
FELLOWSHIP IN ASSISTED REPRODUCTION

D Y PATIL UNIVERSITY, KOLHAPUR

DEPARTMENT OF OBSTETRICS &
GYNAECOLOGY
D Y PATIL MEDICAL COLLEGE, KOLHAPUR

Title: Fellowship in Assisted Reproduction

1. **Proper name of the certificate course:** Fellowship in Assisted Reproduction
2. **Duration of course:** One Year or 2 semester
3. **Eligibility criteria for admission and Intake capacity:** Post M.S (Obst&Gyn)/
D.N.B(ObGyn). / D.G.O. (Obst&Gyn)

4. CURRICULUM:

Core subject:

1. Anatomy of genital tract
2. Physiology of menstruation
3. Anatomy and physiology of male genital tract
4. Semen analysis
5. Investigations of male infertility
6. Treatment of male factor
7. Ovulation
8. PCOS
9. Obesity
10. Hirsutism
11. Galactorrhoea
12. Primary Amenorrhoea
13. Secondary Amenorrhoea
14. Ovulation Induction
15. History and examination of infertile couple
16. Premature ovarian failure
17. Azoospermia
18. Sexual dysfunction
19. Sperm Banking
20. Sperm function test
21. Oestrogens and progestogens
22. Role of cervix in infertility
23. Thyroid disorders
24. Puberty
25. Menopause
26. Homosexuality
27. Genetics and infertility
28. AMH

Ultrasonography in infertility

1. Basics of ultrasonography
2. Normal pelvic sonography
3. Follicular monitoring
4. Congenital uterine anomalies
5. Ovarian masses
6. Tubal pathology
7. Diagnosis of pregnancy

8. Endometrium
9. Threatened abortion
10. Role of CT scan in infertility
11. Role of MRI in infertility
12. Colour Doppler in infertility
13. PCPNDT law
14. Sonosalpingography
15. Pelvic masses
16. Ectopic pregnancy

ART Procedures

1. USG Guided oocyte retrieval and its complications
2. Ovarian hyperstimulation syndrome
3. Embryo transfer
4. Luteal phase management
5. Intra uterine insemination
6. ART lab setup
7. Cultural media
8. CO2 incubators
9. Sterio microscope
10. Disposables in ART procedures
11. Oocyte grading
12. ICSI procedure
13. Sperm washing procedures
14. Embryo loading procedures
15. Oocyte donation
16. Sarrogacy
17. Selection of ART procedure
18. Ovarian stimulation protocols
19. TESA
20. Genetic counseling
21. Microsurgeries
22. AID
23. Adoption
24. Legal aspects of ART
25. Psychiatric problems in infertility

Basic endoscopy

1. Instruments in gyn.endoscopy
2. Steps in endoscopy
3. Laparoscopic myomectomy
4. Ovarian cystectomy
5. Role of endoscopy in endometriosis
6. Ectopic pregnancy management
7. Tubal factor

8. Congenital uterine anomalies and endoscopy
9. Diagnostic laparoscopy
10. Complications of endoscopy
11. Hysteroscopy-instruments
12. Diagnostic hysteroscopy
13. Septum resection
14. Tubal cannulation
15. Hysteroscopic myomectomy
16. Endometrium
17. Complications of hysteroscopy
18. Office hysteroscopy
19. Adhesiolysis
20. Metroplasty

ELECTIVE SUBJECT

1. High risk pregnancy

1. Pregnancy with PIH- Pathophysiology
2. DIC
3. HELLP syndrome
4. Early diagnosis of PIH
5. Decision making of PIH
6. Role of USG in PIH
7. Eclampsia
8. Drugs in PIH
9. Laboratory investigations in PIH
10. Screening tests in early pregnancy
11. Gestational diabetes-pathophysiology
12. Management of GDM
13. Anaemia in pregnancy
14. Prematurity
15. Preterm labour
16. Abortion
17. Heart disease in pregnancy
18. BOH
19. Recurrent pregnancy loss
20. Multiple pregnancy
21. Fetal reduction
22. Thyroid and pregnancy
23. Jaundice in pregnancy
24. Renal diseases in pregnancy
25. Epilepsy in pregnancy
26. Acute renal failure
27. IUGR
28. APH
29. Placenta previa
30. Obesity
31. Elderly primi

2. Embryology:

TEACHING SCHEME AND PERIOD ALLOTTED TO EACH TOPIC:

Didactic lecture—These will be held once a week and delivered by Faculty member or by a specialist in particular subject or Allied discipline.

