2009

M.Sc.

2nd Semester Examination

BIO-MEDICAL LABORATORY 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.

[General Repro. Events & Assisted Reproductive Tech.]

Module-I

1. Answer any *five* of the following : 1×5

(a) Classify sperm on the basis tail abnormality.

(b) What is spermiogenesis ?

(c) Write the full form of MMPs.

(d) What is emergency Contraceptive ?

(e) Write the names of any two hormones used for artificial ovulation.

(f) What is teratospermia ?

(g) Write the full form of CASA.

(h) Write the source of acid phosphatase in semen.

2. (a) What is 95% confidence state of WHO for sperm court ?

(b) Explain this scale with an example.

(c) What are the steps those should be adopted for quality control in this line ? 2+4+2

Or

(a) Write the hormone treatment regimen for superovulation induction in woman.

(b) Explain the biochemical basis of hormone controlled ovulation. 3+5

3. (a) Discuss the bio-chemical model of ovulation.

(b) Classify sperm abnormalities on the basis of morphology. 4+3

Or

(a) Write the fundamental steps of CASA.

(b) Cite the applied values of CASA in andrology. 5+2

Module-II

4. Answer any *five* of the following : 1×5

(a) Write the source of neutral alpha-glucosidase.

(b) Give the names of any two ROS.

(c) Write the full forms of GIFT and ICSI.

(d) Write the name of any one acrosomal test for quality assessment.

(e) Cite the types of A.I.

(f) Why swimming technique is adopted for collection of super grade sperms.

(g) What is 2nd polar body?

(h) What is sperm viability test?

5. (a) Write the principle of neutral alpha glucosidase assessment.

(b) Write the procedure of this assessment from human semen.

(c) Give the importance of this test. 2+4+2

Or

(a) Why sperms are vulnerable to ROS.

(b) What are the sources of ROS in Semen?

(c) Write the names of bio-sensors used for the assessment of oxidative injury of sperm.

(d) Write the principle of catalase assessment of sperms. 2+2+2+2

6. (a) Write the fundamentals steps followed in ICSI.

(b) Write the advantages of ICSI over IVF.

5+2

Or

(a) Define infertility.

(b) Write the causes of male infertility.

(c) What are the major causes of female infertility?

2+3+2

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