

PE – 271

(552) M.Sc. ZOOLOGY (Second Semester)
Examination June 2022 Compulsory/Optional
Group - Paper -II

GAMETE BIOLOGY AND REPRODUCTIVE PHYSIOLOGY IN HUMAN BEINGS

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

Q 1. Answer the following question :-

1x10=10

- (a) During development of male foetus when does testis descend in the scrotum from abdominal cavity.
- (b) What is spermatic cord?
- (c) How many Sperms are present in Per ml. of semen in human beings.
- (d) What is atretic follicle.
- (e) Write function of fimbriae.
- (f) How many carbon atoms are present in Progesterone.
- (g) Name the hormones produced by embryonic testis to inhibit development of ovary & Mullerian ducts.
- (h) Define Capacitation of Sperms.
- (i) What is function of syncytiotrophoblast in early embryonic development.
- (j) What is immunocontraception.

Q 2. Answer the following question :-

2x5 = 10

- (1) What is pubarche.
- (2) Draw well labelled diagram of mature Ova.
- (3) Write brief note on endocrine function of Placenta.
- (4) What is progesterone block?
- (5) Write function of human Chorionic gonadotropin.

Section-B

Answer the following question :-

15x4 = 60

Unit - I

Q. 3- Give detail account of sex differentiation.

Or

Discuss endocrine control of Menstrual Cycle.

Unit - II

Q. 4- Describe development of secondary sexual characters in male and Hormones responsible for its development.

Or

Discuss process of spermatogenesis and hormonal control of it.

Unit - III

Q. 5- Give an account on abnormalities of Ovarian function.

Or

Answer the following-

- (i) Structure of Uterus.
- (ii) Ovarian steroid hormones its biosynthesis.
- (iii) catabolism of female steroid hormones.

Unit - IV

Q. 6- Structure of mammary gland and role of hormones in its development.

Or

Write various methods for Collection and Cryopreservation of gametes.