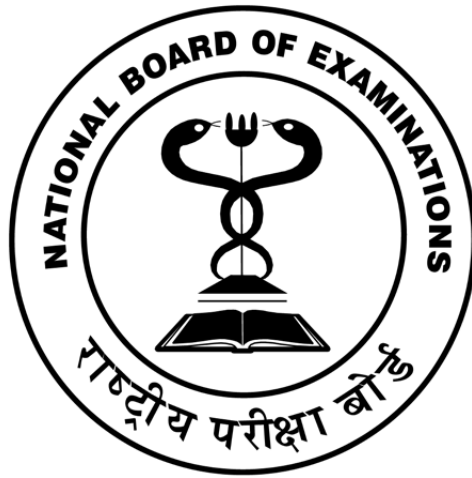


Guidelines
for
Competency Based Training Programme
in
DNB- OBSTETRICS AND GYNECOLOGY



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PROGRAMME GOAL

A postgraduate student is required to acquire knowledge of Anatomy, Physiology, Pharmacology and Patho-physiology related to reproductive system and is competent to manage all normal and pathological states and function as a productive member of team engaged in health care, research and education

PROGRAMME OBJECTIVES

A. OBSTETRICS

- Basic sciences as applicable to Obstetrics
- Provide quality maternal care in the diagnosis and management of Antenatal, Intra-natal & Post natal period of normal and abnormal pregnancy including emergencies, and management of neonatal problems
- Development of Adequate Surgical skills
- Recent advances

B. GYNECOLOGY

- Basic sciences as applicable to Gynecology
- Should be able to diagnose and manage all types of gynecological problems
- Development of Adequate Surgical skills
- Recent advances

C. FAMILY WELFARE

- Provide counseling and delivery of fertility regulation methods
- Organize and implement National Health Programs
- Vital Statistics

D. OTHERS

- Medico legal aspects in Obstetrics & Gynecology
- Biomedical Waste Management
- Biostatistics and research methodology

- Facilitate learning and teaching of medical / nursing students / paramedical health workers
- Use of newer information technologies (computer & internet)
- Develop communication skills and compassionate attitude towards the patients and their formulas

ELIGIBILITY CRITERIA FOR ADMISSIONS TO THE PROGRAMME

(A) DNB Obstetrics and Gynecology Course:

1. Any medical graduate with **MBBS** qualification, who has qualified the **Entrance Examination** conducted by NBE and fulfill the eligibility criteria for admission to DNB **Broad Specialty** courses at various NBE accredited Medical Colleges/ institutions/Hospitals in India is eligible to participate in the Centralized counseling for allocation of DNB Obstetrics and Gynecology seats purely on merit cum choice basis.
2. Admission to 3 years post MBBS DNB Obstetrics and Gynecology course is only through **Entrance Examination** conducted by NBE and Centralized Merit Based Counseling conducted by National Board of Examination as per prescribed guidelines.

(B) DNB (Post diploma) Obstetrics and Gynecology Course:

1. Any medical graduate with MBBS qualification who has successfully completed **DGO** (and fulfill the eligibility criteria for admission to DNB (Post Diploma) Broad Specialty courses at various NBE accredited Medical Colleges/ institutions/Hospitals in India is eligible to participate in the Centralized counseling for allocation of DNB (Post Diploma) **Obstetrics and Gynecology** seats purely on merit cum choice basis.
2. Admission to 2 years post diploma DNB **Obstetrics and Gynecology** course is only through PDCET Centralized Merit Based Counseling conducted by National Board of Examination as per prescribed guidelines.

Duration of Course:

For Primary candidates : 3 years
For Secondary Candidates : 2 years

Every candidate admitted to the training programme shall pursue a regular course of study (on whole time basis) in the concerned recognized institution under the guidance of recognized post graduate teacher for assigned period of the course.

TEACHING AND TRAINING ACTIVITIES

The fundamental components of the teaching programme should include:

1. Case presentations & discussion- once a week
2. Seminar – Once a week
3. Journal club- Once a week
4. Grand round presentation (by rotation departments and subspecialties)- once a week
5. Faculty lecture teaching- once a month
6. Clinical Audit-Once a Month
7. A poster and have one oral presentation at least once during their training period in a recognized conference.

