

CHAROTAR ENGLISH MEDIUM SCHOOL, ANAND
SEMESTER -1/ 2018-19
STANDARD- 7

SUBJECT : SCIENCE & TECHNOLOGY
Date : 19-10-2018

(MAXIMUM MARKS -80)

SECTION-A

Q1- MULTIPLE CHOICE QUESTIONS (Each carry 1 mark) (40)

Q1- The air moves..... when the difference in the air pressure increases.
a) slower **b) faster** c) with the same speed d)with reduced speed

Q2 Pressure cookers are provided with.....handles.
a) copper **b) bakelite** c) aluminium d) brass

Q3 Which of the following is not a type of teeth?
a) incisors b) canines c) **anus** d) molars

Q4 Hydrochloric acid solution affectslitmus paper.
a) red **b) blue** c) pink d) green

Q5 In the absence of photosynthesis, there would be no.....
a) plants b) animals c) **living organisms** d) air

Q6 Wool is not obtained from.....
a) sheep b) cashmere goat c) yak d) **cow**

Q7 The cut surface of brinjal turns black due to a.....change.
a) physical **b) chemical** c) biological d) mechanical

Q8 Which of the following animals has an opposable thumb?
a) red eyed frog **b) monkey** c) toucan d) tiger

Q9 Raw silk is twisted to produce..... silk.
a) spun b) eri **c) thrown** d) mooga

Q10 The normal temperature of healthy human body is.....
a) 30° C b) 35°C c) 40 °C d) **37 °C**

Q11 Which factor does not contribute to the formation of a cyclone?.
a) wind speed b) temperature c) **rain** d) humidity

Q12 Which of these lacks humus?

a) **sandy soil** b) clayey soil c) loamy soil d) mixed soil

Q13absorbs the digested food.

a) stomach b) **small intestine** c) large intestine d) Oesophagus

Q14 During a physical change.....substance is formed.

a) a new b) **no new** c) a big d) a small

Q15 Our tearing teeth are called.....

a) **canines** b) premolars c) molars d) incisors

Q16 Rhizobium bacteria live in the root nodules of..... plants.

a) wheat b) rice c) barley d) **pea**

Q17 Bile juice is produced by.....

a) pancreas b) gall bladder c) **liver** d) stomach

Q18 Solids transfer heat by.....

a) **conduction** b) convection c) radiation d) expansion

Q19 Penguins are found in.....region.

a) tropical b) **polar** c) subtropical d) desert

Q20 Dead and decaying remains of plants and animals make.....

a) clay b) silt c) **humus** d) sand

Q21 Manure is added, when the soil is too.....

a) acidic b) **basic** c) neutral d) none of these

Q22 When an iron nail is kept in copper sulphate solution , the blue colour of copper sulphate solution changes to.....

a) red b) orange c) **green** d) yellow

Q23 The carbon dioxide gas enters the leaves of the plant through.....

a) stalk b) lamina c) **stomata** d) guard cells

Q24 The eggs of silkworm hatch in.....weeks.

a) one b) **two** c) three d) four

Q25 Temperature of an object is measured with a/an.....

a) barometer b) lactometer
c) **thermometer** d) electrometer

Q26 The maximum temperature for a particular day is recorded in the.....

a) evening b) night c) morning d) **afternoon**

Q27 Temporary and reversible changes are generally.....changes.

- a) **physical** b) irreversible c) chemical d) mechanical

Q 28 Which of the following is a property of an acid?

- a) **sour taste** b) sweet taste c) bitter taste d) salty taste

Q29 The mouth part of insects are modified to form ato suck liquid food.

- a) **feeding tube** b) sticky web c) tentacles d) cilia

Q30 Which of the following is not a natural fibre?

- a) cotton **b) rayon** c) silk d) wool

Q31is a bad conductor of heat.

- a) copper **b) air** c) silver d) gold

Q32 Which soil contains all type of soil particle with a lot of humus in it and is very fertile?

- a) sandy soil b) clayey soil c) loamy soil **d) alluvial soil**

Q33 In winters, the temperature of water in the sea is.....than that of land.

- a) The same b) lower **c) higher** d) less

Q34 Bacteria act on the leftover food in the teeth and form.....

- a) **acids** b) bases c) salts d) indicators

Q35 The mode of nutrition shown by cuscuta is.....

- a) **parasitic** b) symbiotic c) saprotrophic d) autotrophic

Q36 Which of the following is not a neutral substance?.

- a) glucose **b) sodium hydroxide** c) urea d) sugar

Q37 Fast blowing wind creates a region ofpressure.

- a) **low** b) high c) very high d) no

Q 38 Fruits such as oranges, lemons, etc, contains..... acid.

- a) **citric** b) lactic c) ascorbic d) acetic

Q39 The smallest particles of soil are called.....

- a) gravel b) silt c) sand **d) clay**

Q40 The rearing of silkworms for obtaining silk is called.....

- a) apiculture b) pisciculture **c) sericulture** d) horticulture

SECTION –B

Q1(A) Give answers in short.

