

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0822)

AUGUST 2022

Sub. Code: 1979

M.Ch. – REPRODUCTIVE MEDICINE AND SURGERY

**Paper IV – RECENT ADVANCES IN ASSISTED REPRODUCTIVE
TECHNOLOGY / EMBRYOLOGY, ETHICAL AND LEGAL ISSUES**

Q.P. Code: 181979

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Discuss various female fertility preservation: options and protocols.
2. Pre- implantation genetic testing (PGT): Discuss the evidence in ART treatment.

II. Write notes on: (10 x 7 = 70)

1. Ethics in third party reproduction.
2. Artificial intelligence in reproductive medicine.
3. Cross border reproductive care: pros & cons.
4. “Batch IVF programme” - Practical consideration.
5. Discuss the difference between WHO 2010 & WHO 2021 manual on semen analysis.
6. Role of Doppler studies in IVF treatment.
7. Role of Metabolomics in ART.
8. Kisspeptin use in Reproductive medicine.
9. Use of artificial intelligence in ART procedure.
10. Pros and Cons of New Surrogacy bill.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0124)

JANUARY 2024

Sub. Code: 1979

M.Ch. – REPRODUCTIVE MEDICINE AND SURGERY

**PAPER IV – RECENT ADVANCES IN ASSISTED REPRODUCTIVE
TECHNOLOGY / EMBRYOLOGY, ETHICAL AND LEGAL ISSUES**

Q.P. Code: 181979

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Describe the process of uterine transplant and discuss the ethical issues around the procedure.
2. Describe the surrogacy (regulation) act, 2021 and its implications on contemporary practice.

II. Write notes on: (10 x 7 = 70)

1. Discuss the effect of COVID vaccines on reproductive outcomes.
2. Discuss the strategy of oocyte accumulation for poor responders in IVF.
3. Describe the regulatory requirements for starting level II ART clinic as per ART law 2021.
4. Describe the regulatory requirements for starting ART bank as per ART law, 2021.
5. Discuss the role of stem cell therapy for thin endometrium.
6. Discuss the ethical aspects surrounding embryo disposition.
7. Discuss the fertility preservations options for adolescent boys.
8. Discuss the perinatal outcomes of pregnancies following surrogacy.
9. Discuss the predictive models for IVF outcomes.
10. Describe the automated vitrification method.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0225)

FEBRUARY 2025

Sub. Code: 1979

M.Ch. BRACH XIV – REPRODUCTIVE MEDICINE AND SURGERY

**PAPER IV – RECENT ADVANCES IN ASSISTED REPRODUCTIVE
TECHNOLOGY / EMBRYOLOGY, ETHICAL AND LEGAL ISSUES**

Q.P. Code: 181979

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. What are the fertility preservation options in women diagnosed with breast cancer in different age groups? Discuss the COH protocols for fertility preservation.
2. Discuss about the evidence-based markers in Frozen Embryo transfer treatment cycle.

II. Write notes on:

(10 x 7 = 70)

1. Discuss about cross border Reproductive care – pros and cons.
2. Discuss the role of doppler studies to improve fertility treatment outcome.
3. Discuss ICSI (intracytoplasmic sperm injection) versus IMSI (injection of morphologically selected sperms).
4. Critically analyse Freeze – all cycles in ART (assisted reproductive technology) practice.
5. Discuss the role of IVM (In Vitro Maturation) in current ART practice.
6. Discuss the role of 3-D ultrasound in infertility.
7. Critically evaluate WHO -202 Semen analysis.
8. Write a note on social egg freezing.
9. Discuss the ethical issues with donor oocyte – IVF treatment.
10. Discuss the use of oral GnRH antagonist in severe endometriosis treatment.