The rounds should include bedside sessions, file rounds & documentation of case history and examination, progress notes, round discussions, investigations and management plan) interesting and difficult case unit discussions.

The training program would focus on knowledge, skills and attitudes (behavior), all essential components of education. It is being divided into theoretical, clinical and practical in all aspects of the delivery of the rehabilitative care, including methodology of research and teaching.

Theoretical: The theoretical knowledge would be imparted to the candidates through discussions, journal clubs, symposia and seminars. The students are exposed to recent advances through discussions in journal clubs. These are considered necessary in view of an inadequate exposure to the subject in the undergraduate curriculum.

Symposia: Trainees would be required to present a minimum of 20 topics based on the curriculum in a period of three years to the combined class of teachers and students. A free discussion would be encouraged in these symposia. The topics of the symposia would be given to the trainees with the dates for presentation.

Clinical: The trainee would be attached to a faculty member to be able to pick up methods of history taking, examination, prescription writing and management in rehabilitation practice.

Bedside: The trainee would work up cases, learn management of cases by discussion with faculty of the department.

Journal Clubs: This would be a weekly academic exercise. A list of suggested Journals is given towards the end of this document. The candidate would summarize and discuss the scientific article critically. A faculty member will suggest the article and moderate the discussion, with participation by other faculty members and resident doctors. The contributions made by the article in furtherance of the scientific knowledge and limitations, if any, will be highlighted.

Research: The student would carry out the research project and write a thesis/ dissertation in accordance with NBE guidelines. He/ she would also be given exposure to partake in the research projects going on in the departments to learn their planning, methodology and execution so as to learn various aspects of research.

SYLLABUS

Basic Sciences

- Normal & abnormal development, structure and function of female urogenital system and female breast
- Applied Anatomy of female genito-urinary system
- Physiology of spermatogenesis, Gametogenesis, fertilisation, implantation & early development of embryo

- Endocrinology and Physiology during puberty, adolescence, menstruation, ovulation, fertilization, climacteric & menopause
- Development, structure & function of placenta, umbilical cord & amniotic fluid (normal and abnormal)
- Anatomical, biochemical, endocrine & physiological changes in female genital tract during pregnancy
- Anatomy of fetus, fetal growth & development, fetal physiology & fetal circulation
- Physiological changes during pregnancy, labour and Puerperium
- Pharmacology of drugs used during pregnancy, labour, post partum period in reference to their absorption, distribution, excretion, (hepatic) metabolism, transfer across the placenta, effect of the drugs (used) on labour, on fetus, their excretion through breast milk and gynecology
- Role of hormones in Obstetrics & Gynaecology
- Markers in Obstetrics & Gynaecology
- Normal and abnormal microbiology of genital tract . Bacterial, viral & parasitic infections responsible for maternal, fetal and gynaecological disorders.
- Humoral and cellular immunology in Obstetrics & Gynaecology
- Lactation
- Basic Genetics as applicable in the specialty

Clinical Obstetrics

- Identification and management of complications of pregnancy & abortions, ectopic pregnancy, gestational trophoblastic disease, hyperemesis gravidarum, multiple pregnancy, antepartum hemorrhage, pregnancy induced hypertension, preclampsia, eclampsia, other associated hypertensive disorders, anemia, Rh incompatibility, diabetes, heart disease, renal & hepatic diseases, preterm pregnancy and post term pregnancy, intrauterine fetal growth retardation,hydramnios, oligoamnios, premature rupture of membranes, recurrent pregnancy loss.
- Neurological, hematological, dermatological diseases, immunological disorders and other medical & surgical disorders/ problems associated with pregnancy
- Diagnosis of contracted pelvis, Cephalo-pelvic disproportion and their management.
- Evaluation of fetal & maternal health in complicated pregnancy by making use of diagnostic modalities including modern ones (USG, Doppler, Electronic monitors) and plan for safe delivery for mother and fetus. Identifying fetus at risk & its management.
- Infections in pregnancy (Bacterial, viral, fungal, protozoal) -Malaria, Toxoplasmosis, Rubella, Cytomegalovirus Herpes, HIV, Hepatic viral