(any three)

(06)

1- What is the range of Celsius scale?

Ans- The range of Celsius scale is -10°C to 110°C .

2- What are the functions performed by the tongue?

Ans- The tongue performs the following functions:

- a) It helps in mixing saliva with the food.
- b) It helps in pushing and swallowing the food into the food pipe.
- c) It helps in getting the different tastes of food. It has several taste buds that can distinguish four types of tastes in food **salty, sour, bitter and sweet**.
- d) It enables us to speak.

3- What are saprophytes?

Ans- The mode of nutrition in which the non- green plants obtain their nutrients from dead and decaying organic matter of plants and animals is called saprotrophic nutrition. Plants which use saprotrophic mode of nutrition are called saprophytes. E.g. Indian pipe and coral root.

4- Why is the fleece of sheep combed?

Ans- The fleece of sheep combed to remove the burrs.

Q1(B) Write differences. (any two) (04)

1. Physical and chemical change.

Parameter	Physical change	Chemical change
1-New substance	1-No new substance is formed	1-One or more new substances is formed
2-Nature of change	2- It is temporary change.	2- It is permanent change.
3- Reversibility	3- It is easily reversible by simple physical methods.	3- It is generally irreversible change.
4- Physical and chemical properties	4- Only the physical properties of the substance are change.	4- Both the physical and chemical properties of the substance are change.
5- Amount of energy (in the form of heat or light).	5- Generally, there is no overall change in energy	5- Change in energy takes place as a very large amount of energy is absorbed or

		given out.
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2. Clayey and sandy soil

Clayey soil	Sandy soil
1-It has very small particles.	1- It has quite large particles.
2- It has little air.	2- It is well aerated.
3- It is tightly packed and less porous.	3- It is porous.
4- It has water holding capacity.	4-It has low water holding capacity.

3. Laboratory thermometer and clinical thermometer

Ans- Difference between laboratory and clinical thermometer:

- a) There is a slight bend (kink) in the stem just above the bulb in case of clinical thermometer whereas a kink is absent in laboratory thermometer.
- b) Clinical thermometer is used to measure the temperature of human body whereas laboratory thermometer is used for measuring temperature while performing experiments.

Q2(A) Fill in the blanks .

(05)

- 1- The word cyclone is derived from the Greek word **cyclos**.
- 2- Rusting makes the iron objects **weak**.
- 3- Phenolphthalein is a **synthetic** indicator.
- 4- Polar bear has a thick layer of fat called **blubber**.
- 5- **Clayey** soil is very sticky when wet.

Q2(B) Write definitions :

(any four)

(04)

1- Photosynthesis

Ans- The process by which green plants make their own food (like glucose) from carbon dioxide and water by using solar energy in the presence of chlorophyll is called photosynthesis.

2- Insulator

Ans- The materials which do not allow heat to pass through them are called bad conductors of heat or insulators. For ex paper, rubber, wood , clothes, bakelite etc.

3- Air pressure

Ans- The pressure exerted by the air present in the atmosphere is called atmospheric pressure.

4- Soil profile

Ans- A vertical section through the soil showing the different layers of the soil is called the soil profile.

5- Crystallisation

Ans- Crystallisation is the process of obtaining pure solid crystals having definite geometrical shape.

Q3(A) Give detailed answers: (any two) (06)

1- Describe the process of wool production.

Ans- Wool is obtained from the sheep by a long process which involves various steps:

Shearing: The process of removing hair from the body of sheep is called shearing.

Scouring: The process of washing the fleece of sheep to remove dust, dirt, sweat, grease, etc is called scouring.

Sorting: The process of separating the long fine quality fleece from the remaining inferior quality or broken pieces is called sorting.

Combing: The process of removing the burrs from the fleece is called combing.

Dyeing: The natural fleece of sheep is black, brown, or white in colour. The fibres obtained after combing are dyed in various colours.

Spinning: The straightened fibres are spun or twisted together to make yarn. The wool yarn is either knitted or woven.

2- How do Rhizobium bacteria and leguminous plants help each other in survival?

Ans- Rhizobium bacteria live in the root nodules of leguminous plants (plants of pea family) and provide them nitrogen in a soluble form. In return, the plants provide food and shelter to the Rhizobium bacteria. So, both the organisms benefit each other.

3- What precaution should be taken after cyclone hits an area?

Ans- Following precautions should be taken after cyclone hits an area:

- 1- Do not drink water that could be contaminated by floods. Drink only clean water which has been stored for emergencies.
- 2- Do not touch wet electric switches and fallen electric power lines. Do not use electrical appliances, if wet.
- 3- Do not go out just for a sake of fun. Keep watching local television or listening to local radio for advice. Go out only when it is safe.
- 4- Do not pressurize the rescue force by making undue demands.
- 5- Cooperate and help your neighbours and friends.
- 6- Do not spread rumours.

