

**KENDRIYA VIDYALAYA SANGATHAN, NEW DELHI**  
**ZONAL INSTITUTE OF EDUCATION AND TRAINING, CHANDIGARH**  
**PRACTICE SET FOR PERIODIC TEST**

**SET- I**  
**SESSION: 2023-24**

**CLASS: XII**

**SUBJECT: BIOLOGY**

**MAXIMUM MARKS: 40**

**TIME: 1:30 HR**

Q.No	Questions	Marks
<b>SECTION A</b>		
1	In which method the sperm is artificially injected into the ovum by a fine micro syringe- a- ICSI                                      b- IVF                                      c- IUT                                      d- None of these	1
2	The scrotum helps in the spermatogenesis by- a- Increasing the temperature b- Lowering the temperature c- Regulating the LH and FSH d- Regulating the Testosterone	1
3	Contraceptive "Saheli" is developed by- a- NBRI                                      b- CDRI                                      c- IVRI                                      d- CIMAP	1
4	Assertion: Gynoecium consists of the pistil. Reason: It represents the male reproductive part in flowering plants. a- If both Assertion and Reason are true and Reason is the correct explanation of Assertion. b- If both Assertion and Reason are true but Reason is not the correct explanation of Assertion. c- If Assertion is true but Reason is false. d- If both Assertion and Reason are false.	1
5	Assertion- the zygote develops into a new individual in sexual reproduction or in animals. Reason- the zygote is not capable to develop new individuals in asexual animals. a- If both Assertion and Reason are true and Reason is the correct explanation of Assertion. b- If both Assertion and Reason are true but Reason is not the correct explanation of Assertion. c- If Assertion is true but Reason is false. d- If both Assertion and Reason are false.	1
<b>SECTION B</b>		
6	A bilobed dithecous anther has 50 MMC (microspore mother cell) per microsporangium how many male gametophytes this anther can produce? OR What is exine? Write its importance in pollen survival.	2
7	Draw a vertical section of a Maize grain and label it – (i) pericarp (ii) scutellum (iii) coleoptile (iv) radicle	2
8	Which of the following seeds are Ex albuminous/ albuminous and why? Groundnut seeds and Caster seeds	2
9	a. Where is acrosome present in humans? Write its functions. b. What is monospermy? How is polyspermy prevented in humans	2
10	Compare the role of the pituitary hormones during the menstrual cycle.	2

**SECTION C**

11	Give reasons- a. Most zygotes in angiosperms divide only after a certain amount of endosperm is formed. b. Micropyle remains as a small pore in the seed coat of a seed. c. (iv) Integuments of an ovule harden and the water content is highly reduced as the seed matures.	3
12	Answer the following questions- a. List two reasons that make copper-related contraceptives effective. b. What is periodic abstinence? c. Which method of contraception is best in your view? Write any two reasons to support the answer. OR Draw the various stages of zygote development and label each part.	3

**SECTION E (CASE STUDY-BASED QUESTION)**

13	<p>A couple got married 7 years ago but they still do not have any children. They had never used any contraceptive methods. The doctor told them about other methods of pregnancy and after the treatment, a girl child was born to them this year and both the couple are very happy.</p> <p>i- Such methods are collectively called as- a- PRT                      b- CRT                      c- ART                      d- AVRT</p> <p>ii- The AI method is generally used when- a- Sperm count is more than the average number b- Sperm count is less than the average number c- Both are correct d- Both are incorrect</p> <p>iii- Which program is involved in collecting eggs from females and sperm from males to induce fertilization in a test tube? a- Test tube baby programme b- Lactational amenorrhea c- Coitus interrupts d- fertility programme</p> <p>iv- Assertion: GIFT is an IVF technique for such couples. Reason: IN GIFT gamete is transferred to the endometrium of female a- If both Assertion and Reason are true and Reason is the correct explanation of Assertion. b- If both Assertion and Reason are true but Reason is not the correct explanation of Assertion. c- If Assertion is true but Reason is false. d- If both Assertion and Reason are false.</p>	4
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**SECTION D**

14	Explain the neuroendocrine method of the fetal ejection reflex. OR What do you mean by ART? Explain any 4 ARTs and explain their significance.	5
15	Explain the events that take place during oogenesis in the human female. OR Describe the hormonal control of spermatogenesis.	5
16	Give a detailed account of the adaptative changes in the followings- a- Hydrophily b- Entomophily OR The plants have ability to avoid inbreeding depression. Explain.	5