- infections (B,C etc.), Sexually transmitted infections (STDs), Mother to fetus transmission of infections,
- Identification & management of fetal malpositions and malpresentations
 - Management of pregnancies complicated by medical, surgical (with other specialities as required) & gynaecological diseases. Anemia, hematological disorders, Respiratory, Heart, Renal, Liver, skin diseases, Gastro Intestinal, Hypertensive, Autoimmune, Endocrine disorders, Associated Surgical Problems. Acute Abdomen (surgical emergencies & appendicitis & gastrointestinal emergencies). Other associated surgical problems. Gynaecological disorders associated with pregnancy- congenital genital tract developmental anomalies, gynaepathologies- fibroid uterus, Carcinoma Cervix, genital prolapse etc. Hematological problems in obstetrics including coagulation disorders. Use of blood and blood components/ products
 - Obstetric Analgesia and anesthesia
 - HIV infections in pregnancy, its effects and management and PPTCT Program
 - Imaging techniques in Obstetrics
 - Prenatal screening, diagnosis, and therapy of developmental anomalies
 - Pre pregnancy counseling

Antenatal Care

- Prenatal care of normal pregnancy including examination, nutrition, immunization & follow up counseling.

Intrapartum Care

- Normal labour & mechanism & management.
- Partographic monitoring of progress of labour, recognition of abnormal labour and its appropriate management.
- Induction and augmentation of labour
- Maternal & fetal monitoring in normal & abnormal labour and its appropriate management
- Electronic foetal monitoring
- Identification and management of intrapartum complications, Cord presentation, cord prolapse, abruptio placentae, and complications of 3rd stage of labour- retained placenta, inversion of uterus, rupture of uterus, post partum hemorrhage. Management of primary & secondary post partum hemorrhage, Post-partum collapse, amniotic fluid embolism
- Identification & management of genital tract trauma- perineal tear, episiotomy complications
- Management of critically ill women

Postpartum

- Identification and management of genital tract trauma – perineal tear, cervical / vaginal tear, episiotomy complications, rupture uterus.
- Management of critically ill woman.
- Postpartum shock, sepsis and psychosis.
- Postpartum contraception.
- Breast feeding practice; counseling and importance of breast-feeding.
- Problems in breast-feeding and their management, baby friendly practices
- Problems of newborn – at birth (resuscitation), management of early neonatal problems and Immunization at birth
- Normal and abnormal puerperium – sepsis, thrombophlebitis, mastitis, Breast abscess, psychosis, and deep vein thrombosis
- Hematological problems in obstetrics including coagulation disorders. Use of blood and blood components / products.

Operative Obstetrics

Resident must have performed reasonable number of routine procedures and assisted/ observed uncommon procedures.

- Surgical management of Abortions
- Conduct of normal delivery
- Episiotomy, Management of Genital tract injuries
- Vaginal instrumental delivery- Vacuum and Forceps
- Caesarean section
- Obstetric. Hysterectomy
- Surgical procedures for Management of PPH
- Manipulations (External cephalic and internal podalic version, manual removal of placenta etc.)
- Destructive operations
- Cervical Cerclage

Clinical Gynaecology

- Epidemiology and etiopathogenesis of gynaecological disorders in women of all age group
- Diagnostic modalities and management of common benign and malignant gynaecological diseases (diseases of the genital tract)
- Rational approach in diagnosis and management of endocrine, abnormalities such as: menstrual abnormalities, amenorrhea (primary/ secondary), abnormal uterine bleeding, Polycystic ovarian disease,

