



**INDIAN SCHOOL MUSCAT
FINAL EXAMINATION 2023
086 SCIENCE
CLASS IX**



MARKING SCHEME

TOTAL MARKS :80

SET - A		
12	c	1
13	d	1
14	d	1
15	b	1
16	c	1
20	(a)	1
25	Manure - is natural substance formed by the decomposition of animal and plant waste. Manure helps in enriching soil with nutrients and organic matter and increasing soil fertility. Fertilizaer - Fertilizers are commercially produced/ man- made plant nutrients, fertilizers can destroy soil fertility (or any two correct differences)	2
26	Diagram (1 1/2)+ nucleus (1/2)	2
29	(a) Phloem (1)+ it transports food/ translocation to all the parts of the plant(1) A- Sieve plate(1/2)+ B-sieve tube (1/2)+C- phloem parenchyma(1/2)+companion cell OR A- Apical meristem(1/2) B- intercalary meristem(1/2) Function (A) increases the length of the stem and the root.(1) (C) lateral meristem - The girth of the stem or root increases (1)	3
30	Cartilage (1) ,blood (1) , stratified squamous epithelium(1)	3
31	(i) Lipids and proteins (ii) Plasma membrane called a selectively permeable membrane because allows or permits the entry and exit of some materials in and out of the cell. It also prevents movement of some other materials. (iii) Amoeba (1/2), endocytosis (1/2)	3
34	(i) Any two differences (2 marks) (ii) Energy required for various chemical activities needed for life is released by mitochondria in the form of ATP (Adenosine triphopshate) molecules. (iii) Chromoplast (iv) plasmolysis OR (i) Any two differences (2 marks) (ii) The ribosomes are the sites of protein manufacture	5

	(iii) Leucoplasts (iv)	
39	(a) <ul style="list-style-type: none"> • They should sting somewhat less. • They should stay in a given beehive for long periods. • They should breed well. • They should have high honey collection capacity. (any two) (b) <ul style="list-style-type: none"> • Pasturage is the availability of flowers for nectar and pollen collection for the honeybee. • The quality and taste of the honey is determined by adequate quantity of the pasturage and the kind of flowers available. (c) Italian bee OR Bee wax (1 mark)	4
	SET - B	
12	a	1
13	a	1
16	b	1
26	Inter-cropping is growing two or more crops simultaneously on the same field in a definite pattern/ alternate rows. Advantage It ensures maximum utilisation of the nutrients supplied/ prevents pests and diseases from spreading to all the plants	2
30	(i) Stomata (ii) plasma membrane /cell membrane (iii) nucleus (1+1+1)	3
31	Any three <ul style="list-style-type: none"> • show rhythmic contraction and relaxation throughout life. • involuntary muscles • Heart muscle cells are cylindrical/ branched/ uninucleate 	3
	SET C	
12	b	1
13	c	1
16	b	1
25	Difference (1 mark) eg. (1/2+1/2 mark) Macronutrients - Nutrients required by plants in large quantities are called macro-nutrients. Eg. nitrogen, phosphorus, potassium, calcium, magnesium, Sulphur (any one) Micronutrients - Nutrients required by plants in small quantities are called micro-nutrients. Eg. iron, manganese, boron, zinc, copper, molybdenum, chlorine (any one)	2
30	(i) Simple squamous epithelium (ii) ligaments (iii) areolar connective tissue	3
31	<ul style="list-style-type: none"> • Stomata • Functions- exchanging gases with the atmosphere, Transpiration (loss of water in the form of water vapour) 	3