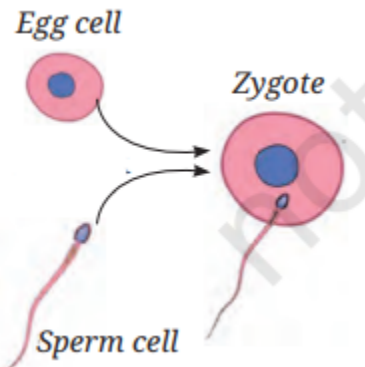


**CLASS 8**  
**BIOLOGY**  
**MID TERM EXAMINATION (2025-26)**  
**SET A1/A2**  
**MARKING SCHEME**

**MM:20**

| SET<br>A1 | SET<br>A2 | Questions with expected answers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MARKS |
|-----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1         | 4         | Why is adolescence often called the “period of storm and stress”?<br>(a) It is due to academic pressure only.<br>(b) It is due to hormonal changes causing emotional and physical changes.<br>(c) It is due to weather changes.<br>(d) It is due to heavy diet during this period.<br><b>Ans: (b) It is due to hormonal changes causing emotional and physical changes.</b>                                                                                                                                                                      | 1     |
| 2         | 3         | Menstruation in females is regulated by which hormones?<br>(a) Insulin and thyroxine<br>(b) Estrogen and progesterone<br>(c) Adrenaline and insulin<br>(d) Testosterone and insulin<br><b>Ans: (b) Estrogen and progesterone</b>                                                                                                                                                                                                                                                                                                                 | 1     |
| 3         | 2         | What is the percentage probability of having a male or female child during fertilisation in humans?<br>(a) 25% male, 75% female<br>(b) 75% male, 25% female<br>(c) 50% male, 50% female<br>(d) 100% male<br><b>Ans: (c) 50% male, 50% female</b>                                                                                                                                                                                                                                                                                                 | 1     |
| 4         | 1         | Which of the following is true regarding sexual reproduction in plants.<br>(i) Pollen grains found inside the anther of a flower are the male gametes<br>(ii) Ovules, found deep inside the flower, are the female gametes.<br>(iii) Pollen is carried to another flower by wind, insects, or animals<br>(iv) The fleshy part of the flower around the ovule develops into a fruit<br><br>(a) (i) and (ii)<br>(b) (ii), (iii), and (iv)<br>(c) (i), (ii), (iii) and (iv)<br>(d) (i), (ii) and (iii)<br><b>Ans: (c) (i), (ii), (iii) and (iv)</b> | 1     |

|   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                     |
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|   |   | <p>Following questions 5 and 6 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:</p> <p>(a) Both A and R are true and R is the correct explanation of A.<br/> (b) Both A and R are true but R is not the correct explanation of A.<br/> (c) A is true but R is false.<br/> (d) A is false but R is true.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                     |
| 5 | 6 | <p><b>Assertion (A):</b> The ‘eyes’ of a sprouted potato can be used to produce new potato plants.<br/> <b>Reason (R):</b> Vegetative propagation is the process used to produce new plants with the help of seeds.<br/> <b>Ans: (c) A is true but R is false.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                                   |
| 6 | 5 | <p>Assertion (A): The father’s chromosome determines the sex of the baby.<br/> Reason (R): The mother can provide either an X or Y chromosome to the child.<br/> <b>Ans: (c) A is true but R is false.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                                                                                                   |
| 7 | 7 | <p><b>Set A1</b><br/> <b>Attempt either option (A) or (B)</b><br/> (A) An ovum is released by one of the ovaries once in about 28-30 days. What happens when this egg is not fertilised?<br/> <b>OR</b><br/> (B) How do hormones help in completing the life history of insects and frogs.<br/> <b>Ans:(A) If fertilisation does not occur, the released egg, and the thickened lining of the uterus along with its blood vessels are shed off. This causes bleeding in women which is called menstruation</b><br/> <b>OR</b><br/> <b>(B) Metamorphosis in insects is controlled by insect hormones. In a frog, it is controlled by thyroxine, the hormone produced by thyroid.</b></p> <p><b>SET A2</b><br/> <b>Attempt either option (A) or (B)</b><br/> (A) (i) Which hormone helps in metamorphosis in Frogs? Which mineral is required for the production of the hormone?<br/> (ii) What happens if the water in which the tadpoles are growing does not contain a sufficient quantity of the particular nutrient.<br/> <b>OR</b><br/> (B) Does the reproductive phase of life in females continue throughout life? Give reason to justify your answer.</p> <p><b>Ans: (i) Thyroxine, Iodine</b><br/> <b>(ii) If the water does not contain sufficient iodine, then the tadpoles will not develop into frogs.</b><br/> <b>OR</b></p> | <p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p> <p>1</p> |

