# 7

# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.Sc. DEGREE EXAMINATION - ZOOLOGY

# FOURTH SEMESTER - APRIL 2016

# **ZO 4813 - MOLECULAR ENDOCRINOLOGY AND REPRODUCTION**

Date: 21-04-2016 Time: 09:00-12:00 Dept. No.

# PART A

# Answer **ALL** the questions

 $(10 \times 2 = 20)$ 

Max.: 100 Marks

- 1. Define hormone receptor?
- 2. Mention any two functions of endocrine system.
- 3. How the thyroid is controlled?
- 4. Write a short note on Oogenesis.
- 5. What are transducers?
- 6. Define cryopreservation.
- 7. What are the different advantages of immunocontraceptives?
- 8. Write a short note on streptokinase.
- 9. Enlist the positive role of oxytocin.
- 10. Comment on any two different female reproductive disorder.

### PART B

# Answer any **FOUR** questions

 $(4 \times 10 = 40)$ 

- 11. What is acrosome? Explain the capacitation reaction.
- 12. Give account on different classes of hormone receptors.
- 13. Explain the following (i) Thyroid gland, (ii) Pituitary gland.
- 14. Discuss the hormonal replacement therapy for cancer.
- 15. Explain the role of hormones in Oogenesis.
- 16. Give details on genetic basis of male infertility.

### PART C

# Answer any **TWO** questions

 $(2 \times 20 = 40)$ 

- 17. Discuss the production of hormones, therapy and its application.
- 18. Explain in detail about the following (i) Adrenal medulla, (ii) Adrenal cortex, (iii) Growth hormone, (iv) FSH and LH, (v) Prostaglandins.
- 19. Describe the process of sex determination.
- 20. Explain in detail about structural and molecular events of spermatogenesis with suitable diagram.

\*\*\*\*\*\*