- hyperprolactinemia (galactorrhea), hyperandrogenism, thyroid-pituitary-adrenal disorders
- Fibroid uterus
 - Endometriosis & adenomyosis
 - Genital prolapse (uterine & vaginal)
 - Cervical erosion, cervicitis, cervical polyps, cervical neoplasia.
 - Benign, Premalignant and Malignant lesion of Vulva, vagina, cervix, uterus tubes and ovaries
 - Gestretional Trophoblastic diseases
 - Diagnosis and surgical management of clinical conditions related to congenital malformations of genital tract including Reconstructive surgery in gynaecology
 - Intersex, ambiguous sex and chromosomal abnormalities.
 - Reproductive endocrinology- Evaluation of Primary/ Secondary Amenorrhea, management of hyperprolactinemia, Hirsutism, Chronic an-ovulation, Polycystic Ovarian Disease, thyroid and other endocrine dysfunctions.
 - Urological problems in gynaecology œ diagnosis and management of - Urinary tract infection, Urogenital fistulae, Incontinence, Other Urological problems
 - Menopause : management (Hormone replacement therapy) and prevention of its complications
 - Endoscopy (Laparoscopy Hysteroscopy)
 - Diagnostic & simple therapeutic procedures (PG students must be trained to do these procedures)
 - Principles of radiotherapy and chemotherapy in gynaecological malignancies, Choice, schedule of administration & complications of such therapies
 - Preventive Oncology
 - Recognize importance of good health of adolescent and postmenopausal women.
 - Identification and management of health problems of postmenopausal women.
 - Understanding and planning and intervention program of social, educational and health needs of adolescent girls and menopausal women
 - Infertility workup evaluation and management of infertile couple
 - Basic knowledge of Assisted Reproductive Techniques (ART)
 - Reproductive Tract Infection including HIV infection in women of reproductive age group its Diagnosis, management and Prevention
 - Imaging techniques in Gynecology
 - Recent Advances

Operative Gynaecology

- Pre and post operative care for Gynecological cases
- Knowledge of all minor and major Surgical Procedure as mentioned on further sections
- Recent advances in Operative gynecology

Family Welfare & Demography

- Definition of demography and its importance in Obstetrics and Gynaecology
- Various methods of male and female contraception
- Knowledge of contraceptive techniques (including recent developments)
- Provide adequate services to service seekers of contraception including follow up.
- Medical termination of pregnancy: MTP act, its implementation, providing safe and adequate services.
- Population dynamics
- Statistics regarding maternal mortality, perinatal mortality/ morbidity, birth rate, fertility rate.
- Organizational and operational aspects of National health policies & programs in relation to population and family welfare including Reproductive & Child Health
- Medical termination of pregnancy and safe abortions-selection of cases, technique & management of complications
- Maternal Child Health MCH programs, Social Obstetrics & Vital statistics
- PCPNDT Act

Diagnostic Procedures

Obstetrics

- Ultrasound and Doppler
- Fetal surveillance methods – Electronic fetal monitoring and its interpretation
- CVS Amniocentesis

Gynecology

- Cervical PAP Smear – VIA / VILI (visual inspection with acetic acid / visual inspection with Lugol's iodine)
- Colposcopy
- Endometrial Sampling

- Cervical Biopsy
 - Endoscopy – Laparo & Hysteroscopy.
 - Sonography in infertility: Follicular study and Endometrial study
 - Amniocentesis
1. Interpretation of x-rays – Twins, common fetal malformations/ mal-Presentations, abnormal pelvis (pelvimetry), Hysterosalpingigraphy
 2. Sonographic pictures at various stages of pregnancy – normal and abnormal pregnancies, Fetal biophysical profile & doppler study, common gynaecological pathologies.

Medicolegal aspects

- Knowledge and correct application of various acts and laws while practicing obstetrics and gynaecology, particularly MTP act and sterilization.
- Knowledge of importance of proper recording of facts about history, examination findings, investigation reports and treatment administered in all patients.
- Knowledge of steps recommended for examination and management of case of sexual assault
- Knowledge of steps to be taken in the event of death of a patient or a stillbirth

Biomedical Waste Management, Environment and Health

- Concept of safe disposal of human body fluids and other materials
- Universal precautions to be taken in examining and carrying surgical procedures for the prevention of HIV and other diseases.
- Effect of environment of pregnancy outcome.

