d) Food gives us resistance to fight against diseases and protects us from infections 2

A22) Pg no.12 in text book.   5

- A23)1. **White fur:** White fur in snowy white camouflage them and protect from predators
- **Thick fur & skin:** Thick fur and layer of fat skin help in insulation and keep warm.
- **Strong sense of smell:** Sense of smell is very strong that assists them in catching preys.
- **Shaped and sharp claws:** They have well curved and sharp claws that support them in walking on ice.   2

2.The day to day condition of atmosphere at a place with respect to temperature,humidity,rain and wind speed is called weather.

Elements---Temperature,humidity rainfall and wind speed.   3

A24) 1.

Clayey Soil	Loamy Soil

(i) It has much smaller particles.	(i) It has much larger particles.
(ii) It can hold good amount of water.	(ii) It cannot hold water.
(iii) It is fertile.	(iii) It is not fertile.
(iv) Air content is low.	(iv) Air get trapped between the particles.
(iv) Particles are tightly packed	(iv) Particles are loosely packed
(iv) Good for growing various crops.	(iv) Not suitable for growing crops.

3

2. Soil is formed through the process of weathering. Weathering is a process of physical breakdown and chemical decomposition of rocks and minerals near or at the surface of the earth. This physical and chemical decomposition is primarily done by wind, water, and climate. As a result of these processes, large rock pieces are converted into smaller pieces and eventually to soil.

2

A25) 1. During the run, the demand of energy is high but the supply of oxygen to produce energy is limited. Therefore, anaerobic respiration takes places in the muscle cells to fulfill the demand of energy. After finishing the race, an athlete breathe faster and deeper than usual so that more oxygen is supplied to the cells. 2

2.pg no.111 3

Section B

A26) Bile and it is stored in gall bladder.   2

A27)clean the thermometer .Jerk it.place it in the object whose temp. has to be noted.

 Keep it for 2 min. and record the temp. keeping the thermometer straight in front of the eyes.2

A28)Turmeric with acid ---no colour change.

   Turmeric with base---- red colour.   2

A29) Magnesium oxide is the product.   2

A30) Balloons will come close to each other because of reduced air pressure.   2

A31) Slow rate of breathing----While sleep and while sitting.   2

      Fast rate of breathing-----While exercise and while running.