

12.12.18 (M)



[This question paper contains 2 printed pages]

Sl No of Q.P: 444

Your Roll No.:

Unique Paper Code : 32237910

Name of the Course : B.Sc. (Life Sciences)
Zoology (DSE Course) 3A

Name of the Paper : Reproductive Biology

Semester : V

Time : 3 Hours

Maximum Marks : 75

Instructions for candidates:

- (a) Write your **Roll No.** on the top immediately on receipt of this question paper.
- (b) Attempt any **FIVE** questions in all.
- (c) Question **No. 1** is **compulsory**.
- (d) **Draw** diagrams where ever necessary.

1. A. *Differentiate* between the following pairs of terms

8

- (a) Corpus luteum and corpus albicans
- (b) Primary and secondary infertility
- (c) Luteolytic factors and luteotrophic factors
- (d) Uterus of rat and human

B. *Define* the following terms:

5

- (a) Net fertility rate
- (b) Endometrosis
- (c) Menarche
- (d) Spermiation
- (e) Hysterectomy

C. *Fill* in the blanks:

5

- (a) The acute stromal cell reaction in response to trophoblast invasion is known as
- (b)secreted by placenta binds to LH receptors and prevents luteolysis.
- (c)is the major estrogen secreted during pregnancy
- (d) The condition in which the embryo does not implant but remains in a state of suspended animation is termed as
- (e)is the precursor molecule for the synthesis of steroid hormones

D. Name the *source* of the following hormones

4

- (a) hCG
- (b) PRL
- (c) Oxytocin
- (d) FSH

E. *Expand* the following terms

5

- (a) AIH

(M) 8/5/18

- (b) ABP
- (c) PID
- (d) STD
- (e) PGD

2. (a) What are the essential features of an ideal contraceptive? 3
(b) Discuss the mode of action of hormonal contraceptives. Also add a note on the advantages and disadvantages of hormonal contraception. 9
3. (a) Discuss the primary causes of infertility in females. 6
(b). Discuss any three ART techniques that help infertile couples. 6
4. (a) Discuss the role of feto-placental unit in gestation. 9
(b) Discuss the functions of the cellular components of the human testis. 3
5. (a) Discuss the hormonal regulation of spermatogenesis in males. 3
(b) Differentiate between the mechanism of action between steroid and protein receptor. 9
6. (a) Discuss the biosynthesis of estrogen. 7
(b) Describe the mechanisms involved in prevention of polyspermy. 5
7. Write short notes on **any three** of the following: 3x4=12
 - (a) MER
 - (b) Acrosome formation
 - (c) Fergusson's reflex
 - (d) Epididymal maturation of spermatozoa
 - (e) Diapause