

M.Sc. 2nd Semester Examination, 2023

**BIO-MEDICAL LABORATORY SCIENCE
AND MANAGEMENT**

(Reproductive Technology)

PAPER – BML-201

Full Marks : 50

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

GROUP – A

Answer any four questions : 2 × 4

- 1. Write the full form of IUI and IVF.**
- 2. What do you mean by superovulation ?**

(Turn Over)

3. Define 'Antisperm antibody'.
4. Define 'Oligospermia' and 'teratospermia'.
5. What do you mean by 'sertoli cell only syndrome'?
6. Write the importance of acrosome in fertilization.

GROUP – B

Answer any **four** questions :

4 × 4

7. State the condition for adoption of IUI.
8. Write the cause of 'primary hypo-testicular activity'.
9. State the sperm preparation process for IUI.
10. Describe the hormone treatment protocol and estrogen receptor blocker application for induced ovulation in ART.

11. Discuss the process of collagenase-polymerase chain reaction in ovulation.
12. Write the advantages of IVF over IUI to challenge infertility.

GROUP – C

Answer any two questions : 8 × 2

13. Describe the major steps followed in IVF for the management of ART. 8
14. Describe the naked oocyte preparation in ICSI. State the technique for oocytes collection in ICSI. 4 + 4
15. Describe 'HOS' test with principle and procedure. State the importance of HOS test. (2 + 3) + 3
16. Discuss the acrosome status assessment technique.

(4)

Write the technique of microinjection of sperm
in cytoplasm of oocyte.

4 + 4

[Internal Assessment – 10 Marks]
