SHREE SANATAN DHARM EDUCATION CENTRE

Date; 18.4.16 CLASS – XII BIOLOGY Worksheet 1 (Unit VI; REPRODUCTION)

HUMAN REPRODUCTION

1. Name the gland whose secretions help in the lubrications of the penis.
2. Name the hormone secreted by Leydig cells.
3. Why is the middle piece of a sperm called power house of sperm?
4. Define spermiogenesis .Where does it occur?
5. What is the significance of secondary oocyte retaining the bulk of nutrient rich cytoplasm of primary oocyte?
6. What are fraternal twins?
7. What is corpus luteum?
8. Where does fertilization take place in human female?
9. Define implantation and the stage of implantation.
10. What are stem cells in human embryo?
11. 'Human testis is extra-abdominal'. What is the significance?
12. Name and write the functions of 2 types of cells present in inner lining of semniferous tubule.
13. Write 2 differences between vas efferentia and vas deference.
14. What is seminal plasma? Write its components.
15. Write 2 important functions of testis and ovary.
16. Write 2 differences between spermatogenesis and spermiogenesis.
17. Mention the site of action of GnRH and FSH during spermatogenesis. Give one function of each.
18. Write the various events that take place in the reproductive organs of a human female during follicular phase of menstrual cycle.
19. What are chorionic villi? What is their fate?
20. Name 4 hormones secreted by placenta?
21. Why is it considered that presence/absence of hymen is not the indicates of virginity?
22. What is parturition? Which hormones are involved in its induction?
23. Correlate the uterine event according to the hormonal level on 26-28 days.

SEXUAL REPRODUCTION IN FLOWERING PLANTS

1. The flower of brinjal is referred to as chasmogamous while that of beans is cleistogamous. How are they different from each other?
2. Draw a labeled schematic representation of a) mature embryo sac of an angiosperm b) a typical anatropous ovule.
3. How can pollen grains of wheat & rice which tend to lose viability within 30 minutes of their release are made available months later for breeding programmes?
4. Name the type of flower which favors cross pollination.
5. The meiocytes of rice has 24 chromosomes. How many chromosomes are present in its endosperm?
6. Explain any two devices by which autogamy are prevented in flowering plants.
7. Pea flowers produce assured seed sets. Give a reason.
8. Why do corn cobs have long tassels?
9. Explain the development of the zygote into an embryo & of the primary endosperm nucleus into endosperm in a fertilized embryo sac of a dicot plant.
10. Mention the location & function of tapetum in the microsporangium of angiosperms. State the characteristic features of the cells forming this layer.
11. a) Draw a labeled diagram of L.S. of an embryo of grass
    b) Give reason for each of the following; i) Anthers of angiosperm flowers are described as dithecous.
    ii) Hybrid seeds have to be produced year after year.
12. a)Draw a diagram of an enlarged view of T.S of one microsporangium of an angiosperm and label the following parts:
    i) Tapetum ii) Middle layers iii) Endothecium iv) Microspore mother cells
    b) Mention the characteristics features and function of tapetum. c) Explain the following giving reasons:
    i) Pollen grains are well-preserved as fossils. ii) Pollen tablets are in use by people these days.
13. How is it possible in Oxalis and Viola plants to produce assured seed-sets even in the absence of pollinators?
14. How does the megaspore mother cell develop into a 7-celled, 8-nuleate embryo sac in an angiosperm? Draw a labeled diagram of a mature embryo sac.
15. a) How does microspore mother cell develop into mature pollen grain in angiosperms?
    b) Describe the structure of a mature pollen grain and draw a labeled diagram of its two-celled stage.

EXPAND YOUR HORIZONS, BECAUSE THAT WILL EXPAND YOUR INFLUENCE,* YOUR *POSSIBILITIES, & YOUR ABILITIES