

M. Sc.

2018

2nd Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-201

Subject Code—22

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 from the rest.

1. Answer any ten questions : 10×1
- (a) Write the full forms of ZIFT and GIFT.
- (b) What are the hormones responsible for ovulation ?

(Turn Over)

- (c) Which date would be the ovulatory data when the duration of menstrual cycle is of 32 days ?
- (d) Which technique would you follow for infertility management when husband suffering from severe oligospermia ?
- (e) Write the full forms of PESA and FNA.
- (f) Name the hormones responsible for pasturization.
- (g) What do you mean by sperm viability ?
- (h) What is the indicator of fertilization under microscopic observation of oocyte ?
- (i) Write the name of two enzymes present in acrosome involved in fertilisation.
- (j) What are polar bodies ?
- (k) What do you mean by endometriosis ?
- (l) What is the principle of pregnancy test using urine of suspected mother ?
- (m) What do you mean by desidualization ?

- (n) What is cryopreservation of semen ?
- (o) What is ART ?
2. (a) What are the criteria for adoption of ICSI ?
- (b) State the superovulation technique followed for ICSI.
- (c) Write the process of microinjection of sperm in oocyte.
3+4+3
3. (a) Describe the process of collection of supergrade quality sperm for IUI.
- (b) Why is IUI not followed more than three times ?
- (c) What do you mean by ultrasonic guided transfusional oocyte retrieval ?
4+3+3
4. (a) Discuss the mechanism of ovulation in human.
- (b) How is polyspermic fertilization prevented in woman ?
- (c) Why do you perform 'Hos' test ?
4+4+2
5. (a) Write the role of testosterone and thyroxine on spermatogenesis.

- (b) Describe the principle of acid phosphatase activity assessment of semen.
- (c) Write the structure of Graafian follicle. 4+3+3
6. (a) What do you mean by implantation ?
- (b) Write the process of implantation with special reference to MMPs.
- (c) Write the function of corpus luteum. 2+5+3
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