KENDRIYA VIDYALAYA SANGATHAN ZIET, CHANDIGARH REVISION PAPER, SET- III

UNIT- VI

(Chapters (Sexual reproduction in flowering plants, Human reproduction, Reproductive health)

Subject: Biology Class: XII

TIME: 1:00 Hr Max. Marks: 20

Note: Question no one to four is of 01 mark each, question no five and six is of 02 marks each, question number three is of 03 marks, question no five is a case study based and is of 04 marks and question number six is of 5 marks.

| SN | Question | | | | | Marks | | |
|----|---|---------------------------|--------------|---------|---------------------|-------|--|--|
| 1 | Which is the correct stage of transfer during IVF for an infertile human female- a- Blastocyst b- Morula | | | | | | | |
| | c- Embryo with 8 blastomere | | | | | | | |
| | d- Zygote stage | | | | | | | |
| 2 | | entify the correct answer | | | | | | |
| | Options | Antipodal cell | Central cell | Egg | Synergids in number | 11 | | |
| | а | Two in number | Haploid | Diploid | 1 | 1 | | |
| | b | Three in number | Diploid | Haploid | 2 | 11 | | |
| | С | One in number | Triploid | 2n | 3 | 1 | | |
| 3 | d | Four in number | Tetraploid | 3n | 0 | 1 | | |
| 4 | Assertion: in coconut, the water represents a type of endosperm. Reason: it is a free cellular endosperm. a- Both assertion and reason are correct and the reason is the correct explanation of assertion. b- Both assertion and reason are correct and the reason is not a correct explanation of assertion. c- Assertion is true but the reason is false d- Assertion is false but the reason is true. Which of the following functions are carried out by the copper ion in Intra uterine device fitted in the uterus- a- Decrease motility of sperm b- Increase motility of sperm | | | | | | | |
| | c- Decrease the ovulation time | | | | | | | |
| _ | d- Inhibit progesterone secretion and thereby endometrium can't remain intact Explain two demerits of the followings- | | | | | | | |
| 5 | i- Vasectomy ii- Oral contraceptives. | | | | | | | |
| 6 | i- identify a, b, and c in the given diagram. ii- Microspore mother cells undergo in which division to produce pollen tetrad. Microspore mother cells undergo in which division to produce pollen tetrad. | | | | | | | |
| 7 | Write the correct answer based on the statements given below- i- Hormone that is responsible for the maturation of follicles in the ovary. ii- Site where spermatogenesis takes place. iii- The layer which prevents polyspermy during the fertilization process. iv- Its surge causes ovulation in females. | | | | | 3 | | |

| | | It helps in maintaining the number of chromosomes in the ovum. | |
|---|--|---|---|
| | vi- | The aggregation of cells that is involved in the formation of organs in an embryo. | |
| 8 | crucial ever anther (ma pollinated, that produce several straincluding we in global ecurrent glo somewhere i- | is It is an essential ecological survival function. Flower pollination is one of the nts in the life cycle of many flowering plants. When a pollen grain moves from the ale part) of a flower to the stigma (female part), pollination happens. To be pollen must be moved from a stamen to the stigma. This is the first step in a process ces seeds, fruits, and the next generation of plants. It may be self or cross. here are ategies that flowering plants utilize to move pollen from one flower to another wind, water, and animal pollination. Pollinators, like bees, form an important aspect economic systems and social activities and traditions. Around five to eight % of obal crop production is directly ascribed to animal pollination, which equates to be between 235 and 577 billion American dollars worldwide. Light and sticky pollen grains are features of-a- Wind pollinated flower b- Animal pollinated flower | |
| | | c- Insect pollinated flower d- Animal pollinated flower Assertion: All aquatic plants do not show pollination by water. | |
| | | Reason: some aquatic plants show insect pollination. a- Both assertion and reason are correct and the reason is the correct explanation of assertion. b- Both assertion and reason are correct and the reason is not a correct explanation of assertion. c- Assertion is true but the reason is false | |
| | iii- | d-Assertion is false but the reason is true. transfer of pollen grains from the anther to the stigma of another flower of the same plant a- Autogamy b- Geitonogamy c- Xenogamy d- Emasculation | |
| | | Large flowers which are colourful, fragrant, and rich in nectar show- a- Insect pollination b- Wind pollination c- Aquatic pollination d- No pollination | |
| 9 | following q i- ii- | e given diagram carefully and answer the questions related to the diagram label a, b, c, and d in the given diagram. Mention the importance of 'c'. Explain formation of 'a'. | 5 |