|   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                       |
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|   |   | <b>(B) No, because the end of the reproductive phase is the menopause which occurs in female at the age of 45-50 years in which the release of egg stops and menstruation stops</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1+1                                                                   |
| 8 | 8 | <p>(i) Mention any one point of difference between asexual and sexual reproduction.</p> <p>(ii) Identify the process shown in the diagram below and define it.</p>  <p>(iii) Name an organism in which the above process takes place outside the body of the organism.</p> <p><b>Ans: (i) In asexual reproduction, a single parent produces new individuals that are exact copies of itself (exact in terms of the instructions inside the cell). In sexual reproduction, instructions from two parents combine to create offspring that are not exactly like either of the parent (or any other)</b></p> <p><b>(ii) Fertilisation- fusion of male and female gamete to form a zygote.</b></p> <p><b>(iii) Fish or frogs</b></p>                                                                                                                                                                                   | <p>3</p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p> <p>1<br/>1</p> |
| 9 | 9 | <p><b>Read the passage given below and answer the questions related to the passage and other studied concepts.</b></p> <p>The human body undergoes several changes during adolescence. These changes mark the onset of puberty. The most important change which marks puberty is that boys and girls become capable of reproduction. Puberty ends when an adolescent reaches reproductive maturity. Along with that, various other changes also take place in the body of the adolescents. Some of these include change in voice, increase in height, change in body shape, etc.</p> <p>(a) Why do boys' voices become hoarse during puberty?<br/> (b) Why do young people get acne and pimples on their face?<br/> <b>Attempt either (c) or (d)</b><br/> (c) Mention any two changes that take place in the body shape of adolescents.</p> <p style="text-align: center;"><b>OR</b></p> <p>(d) List any two secondary sexual characters that are shown by males and females during adolescence.</p> | 4                                                                     |

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|----|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |    | <p><b>Ans: (a) Boys develop larger voice boxes. The growing voice box in boys can be seen as a protruding part of the throat called Adam's apple which makes their voice deep.</b></p> <p><b>(b) During puberty the secretion of sweat glands and sebaceous glands (oil glands) increases which causes acne and pimples.</b></p> <p><b>(c) Boys- shoulders broaden, the muscles of the body grow more prominently In girls, the region below the waist becomes wider. (any 2)</b></p> <p style="text-align: center;"><b>OR</b></p> <p><b>(d) Boys also develop hair on their chest. In both, boys and girls, hair grows under the arms and in the region above the thighs or the pubic region.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>1</p> <p>1</p> <p>1+1</p> <p>1+1</p>                                                                                                                                                             |
| 10 | 10 | <p><b>Attempt either option (A) or (B)</b></p> <p><b>(A) The changes which occur at adolescence are controlled by hormones. Hormones are chemical secretions from endocrine glands.</b></p> <p><b>(i) The thyroid gland is located in the neck. Which hormone is secreted by this gland? What will happen if a person's thyroid gland is not producing this hormone properly?</b></p> <p><b>(ii) Patients suffering from diabetes take injections of a particular hormone. Name the hormone and the gland which secretes this hormone.</b></p> <p><b>(iii) Which hormone is released by the adrenal gland? State its function.</b></p> <p><b>(iv) A person has become taller than usual. We can infer that X gland is affected and it is overproducing Y hormone. Identify X and Y.</b></p> <p style="text-align: center;"><b>OR</b></p> <p><b>(B) (i) List three methods by which HIV can spread from an infected person to a healthy person.</b></p> <p><b>(ii) List two myths or taboos related to changes in adolescents that are prevalent in the society</b></p> <p><b>Ans: (i) Thyroxine hormone.</b></p> <p><b>The person will suffer from the disease called Goitre which causes swelling in the neck.</b></p> <p><b>(ii) Insulin hormone secreted by Pancreas gland.</b></p> <p><b>(iii) Adrenalin because It helps the body to adjust to stress when one is very angry, embarrassed or worried.</b></p> <p><b>(iv) X- Pituitary</b></p> <p><b>Y- Growth hormone</b></p> <p style="text-align: center;"><b>OR</b></p> <p><b>(i) 1. sharing the syringes used for injecting drugs.</b></p> <p><b>2. It can also be transmitted to an infant from the infected mother through her milk.</b></p> <p><b>3. The virus can also be transmitted through sexual contact with a person infected with HIV.</b></p> <p><b>(ii) 1. A girl becomes pregnant if she looks at boys during menstruation.</b></p> <p><b>2. The mother is responsible for the sex of her child. (Any 2)</b></p> | <p>5</p> <p>1+1</p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p> <p>1</p> <p>1</p> <p>1</p> <p>1+1</p> |