

2026

6th Semester Examination (CCFUP : NEP)

BMLT

Paper : MJ 13-T

(Single Core Major)

[Assisted Reproductive Technology and
Embryology]

Full Marks : 40

Time : Two Hours

The figures in the margin indicate full marks.

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

Group - A

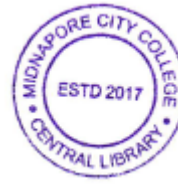
Answer any *five* questions : $2 \times 5 = 10$

1. Define spermatogenesis.
2. Name any two hormones involved in male reproduction.
3. Define ovarian hyperstimulation syndrome.
4. What is Assisted Reproductive Technology (ART)?
5. What is Intracytoplasmic Sperm Injection (ICSI)?
6. Briefly state the core objective of cryopreservation in ART.

P.T.O.

7. State one important quality control measure in an ART laboratory.

8. What is Endometriosis?



Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. Describe the anatomy and functions of the male reproductive system.

10. Explain the stages of spermatogenesis with a suitable diagram.

11. Discuss the causes and types of infertility in males and females.

12. Describe the procedure and indications of Intrauterine Insemination (IUI).

13. Explain the principle and procedure of *In Vitro* Fertilization (IVF).

14. Discuss the importance of quality control and quality assurance in ART laboratories.

Group - C

Answer any *one* question : $10 \times 1 = 10$

15. Describe the anatomy and physiology of the female reproductive system. Explain hormonal regulation of the menstrual cycle. $(2+2)+6$

(3)

16. (i) Discuss the ethical guideline that should be followed in an ART laboratory.
- (ii) Evaluate the critical importance of informed consent and patient autonomy in ART clinic.
- (iii) Analyze the critical ethical issues surrounding genetic selection and designer embryos in reproductive medicine.

3+3+4

