INDIAN SCHOOL MUSCAT

ANNUAL EXAMINATION

SET A

FEBRUARY 2020

CLASS IX

Marking Scheme – SCIENCE [THEORY]/BIOLOGY

SECTION - A

Q.NO.	ANSWER	MARKS
2	Red Sindhi and Sahiwal	1
8	a. Endoplasmic reticulum OR b. Plastid	1
9	a. Arthropoda	1
10	c. Conduction of water	1
11	c. Air borne disease	1

SECTION - B

18	Camillo Golgi ½ M Lysosomes ½ M Functions 1. Packages and dispatches materials synthesized by ER 1 M 2. Complex sugar made from simple sugars. 1 M OR 1. The cell shrinks, Osmosis 1 M 2. a. Nucleoid b. Mitochondria 1 M 3. In unicellular organisms vacuoles plays n important role in expelling excess water and waste materials, provides turgidity and rigidity to the cell. 1 M	3
19	1. Tuberculosis, Bacteria 1 M 2. Sexual contact, Blood to blood contact with infected person, from infected mother to her baby during pregnancy (Any two) 2 M	3
20	1. Nitrification- It is the conversion of ammonia into nitrites and nitrates. 1 M Nitrogen fixation – I t is the conversion of atmospheric nitrogen to compounds of nitrogen 1 M 2. Ozone forms a protective layer and prevents harmful rays from entering the earth surface. 1 M	3
21	1. Combination of five or six fish species in a single fish pond 1M 2. Species are selected in such a way that their nutrient requirements are different 1 M 3. Hormonal stimulation 1 M	3

SECTION- C

27 1. a. Thick waxy coating help in protection against loss of water and parasitic fungi. 1M 5
b. Hair like parts greatly increase the surface area for water absorption. 1M
2. Diagram Text book page no: 69, Fig-6.3 2 M
Increases the length of the stem and the root. 1M

28 1. Thallophyta 5
Plant body is not well differentiated , Predominantly aquatic 1 ½ M
2. Cell structure, Body organization, Source and mode of nutrition 1 ½ M
3. Gymnosperms
Naked seeds, Non -flowering plants
Angiosperms
Seeds are enclosed within the fruits, Flowering plants 2 M

OR

1.Binomial nomenclature 1 M
Generic name should start in capital.
Specific name in small letters 2 M
Generic and specific name must be underlined separately.
2. Animals with three layers of cells in which differentiated tissues can be made. 1 M
Tape worm – Platyhelminthes
Earthworm – Annelida 1 M

SET – B

SECTION - A

Q.NO.	ANSWER	MARKS
2	Improved quality, Higher yield	1
8	c. Endoplasmic reticulum OR d. Plastid	1
9	d. Gymnosperms	1
10	c. Conduction of water	1
11	c. Air borne diseases	1

SECTION - B

18 1. Cellulose provide rigidity to the plant cell and helps it to withstand in dilute medium 1M 3
2. Folds in mitochondria increase the surface area to help in ATP generating reactions 1 M
3. Digestive enzymes in lysosomes help in removal of worn out organelles and damaged cell 1

M

OR

1. When a living plant cell loses water through osmosis there is shrinkage or contraction of the cell contents of the cell away from the cell wall. 1 M
2. Prokaryotic cell — Eukaryotic cell
   Generally small — Generally large
   Single chromososme — More than one chromosome 2 M

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Nitrogen fixation – I t is the conversion of atmospheric nitrogen to compounds of nitrogen 1 M
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21 1. Compost – The process in which farm waste material like live stock excreta. Vegetable wastes, straw, domestic wastes, eradicated weeds is decomposed in pits is known as compost. 3
vermi – compost – Compost is prepared by using earthworms to hasten the process of decomposition. 2 M
2. Manure is prepared by the decomposition of animal excreta and plant waste. 1 M

SECTION- C

27 1.Diagram Neuron with four labeling - 3 M 5
2. Voluntary muscles
   a. Striations are present
   b. Multinucleate 2M
Involuntary muscles
   a. Absence of striations
   b. Uninucleate

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