KENDRIYA VIDYALAYA KHAMMAM

Half Yearly Examination (2017-18)

Class: **VII** Max. Marks: 80

Subject: **Science** Time Allotted: 3 Hours

Marking Scheme

SECTION A

I. **Fill in the blanks** – 10 X 1m = 10m

1. climate
2. chemical changes
3. dark
4. heating
5. liver
6. chlorophyll
7. moving
8. blue ; red
9. cyclones
10. sericulture

SECTION B

II. **Choose the correct option** – 10 X 1m = 10m

11. (d) large intestine
12. (b) 24 hours
13. (b) formic acid
14. (d) wooly dog
15. (d) does not become cold
16. (a) hot and humid
17. (b) clayey
18. (c) Amritsar
19. (b) radiation
20. (c) bases

SECTION C

Answer the following in **two or three sentences** – 8 X 2m = 16m

21. Sketch as given in Fig. 1.3. of the lesson Nutrition in Plants in Textbook on Page No. 3
    (Diagram : 1m ; Labelling : 1m)
22. Examples of conductors of heat : aluminium, iron, copper
    Examples of insulators of heat : plastic, wood
    (1m + 1m =2m)

23. Differences between a parasite and a saprotroph –

Parasite	Saprotroph
The organism that grows on the body of another organism and derives nutrients from it is known as a parasite.	The organism that obtains nutrients from the dead and decaying organic matter is called saprotroph.
Examples : Cuscuta	Examples : fungi and some bacteria

(Two differences : 1m + 1m = 2m)

24. During acidity in stomach, excess of acids is produced in the stomach. An antacid contains base, such as milk of magnesia. This base reacts with acids and neutralizes the effect of acid, thus giving relief. (2m)
25. Rusting is aided by both moisture and air. By painting an iron gate, we prevent its contact from the air and moisture present in the atmosphere. Hence, rusting is prevented. (2m)
26. Bile is produced in liver. It helps to digest fats. (1m + 1m = 2m)
27. Differences between sea breeze and land breeze –

Sea Breeze	Land Breeze
The breeze blowing from the sea towards land is called sea breeze.	The breeze blowing from the land to sea is called land breeze.
Sea breeze occurs during daytime.	Land breeze occurs during night time.

(Two differences : 1m + 1m = 2m)

28. (a) Photosynthesis : chemical change
    (b) Melting of wax : physical change
    (1m + 1m = 2m)

SECTION D

Answer the following questions in **three** to **four sentences** – 8 X 3M = 24M

29. Name the following –
    (i) Amarbel or Cuscuta
    (ii) Insectivorous plant (Name of any insectivorous plant)
    (iii) Stomata
    (1m + 1m + 1m = 3m)
30. Differences between clayey soil and sandy soil –

Clayey soil	Sandy soil
1. The proportion of fine particles is higher	1. The proportion of large particles is Higher.
2. Particles are tightly packed.	2. Particles are loosely packed.

3. It can hold good amount of water.	3. It cannot hold good amount of water.
4. Water cannot drain easily.	4. Water can drain easily.
5. Less air is trapped between particles.	5. More air is trapped between particles.

(Any other relevant three points of difference or any of these points : 1m + 1m + 1m)

31. (i) Rearing : Rearing is a process of helping any organism to grow.
    (ii) Shearing : It is the process of removing fleece (hairs) along with a thin layer of skin from the body of sheep.
    (iii) Sericulture : The rearing of silk worms to obtain silk is called sericulture.
    (1m + 1m + 1m = 3m)
32. Diagram of soil profile : As given in Fig. 9.3 of the lesson Soil in Text book on Page No. 98.
    (Correct and neat diagram : 1m Correct labeling : 2m)
33. The elements that determine the weather of a place are temperature, humidity, rainfall and wind speed.
    (Any three elements : 3m)
34. Sketches of a cocoon and a larva as given in Fig. 3.9 of the lesson Fibre to fabric of text book on page no. 28.
    (1.5M + 1.5M = 3M)
35. Amount of water = 200 ml
    Percolation time = 40 minutes
    Therefore rate of percolation = $\frac{\text{Amount of water (ml)}}{\text{Percolation time (min)}}$

    $= \frac{200 \text{ ml}}{40 \text{ min}}$

    = 5 ml / min.

    (Answer given showing steps of calculation fetches 3m)
36. (i) Transfer of heat from burner to pan is by radiation.
    (ii) Transfer of heat from pan to water is by conduction.
    (iii) Transfer of heat within water is by convection.
    (1m + 1m + 1m = 3m)

SECTION E

Answer the following questions in **five** sentences or **a paragraph** – 4 X 5M=20M

37. Diagram as shown in Fig. 2.2 of lesson Nutrition in animals of the textbook on Page 12. (Correct diagram = 2m ; Correct labeling = 3m)
38. Differences between acids and bases –

Acids	Bases
1. Acids are sour in taste.	1. Bases are bitter to taste.
2. Acids turn blue litmus red.	2. Bases do not change the colour of blue litmus.

3. Acids do not change the colour of red litmus.	3. Bases turn red litmus blue.
4. With china rose indicator, acids give pink colour.	4. Bases give green colour with china rose indicator.
5. Acids do not change the colour of turmeric indicator.	5. Bases turn the colour of turmeric indicator to red.

(Five differences = 5m)

39. Following planning is required to deal with the situation created by cyclone :
    (a) Facilities must be made for cyclone prediction and forecasting which can give cyclone warning in advance.
    (b) Quick information and communication linkages so that information can spread quickly.
    (c) Make necessary arrangements to shift the essential household goods, domestic animals and vehichles to safe places.
    (d) Avoid driving on roads through standing water, as floods may have damaged the roads.
    (e) Construction of cyclone shelters.
    (1m + 1m + 1m + 1m + 1m = 5m)

40. An important and widely found animal of Indian tropical rainforest is the elephant. It has adapted remarkably to the conditions of this region. Some of The adaptations are as follows –
    (i) It uses its trunk as nose so that it has a strong sense of smell.
    (ii) Its trunk is also used for picking up food.
    (iii) Its tusks are used to tear bark of trees. It can eat barks of trees.
    (iv) The soles of their feet are covered with thick pads. These pads can handle their enormous weight. They also prevent sound so that the elephants can move silently.
    (v) Its large ears have strong sense of hearing.

    (1m + 1m + 1m + 1m + 1m = 5m)