PRACTICAL

Student should know basic management of patient in the operation theatre including anesthetic procedure, preoperative and post operative care and related instruments and equipments used in the Operation Theatre and the safety issues regarding the use of equipments

Obstetrics

- Surgical procedures for management of PPH
- Venepuncture

- Amniotomy
- Conduct of normal Vaginal delivery
- Perineal infiltration & Pudendal block
- Episiotomy
- Ventouse delivery
- Forceps delivery
- Management of Genital tract injuries
- Exploration of Cervix
- Lower Segment Caesarean Section
- Manual Removal of Placenta
- Breech vaginal delivery
- External Cephalic Version
- Delivery of twins
- Management of shock
- Management of Postpartum hemorrhage
- Cervical Cerclage
- Amnio infusion
- Instillation of extra amniotic & intra amniotic drugs
- Non stress Test
- Suction Evacuation, MVA
- Dilatation & Evacuation
- Repair of complete perineal tear
- Repair of cervical tear
- Caesarean Hysterectomy Internal iliac ligation
- Uterine & Ovarian Artery ligation
- Destructive operations
- Reposition of inversion uterus
- Amniocentesis
- Balloon Tamponade
- Maternal Pelvis and fetal skull practical demonstration
- Knowledge of Instruments and Equipments

Gynaecology

- PAP smear
- Wet smear examination
- Post Coital Test
- Endometrial Biopsy Endometrial Aspiration
- Dilatation and Curettage/Fractional Curettege / Polypectomy
- Cervical Biopsy
- Cryo / Electrocautery of Cervix
- Hystero Salpingography
- Diagnostic Laparoscopy & Hysteroscopy
- Opening & closing of abdomen

- Operations for utero vaginal prolapse
- Operations for Ovarian tumors
- Operations for Ectopic pregnancy
- Vaginal hysterectomy
- Abdominal Hysterectomy
- Myomectomy
- Colposcopy
- Loop Electro Surgical Excision Procedure
- Tuboplasties
- Paracentesis
- Culdocentesis
- Endoscopic surgery (Operative Laparoscopy & Hysteroscopy)
- Repair of genital fistulae
- Operations for Urinary incontinence
- Radical operations for gynaecological malignancies
- Vaginoplasty
- Intrauterine insemination
- Basic ultrasound / TVS
- Vulval Biopsy
- Incision & drainage

Family Planning

- Counseling
- Intra Uterine Contraception Device Insertion / removal
- Female sterilization - Post Partum & Interval, Open & Laparoscopic
- MTP- First and second trimester Both surgical and Medical methods
- Male Sterilization

Teaching Program

General Principles

- Acquisition of practical competencies being the keystone of postgraduate medical education, postgraduate training should be skills oriented.
- Learning in postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are meant to supplement this core effort.

Teaching Sessions

- Clinical case discussions:
 1. Bed side
 2. Teaching rounds

- Seminars / Journal Club
- Statistical meetings: Weekly / Monthly
- Mortality meetings
- Interdepartmental Meetings: Pediatrics, Radiology
- Others – Guest Lectures / Vertical Seminars / Central Stat Meets

Teaching Schedule

The Suggested departmental schedule is as follows

- | | |
|--|-------------------|
| 1. Seminar / Symposium | Once a week |
| 2. Journal Club | Once a week |
| 3. PG Case discussion / Bed Side teaching | Once a week |
| 4. Intradepartmental Statistical Meet | Once a month |
| 5. Interdepartmental meet which includes Meet with other specialties viz. Medicine, Pathology, Microbiology, Gastroenterology, Anesthesia. | Twice a month |
| 6. Perinatology Meet with Pediatric department discussing any neonatal death in inborn babies and other topics of common interest | Once a month |
| 7. Thesis meet to discuss thesis being done by the residents | Once a week |
| 8. Grand round of the wards | Twice a month |
| 9. Interdepartmental Meet with the Radiology department. | Once a month |
| 10. Central session held in hospital auditorium | Guest Once a week |
| 11. Lectures, Student Seminars, Grand Round, Sessions on basic Sciences | |
| 12. Biostatistics, Research Methodology, Teaching Methodology, Health Economics | |
| 13. Medical Ethics & Legal issues | |

