

2008**M.Sc.****2nd Semester Examination****BIO-MEDICAL LAB. SCIENCE & MANAGEMENT****PAPER—V (Unit - 9)***Full Marks : 40**Time : 2 Hours**The figures in the right-hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.**Illustrate the answers wherever necessary.***Module — I****Answer all questions.**

1. Answer any *five* questions of the following : 1×5
- (a) What is necrospemia ?
 - (b) Write the source of acid phosphatase in semen.
 - (c) What is the important hormone for pregnancy maintenance ?
 - (d) What do you mean by LH surge ?
 - (e) Define Spermiogenesis.
 - (f) Write the name of any oestrogen receptor blocker.
 - (g) What is emergency contraceptive ?
 - (h) Write the full name of TIMMP.

(Turn Over)

2. (a) Write the significance of fructose quantification in semen.
(b) Describe the procedure of fructose quantification in semen.
(c) What is the reference value of fructose on semen? 2+5+1

Or

- (a) What is superovulation?
(b) Describe the steps for the induction of superovulation.
(c) Write the process of oocytes collection in connection to ICSI. 2+4+2
3. (a) Describe the procedure of HOS test of sperm.
(b) Write the significance of HOS test.
(c) Write the self-checking technique for the accuracy of sperm unit. 3+2+2

Or

- (a) Describe the hormonal control of ovulation.
(b) Why transitional period of 1st and 2nd trimester of pregnancy is very risk period? 4+3

Module — II

Answer all questions.

4. Answer any *five* of the following : 1×5
- (a) Write the names of any *two* A. I. techniques.
 - (b) Why 'swim-up' technique is followed for sperm collection for ART.
 - (c) What is the importance of WBC count in semen ?
 - (d) Write the full forms of ICSI and IVF.
 - (e) What is immortile cilia syndrome ?
 - (f) What is the significance of 'Neutral-alpha-Glucosidase' test ?
 - (g) Write any *two* causes of male infertility.
 - (h) Why physician do not follow IUI for more than 3 times ?
5. (a) Write the different causes of female infertility.
- (b) Describe the sperm antibody testing using the immunobeads.
- (c) Describe the process of supergrade quality of sperm collection. 3+3+2

Or

- (a) Describe any *one* of the sperm acrosome assessment test.

(b) Write the technique for the assessment of catalase activity of sperm pellet. 4+4

6. (a) Write the principle of acid phosphatase test.

(b) Describe the test for the assessment of acid phosphatase activity of semen.

(c) Why sperms are very sensitive to ROS? 2+4+1

Or

(a) Write the technique of sperm injection in oocyte which is followed in ICSI.

(b) When IVF technique is selected in lieu of IUI?

(c) Why chronic diabetes may lead to male infertility? 3+2+2