

Roll No.

Total Pages : 3

CMDQ/D-23

5170

MOLECULAR REPRODUCTION-I

Paper-M-Z-304

Time Allowed : 3 Hours]

[Maximum Marks : 80

Note : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Answer the following questions : 8×2=16
 - (a) Diagrammatically explain the structure of mature Graafian follicle.
 - (b) What is the biological significance of progesterone?
 - (c) Enlist different reasons of male sterility.
 - (d) Write the characteristic features of follicular atresia.
 - (e) How does osteoporosis affect reproduction?
 - (f) What are the markers of reproductive aging?
 - (g) Explain the hormonal theory of ageing.
 - (h) Define the Apoptosis.

UNIT-I

2. Elaborate the molecular bases of testicular steroidogenesis and its endocrinal control. 16
3. Write a short note on the following :
 - (a) Two cell theory. 8
 - (b) Dynamics of Folliculogenesis. 8

UNIT-II

4. Explain the structure, function and molecular mechanism associated with regulation of luteinization? 16
5. Write notes on the following :
 - (a) Spontaneous and Induced ovulators. 8
 - (b) Nuclear Oocyte maturation. 8

UNIT-III

6. Elucidate the genetic and endocrine factors regulating female infertility. 16
7. Write notes on the following :
 - (a) PCOD. 8
 - (b) Male sterility. 8

UNIT-IV

8. Describe in detail various lifestyle factors that affect reproductive ageing. 16
9. Explain the following :
 - (a) Fertility preservation. 8
 - (b) Pre-menopausal disorders. 8