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CLASS VIII

ANNUAL EXAMINATION 24-25

BIOLOGY

SET- A1

M.M. 20

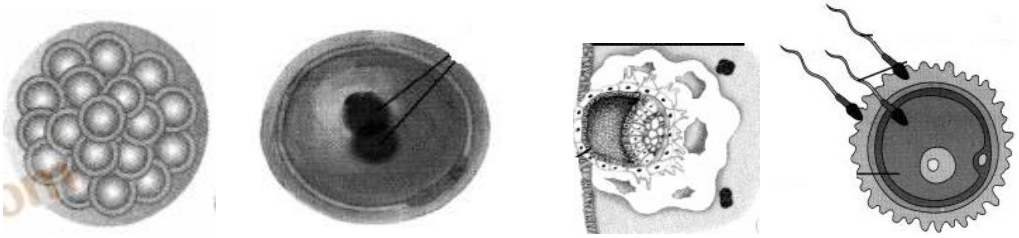
INSTRUCTIONS

1. **All questions are compulsory**
2. **Questions 1 to 6 carry 1 mark each.**
3. **Question 7 (with an internal choice) carries 2 marks.**
4. **Question 8 carries 3 marks.**
5. **Question 9 (case based question with an internal choice) carries 4 marks**
6. **Question 10 (with an internal choice) carries 5 marks.**

Q. No.		Marks
1	Refer to the given table and select the option that correctly identifies **P, Q, R** and **S.** | | Steps of agriculture | Implements | | i) | Tilling | **P** | | ii) | **Q** | Seed drill | | iii) | **R** | Trowel | | iv) | Harvesting | **S** | **P** **Q** **R** **S** a) Plough Threshing Levelling Combine b) Hoe Sowing Weeding Sickle c) Combine Sowing Manuring Hoe d) Cultivator Manuring Levelling Harvester	1
2	Among the diseases given below, which is true about the microorganisms that cause them and the symptoms of the disease? | | Disease | Microorganism | Symptoms | | 1 | Malaria | Protozoa | Fever accompanied by shivering | | 2 | Hepatitis B | Virus | Swollen Liver | | 3 | Cholera | Bacteria | Vomiting and diarrhoea | | 4 | TB of the lungs | Bacteria | Persistent cough | a) 1 and 2 only	1

	b) 1,2 and 3 only c) 2,3 and 4 only d) 1, 2, 3 and 4 only	
3	A student sets up an experiment to study the growth of plants.The student used three potted plants with the same amount of soil and additionally added manure in pot A, fertilizer in pot B and left pot C undisturbed. After 3 months, the student measured the growth of each plant as shown in TABLE 1. The student carried out the same experiment again and used the same soil for planting new plants.The table shows the growth of each plant after 3 months as shown in TABLE 2. TABLE 1 Pot | Initial Growth (cm) | Final Growth (cm) A | 10 | 25 B | 10 | 35 C | 10 | 18 TABLE 2 Pot | Initial Growth (cm) | Final Growth (cm) A | 10 | 28 B | 10 | 20 C | 10 | 18 On comparing the results of his experiments,what can the student correctly infer? a) Manure provides inorganic nutrition to the plants. b) Fertilizers and manure both decrease the soil's fertility. c) Use of fertilizers repeatedly reduces the soil's fertility. d) In the long run, growth of the plant is better when fertilizers are used instead of manure.	1
4	What is the role of adrenalin in the body during stressful situations? a) It helps the body sleep better. b) It triggers a "fight or flight" response to prepare the body for stress. c) It regulates salt and water balance in the digestive system. d) It helps the body relax and calm down.	1
	In the following questions, two statements are given- one labelled **Assertion (A)** and the other labelled **Reason (R)**. Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below: (a) Both A and R are true, and R is the correct explanation of the assertion.	

	(b) Both A and R are true, but R is not the correct explanation of the assertion. (c) A is true, but R is false. (d) A is false, but R is true.	
5	**Assertion (A)**: Preventive and control measures are used before grains are stored for future use. **Reason (R)**: Storage losses in agricultural produce can be very high.	1
6	**Assertion (A)**: Wildlife Sanctuaries like reserve forests do not provide protection and suitable living conditions to wild animals. **Reason (R)**: People living in wildlife sanctuaries are allowed to do certain activities such as grazing by their livestock, collecting medicinal plants, firewood, etc.	1
7	**Attempt either option A or B** A.What is a vaccine? Against which disease was the first vaccine discovered? OR B.Boojho was invited by his friend to a party and he ate a variety of foodstuff. On reaching home he started vomiting and had to be taken to a hospital. Name the condition he is suffering from. State any three characteristics of spoiled food?	2
8	Define the following terms- i) Ecosystem ii) Red-data book iii) Species	3
9	Case- based question Adolescence is a transitional stage of physical and psychological development culminating in reproductive maturity, that generally occurs during the period from puberty to adulthood.The capacity for maturation and production of gametes lasts for a much longer time in males than in females.The major landmark of puberty for females is the onset of menstruation which occurs once in about 28 to 30 days. **Attempt either subpart a) or b)** a)Differentiate between menarche and menopause. OR b) List the events of the menstrual cycle in human females. c) For how long does the reproductive phase in human females last? d) What will be the product/ result of fertilization of an egg having X chromosome with a sperm having: i) X chromosome ? ii) Y chromosome ?	4

10	**<u>Attempt either option A or B</u>** A. a) Define ovulation. b) Observe the given diagrams carefully. Name and arrange them in the correct sequence of occurrence.  Q R S T **OR** B.Answer the following questions- a) Out of Human beings, hen, cow and dog, hen is the odd one out. Why? b) Which type of fertilization is exhibited by hen? c) Why do animals exhibiting external fertilization produce a large number of gametes? d) The eggs of frogs do not have shells for protection, yet they are safe in water. How? e) Name the mode of asexual reproduction exhibited by *Amoeba* and *Hydra* respectively.	5