M. Sc.

2017

2nd Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER-BLM-201

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.

Answer Q. No. 1 and any three of the following.

- 1. Answer any ten questions of the following: 10×1
 - (a) Write the full forms of IVI and IVF.
 - (b) At what phase of cell cycle, ovulation is noted?
 - (c) What do you mean by sperm viability?

- (d) Define ectopic pregnancy.
- (e) What is the time of LH-surge in menstrual cycle?
- (f) What is the source of fructose in semen
- (g) State the significance of HOS test of sperms.
- (h) Why does uterine remains in quiescent phase throughout pregnancy?
- (i) What do you mean by antisperm antibody?
- (j) Write the names of any two enzymes released from acrosome.
- (k) Write the full forms of GIFT and SUZI.
- (l) What do you mean by decidua basalis and decidua capsularis?
- (m) What do you mean by hormonal contraceptive pill?
- (n) Write the differences between embryogenesis and organogenesis.
- (o) What are the enzymes involved for ovarian follicular rupturation?

- 2. (a) State the principle of sperm viability test using eosin and nigrosin.
 - (b) Describe the protocol of sperm viability testing using eosin and nigrosin.
 - (c) "Sperms become infertile though viability level is excellent"-Justify the statement.

 3+4+3
- 3. (a) What are the conditions require for IVF?
 - (b) Write the procedure of oocyte collection from ovary for ICSI.
 - (c) State in brief about the microinjection of sperm in oocyte. 3+3+4
- 4. (a) Write the different phases of pregnancy.
 - (b) State the hormonal control of pregnancy maintenance.
 - (c) Write the oogenesis in brief. 3+4+3
- 5. (a) Write the time of implantation in respect to ovulation.
 - (b) "Implantation is a joint activity of uterus and embryo." Justify it.

- (c) State the mode of action of hormonal pill for contraception. 2+5+3
- 6. (a) What do you mean by gamet bank?
 - (b) Describe the utility of gamet bank.
 - (c) State the 'Luteal Phase' of menstrual cycle in brief. 2+2+6