

M.Sc. 2nd Semester Examination, 2013

**BIO-MEDICAL LABORATORY SCIENCE
AND MANAGEMENT**

PAPER—BMLSM - 201(Unit - 9)

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

*Candidates are required to give their answers in their
own words as far as practicable*

Illustrate the answers wherever necessary

MODULE – I

1. Answer any *five* of the following : 1 × 5
- (a) What is LH surge ?
 - (b) Write the normal value of sperm count.
 - (c) What is the importance of sperm motility ?
 - (d) What is oogenesis ?

(Turn Over)

- (e) Define spermiogenesis.
 - (f) What do you mean by implantation ?
 - (g) Write the full form of HOS test.
 - (h) What do you mean by gamet bank ?
2. (a) Write the principle of HOS test of sperm.
- (b) State the procedure of HOS test.
- (c) Write the role of thyroxine and insulin on spermatogenesis. 2 + 3 + 3

Or

- (a) Write the importance of cryopreservation of sperm.
 - (b) What do you mean by endometriosis ?
 - (c) State the role of hormones on pregnancy maintenance. 3 + 2 + 3
3. (a) Define ovulation.
- (b) Describe the modern concept of ovulation.

(3)

- (c) Write the normal level of fructose present in semen. 1 + 4 + 2

Or

- (a) Describe the different phases of menstrual cycle.
- (b) Write the procedure of acid phosphatase activity assessment of seminal plasma.
- (c) Write the disorder of implantation. 2 + 3 + 2

MODULE – II

4. Answer any *five* of the following : 1 × 5
- (a) Define sperm viability.
- (b) Write the full form of IVI and ICI.
- (c) Write the full form of ART and GIFT.
- (d) Define infertility.
- (e) What is acrosome ?

- (f) What do you mean by ROS ?
- (g) Write the normal leukocyte count in semen.
- (h) What do you mean by immunobend test.
5. (a) Write the different causes of female infertility.
- (b) Describe the procedure of sperm viability test.
- (c) What are the conditions fulfilled for IUI. $3 + 3 + 2$
- Or*
- (a) Write the principle of acrosome testing by gelatine coated slide.
- (b) State the causes of male infertility.
- (c) Write the advantages of IVF over IUI. $2 + 4 + 2$
6. (a) What are the advantages for adoption of ICSI to challenge infertility.

(b) Write the hormonal treatment regimen for superovulation in ICSI.

(c) State the micro-injection of sperm in the Ooplasm. 2 + 3 + 2

Or

(a) Write the sperm preparation for IUI.

(b) When IUI is not adopted to challenge infertility.

(c) Write the advantages of ICSI. 3 + 2 + 2