GIRLS' HIGH SCHOOL COLLEGE 2020-2021 CLASS 12th A

BIOLOGY WORKSHEET-03 HUMAN REPRODUCTION

INTRODUCTION: Parents are requested to ensure that your ward spends at least for two days to read and understand the topics, and refer to the given reference books and websites given below.

Reference Books:

- 1. Nootan ISc Biology Class XII Nageen Prakashan
- 2. Balaji ISc Biology, A Textbook for Class XII Shri Balaji Publications

Website:

- 1. https://en.m.wikipedia.org> Human Reproductive system
- 2. You Tube: Human reproduction Class 12 Biology/ Male Reproductive System

1. Answer Briefly:

- a) What is sexual dimorphism?
- b) Where do you find Ledig cells and what is their function?
- c) What is inguinal canal?
- d) Name the accessory genital glands found in human male.

2. Choose the correct answers from the given alternatives:

- a) In mammalian males, the excretory and reproductive systems share the:
 - (i) Testes (ii) Urethra (iii) Ureter (iv) Vas deferens
- b) Secondary sexual characteristics in male are directly maintained by hormone.
 - (i) Estrogen (ii) FSH (iii) LH (iv) Testosterone
- c) The cell formed through fertilization is called a:
 - (i) Zygote (ii) Sperm Cell (iii) gamete (iv) Ovum
- d) During development spermatozoa are nourished by:
 - (i) Fructose (ii) Cells of ledig (iii) mitochondria (iv) Sertoli cells

3. Differentiate between the following pairs:

- a) Fertilization and insemination b) Spermatogenesis and spermiogenesis
- c) Vas deferens and Vas efferentia d) Impotency and sterility

4. Define the following terms:

a) Organogenesis b) Puberty c) Menstrual cycle d) Parturition

5. Draw the following well labelled diagram:

a) T.S. of mammalian Testes b) Internal structure of mammalian Testes c) A mature human spermatozoa

6. Write the specific location and the function of the following cells/glands in human males.

a) Primary Spermatocytes b) Seminal vesicle c) Prostate glands

7. a) Draw a labelled diagram of human male reproductive system showing:

- (i) Testes (ii) Glans penis (iii) Vas deferens (iv) Bulbourethral glands (v) Epididymis
- b) (i) Name the place where spermatogenesis takes place.
 - (ii) What is ejaculation?

- 8. Study the following flow chart. Name the hormones involved in each stage. Explain their function: Hypothalamus \rightarrow Pituitary \rightarrow Testes \rightarrow Sperm
- 9. Give one significant contribution of each of the following scientists:
 - (i) Birbal Sahni (ii) H. Boyer (iii) Hargobind Khorana (iv) Robert Koch
- 10. Expand the following:
 - (i) VNTRs (ii) BCG (iii) AIDS (iv) ELISA