Seminars and Journal Club-These will be held twice a month. Candidates are required to present one seminar and one journal club per month Case discussions Video presentations: These will be held weekly. Each student will present minimum 10 cases in a year Ward round and posting in Allied discipline: Daily rounds will be taken by Fellow in consultation with the Department of Obstetrics & Gynecology

Log book- Maintain a log book of the operative procedures observed / performed/ assisted

Lab;- Will assist and perform Semen preparation for IUI /IVF

TEXT BOOKS:-

Textbook of Assisted Reproduction Techniques: Gardner, Weismann, Howles Shoham

Practical Manual of In Vitro fertilization; ZSolt Peter Nagy

Clinical Infertility and In vitro fertilization: Botros Risk, Hassan Sallam

Protocols in ART and Embryology: Pankaj Talwar

Practical Manual of Infertility Management ; Peter Brinsden et al

Manual of Ovulation Induction; Jaypee publications

Infertility and Ultrasound : Dr. Nagori

Infertility and Gynecological Endoscopy; Jaypee publications

JOURNALS:

Fertility and Sterility: Official Journal of the American Society for Reproductive Medicine

Human Reproduction: Official Journal of European Society for Human Reproduction and Embryology

Journal of In vitro fertilization and Embryo Transfer

Journal of Assisted Reproduction and Genetics

E-Journal: IVF Net

Reproduction Biomed online

Advertisement

- On the institutional website and the intranet
- On the notice boards of the college

11. Interview

By a panel of experts of three - including the head of the institute and 2 internal experts.

12. Selection of candidate: A total number of candidates per year will be as per University regulations. Selection will be based on:

- Performance at interview 30%
- University level academic merits (20%)
- Publications if any (20%)
- Recommendations from PG teacher (20%)

13. Pattern of Exam

- Examination will be conducted at end of semester of training at the college.
- Both theory and practical Examinations will be concluded within 15 days of the end of the semester.
- University will appoint an examination coordination committee (ECC) consisting of three teachers running Fellowship/certificate courses.
- One internal examiner and one external examiner will be appointed by the ECC to conduct the examinations.

SCHEME OF EXAMINATION:

Examination to be conducted at end of each semester within 15 days of end of semester comprising of theory paper and practical examination.

A) Theory Paper of 100 marks

10 Objective questions of 10 marks each.

B) Practical Examination of 200 marks

Long case-----100 marks

Short case-----50 marks

Table viva / spots-----50 marks (Instruments, Reports for comments,

Procedures,Ultrasonography findings, Ward rounds)

C) Assessment of Laparo-Hysteroscopic skills (100 marks)

On pelvi-trainer and Hystero-trainer with viva-voce examination.

Announcement of Results:

Results will be announced within two weeks of the completion of examinations on the Notice board.

This result will be in the form of fellowship granted / denied. Marks will not be displayed.

Repeat examination will be held after a period of not less than 6 months.

Award of Fellowship:

Certificates will be awarded by the D Y Patil University after they receive the results from the college. The University (with signature of the Registrar) will award the certificate.

Note- The decision of the Examination Co-ordination Committee will be binding on all matters pertaining to the examinations and on all stakeholders.

INFRASTRUCTURE:-

- A. Daily O.P.D
- B. Indoor patients wards
- C. Recovery wards
- D. Two bedded Intensive Patient Management ward
- E. Operation theatres --one for oocyte retrieval and one for Gynec Endoscopy with facility to perform laparotomy ,if necessary
- F. IVF laboratory
- G. IUI room
- H. Andrology section
- I. Ultrasonography room
- J. Counseling area
- K. Medical records section
- L. Store room with facility of refrigeration for maintaining Inj Gonadotrophins and Culture media
- M. Round the clock lab support with blood collection facility
- N. Semen collection room
- O. Cryo-preservation room

Title Of Program: Fellowship course in Assisted Reproduction

Duration of Program: One year

Number of Semesters: 2

Number of Papers: 4

Core Papers: (60% weightage of marks)

1. Gyn. Endocrinology and Ultrasonography in infertility
2. Gynecological Endoscopy and Assisted reproductive Technology.

Elective Papers: (25% weightage of marks)

Discipline-related: (Allied specialty, Diagnostic modalities, Sub-specialty)

1. Embryology
2. High Risk pregnancy

Foundation Papers: (15% weightage of marks – only compulsory)

- Compulsory:
1. Research Methodology
 2. Medical Ethics

- Value-based (any1):
1. ATCOM
 2. Computer skill
 3. Marathi language

Semester wise Paper distribution (Core, Elective & foundations as may be applicable):

1. Semester 1:

Core: Endocrinology and Ultrasonography in infertility

Foundation (compulsory 1): Research Methodology/Medical Ethics

2. Semester 2:

Core: Gynecological Endoscopy and Assisted reproductive Technology.

Elective: Embryology/ High risk pregnancy.

1 Semester = 450 Hours / 90 Days / minimum 15-18 weeks

	SEMESTER 1			SEMESTER 2		
	Hours	Per Week	Credits	Hours	Per Week	Credits
Core	45	2	3	45	2	3
Elective-Discipline	-	-	-	30	2	2
Elective-Generic	-	-	-	-	-	-
Foundation – Compulsory	45	2	3	-	-	-
Foundation – Value Based	10	1	-	10	1	-
Practicals	350	16	11	365	17	12

Assessment for credit courses (Absolute grading method):

Marks	93%	84%	77%	70%	63%	56%	49%
Letter grade	A+	A	B+	B	C+	C	F
Grade point	10	09	08	07	06	05	00