

M.Sc. 3rd Semester Examination 2021

ZET 330 (Reproductive Endocrinology)

Full Marks – 30

Answer any 3 (three) questions

Q1. How does ibuprofen act as pain killer and anticoagulant? Differentiate between different isomers of cyclooxygenase enzyme. Briefly discuss the role of prostaglandins in pregnancy.

3+3+4 = 10

Q2. 'Triorganotins are potent ligands for retinoid nuclear receptors.' Can they act as endocrine disruptor in females? Justify your answer. Comment on transgenerational effects of endocrine disruptors. Discuss importance of diethylstilbestrol (DES) as endocrine disruptor in females.

4+3+3 = 10

Q3. Briefly discuss the role of CAG repeat polymorphism in androgen receptor (AR) gene in male hypogonadism. How do different peptides secreted by testes regulate synthesis and release of FSH from pituitary? How does testosterone help to maintain blood testes barrier. 4+3+3 = 10

Q4. Briefly comment on the genetic control of ovarian determination in human. 'Stability of sex determination in gonochoristic fish is different from that in mammalian system' – discuss.

4+6 = 10

Q5. Discuss the histophysiology of testes in anamniotes. How does absolute photorefractoriness differ from relative photorefractoriness in birds? How extraretinal photoreceptors are involved in the adaptive behavior of body colour change in fish and reptiles? How melatonin regulates kisspeptin fun. 3+2+3+2 = 10

Q6. What is progesterone blockage? Why is oxytocin considered as most important galactokinetic hormone? Describe the role of FSH and epidermal growth factor-like ligands on cumulus cells during ovulation.

2+3+5 = 10