

INDIAN SCHOOL AL WADI AL KABIR

POST-MIDTERM EXAMINATION (2024-25)

CLASS: VIII Sub: SCIENCE MAX.MARKS: 30

DATE: 01-12-2024 Set -I TIME: 1 HOUR

ANSWER KEY

	SECTION A (1X7=7)	MARKS
1	(c) (i), (ii) and (v)	1
2	(c) mammary gland and egg cell	1
3	(b) Manure is nutrient specific.	1
4	(d) combine; harvesting and threshing	1
5	i) Both A and R are true and R is the correct explanation of the assertion.	1
6	i) Both A and R are true and R is the correct explanation of the assertion.	1
7	iv) A is false but R is true.	1
	SECTION B (2X3=6)	
8	P – Uterus Q – Ovary.	$\frac{1}{2} + \frac{1}{2} = 1$
	The development of baby takes place in the uterus. Ovary produces the	
	female gamete (egg/ovum).	$\frac{1}{2} + \frac{1}{2} = 1$
9	Crop rotation is a farming practice where different crops are grown	1
	alternately in the same field over different seasons or years.	
	When legumes are grown alternately with the main crop, Rhizobium	1
	bacteria present in the root nodules of legumes fix atmospheric nitrogen	
	into nitrates, thus replenishing the soil with nitrogen.	
10	In vitro fertilization is a method in which the ovum collected from a	
	female's body is allowed to fuse with sperm collected from a male's body	1
	in an external medium or outside the body of the female.	
	The zygote so developed is allowed to grow in vitro (i.e. glass) for about a	
	week and then implanted in the female's uterus where it further develops	1
	as a normal embryo.	
	SECTION C (3X3=9)	
11	(a) The activity demonstrates the laws of reflection. It proves that the	
	incident ray, reflected ray, and the normal at the point of incidence lie in	1
	the same plane.	
	(b) $n=(360/\theta)-1$	
	= 360/120-1	1
	=3-1	1
	=2 images	
	(c) A periscope works on the principle of multiple reflection of light.	
	It is used in submarines to see things above the surface of the water.	
	6	$\frac{1}{2} + \frac{1}{2} = 1$
	I .	

12	(a) The transformation of the larva into an adult through drastic changes is called metamorphosis. For example, female frogs lay eggs. These eggs hatch into larvae known as tadpoles. They undergo some abrupt changes in their structure through cell growth and are gradually transformed into frogs. (b) Hydra	$\frac{1}{2} + \frac{1}{2} = 1$
	Tentacles Bud	1 + 1 = 2
13	(a) Kharif- Crops grown in the rainy season, June to September. E.g.: Paddy,	
	Maize, Groundnut etc. Rabi- Crops grown in the winter season, October to March. E.g.: Wheat, Gram, Pea etc.	1+1=2
	(b) Turning and loosening of soil brings the nutrient-rich soil to the top so that plants can use these nutrients. It helps in mixing organic matter with the soil uniformly. It initiates the growth of natural agents and microorganisms and thus, keeps the soil fertile. It increases the waterholding capacity of soil. It helps in easy penetration of roots into the soil.	14 + 14 - 1
	(ANY TWO POINTS) SECTION D (5X1=5)	$\frac{1}{2} + \frac{1}{2} = 1$
14	(a) When the eye lens becomes cloudy and the eyesight becomes foggy,	
	people are said to have cataracts. It is treated surgically by removing the opaque lens and replacing it with a new artificial lens.	$\frac{1}{2} + \frac{1}{2} = 1$
	(b) Regular reflection	
	(i) All the reflected rays are parallel.	
	(ii) It occurs on a smooth and polished surface.	
	(iii) Reflected rays are in one direction.	
	<u>Diffused reflection</u>	
	(i) The reflected rays are not parallel.	
	(ii) It occurs on a rough surface.(iii) Reflected rays are scattered in different directions.	$\frac{1}{2} + \frac{1}{2} = 1$
	(ANY ONE DIFFERENCE)	$\frac{72+72=1}{2}$
1	Regular reflection Diffused reflection	1 + 1 = 2

	(c) $\angle i + 15^{\circ} = 90^{\circ}$ $\angle i = 90^{\circ} - 15^{\circ} = 75^{\circ}$ Since, $\angle i = \angle r$, $\angle r = 75^{\circ}$	
		1
	SECTION E (1X3=3)	
15	(i) In summer, crops need more water due to the increased rate of evaporation of water from the soil and the leaves.	1
	(ii) Moat (pulley system), chain pump, dhekli, and rahat (lever system) (ANY TWO)	1
	(iii) Drip irrigation is the most effective method for watering fruit trees, gardens, and trees since no water is wasted. It's a gift in areas where there's a shortage of water. (ANY ONE POINT).	1