Q3(B) Draw a labeled diagram (any one)

(04)

1- Human digestive system

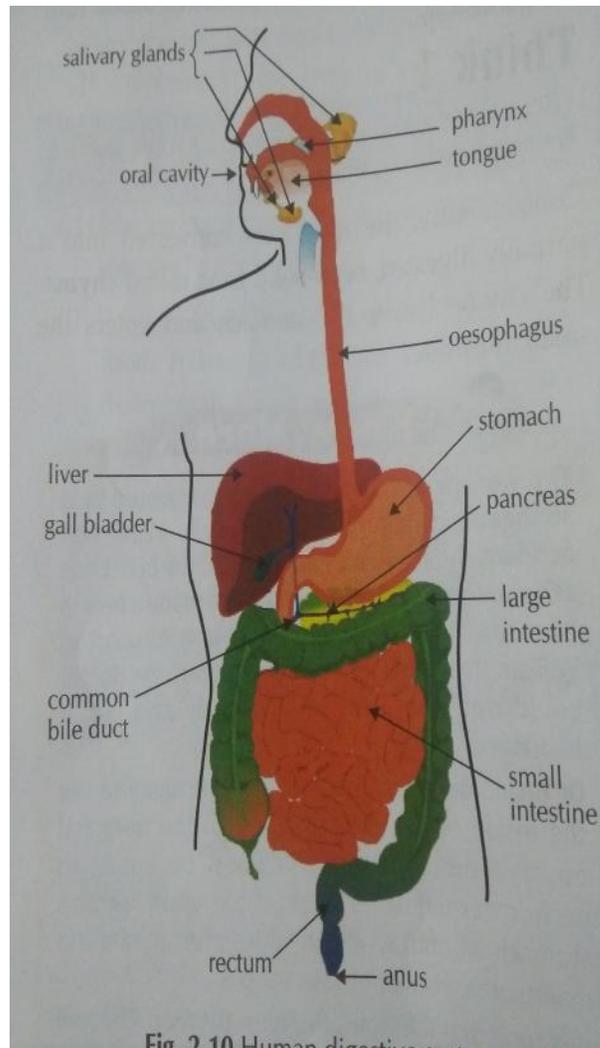


Fig. 2.10 Human digestive system

2- Clinical thermometer

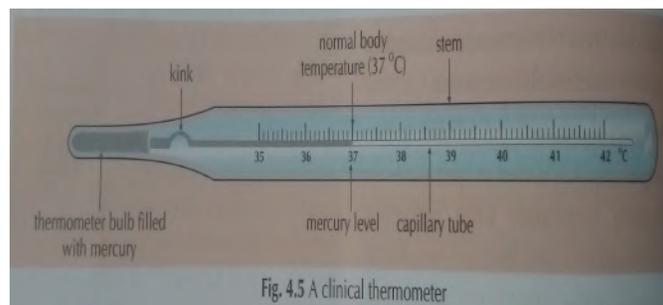
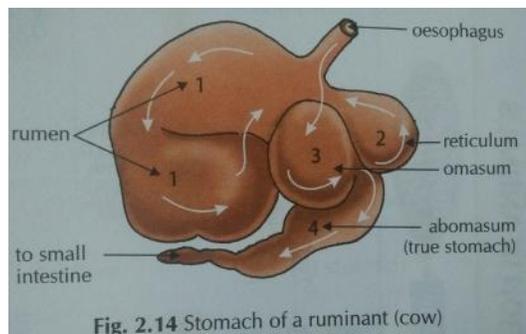


Fig. 4.5 A clinical thermometer

3 Stomach of ruminant (cow)



Q4(A) Short notes

(any three)

(06)

1- Liver

Ans- The liver is a reddish brown gland situated in the upper part of the abdomen on the right side. It is the largest gland in the body. It secretes bile juice, which is stored in a sac called gall bladder. Bile juice helps in the digestion of fats. Fats are present as big droplets in the food because of which they cannot be digested easily. Bile juice breaks these big droplets of fat into small droplets and makes their digestion and absorption easier.

2- Symbiosis

Ans- The association in which two different types of organisms live and work together for their mutual benefits is called symbiosis.

3- Thunderstorm

Ans- The upward movement of hot air and the downward movement of cold air leads to stormy winds accompanied by heavy rains, lightning and thunder. This event is called thunderstorm.

4- Neutralisation reaction

Ans- The reaction in which an acid reacts with a base to form salt and water is called neutralization reaction. Some heat is always evolved in a neutralization reaction. This evolved heat increases the temperature due to which the reaction mixture becomes hot. A neutralization reaction can be represented as:



Q4(B) Circle the odd one. Give reason for your choice.

(05)

1- Wind speed **transpiration** wind direction humidity

Ans- Others are related to atmosphere.

2-Combing sorting **reeling** shearing

Ans- Others are processes of obtaining wool whereas reeling is used in obtaining silk.

3- Paper leather **iron** clothes

Ans- Others are insulator whereas iron is conductor.

4-Formation of curd from milk burning of leaves
Burning of fuels **hammering of metals**

Ans- Others are the chemical change whereas hammering of metals is a physical change.

5- Sulphuric acid nitric acid
lactic acid hydrochloric acid

Ans- Others are the mineral acids whereas lactic acid is an organic acid.

“The End”