Postings

- Emphasis should be self-directed learning, group discussions, case presentations & practical hands on learning.
- Student should be trained about proper history taking, clinical examination, advising relevant investigations their Interpretations and instituting medical surgical management by posting the candidates in OPD, specialty clinics, wards, operation theatres, labour room, family

planning clinics & other departments like neonatology, radiology, and anesthesia

- The candidates must be trained to manage all emergency situations seen frequently
 1. Gynecology Ward
 2. Labour-room
 3. Emergency
 4. Family Planning
 5. Gynaecology Operation Theatre

Practical and Clinical Training

Emphasis should be self-directed learning, group discussions, case presentations and practical hands on learning. Student should be trained about proper history taking, clinical examination, advising/ ordering relevant investigations, their interpretation and instituting medical / surgical management, by posting the candidates in OPD, specialty clinics, wards, operation theaters, labor room, family planning clinics and other departments like neonatology, radiology, radiotherapy. The candidates must be trained to manage all emergency situations seen frequently.

The student should attend to the duties (routine and emergency), Out patient department, inpatients in the wards, Operation theater, labor rooms, write clinical notes regularly and maintain records.

The posting of DNB candidates in allied subjects should be done in fourth semester for total 4 months as follows:

- Neonatology - 1 weeks
- Anesthesia - 1 weeks
- Surgery - 2 weeks (optional)
- Oncology – 2 weeks
- Skin and VD - 1 weeks
- Radiology - 1 weeks

Details of training in the subject

- Attend to routine and emergency duties
- OPD
- Indoor / wards
- Operation Theater
- Labor room

- Family welfare department

OPERATIONS MUST BE DONE / OBSERVED

Obstetrics

- Conduct normal deliveries
- Episiotomy and its repair
- Application of forceps and ventouse (10)
- Assisted breech delivery
- Cesarean section delivery (10 must be done)
- Manual removal of placenta
- Amnioinfusion, Amniocentesis (therapeutic)
- Management of genital tract obstetrical injuries
- Post partum sterilization / minilap tubal ligation (20 must be done)
- Medical termination of pregnancy – various methods (20 must be done)
- Venesection
- Culdocentesis

Gynaecology

- Endometrial / cervical biopsy
- Dilatation and curettage
- Evacuation
- Culdocentesis, colpotomy
- Opening and closing of abdomen (10 must be done)
- Operations for utero-vaginal prolapse
- Ovarian cyst operation
- Operation for ectopic pregnancy (2)
- Vaginal and abdominal hysterectomy (5 must be done)
- Basic Laparoscopic skills
- Laparoscopic sterilization

Operations must be OBSERVED AND/OR ASSISTED

- External Cephalic Version
- Internal podalic version
- Caesarean Hysterectomy
- Internal iliac artery ligation
- Destructive obstetric operations
- Vaginal reconstructive surgery
- Tubal microsurgery

- Radical operations for gynaecologic malignancies
- Repair of genital fistulae
- Operations for urinary incontinence
- Myomectomy
- Diagnostic & Operative Laparoscopic surgery
- LEEP, Cryotherapy, Electrocautery
- IUI

Biostatistics, Research Methodology and Clinical Epidemiology

Ethics

Medico legal aspects relevant to the discipline

Health Policy issues as may be applicable to the discipline

Competencies

DETAILS OF THE SKILLS TO BE ACQUIRED DURING THE TRAINING PERIOD

S No.	Name of Procedure	Number of Procedure		
		As Observer	As First Assistant	Independently under supervision
	OBSTETRICS			
1.	Venepuncture			
2.	Amniotomy	10 (1 st)		5(1 st), 15(2 nd), 20 (3 rd)
3.	Conduct of normal vaginal delivery	5 (1 st)	10(1 st)	15/20/25
4.	Perineal Infiltration and Pudental block	5 (1 st)	10(1 st)	15/20/25
5.	Episiotomy	5(1 st)	10(1 st)	10/15/20
6.	Ventouse delivery	5(1 st)	5(2 nd)	5(IIIrd)
7.	Forceps delivery	5(1 st)	5(2 nd)	2(IIIrd)
8.	Mnagement of Genital tract injuries	2	2	
9.	Exploration of Crevix	5(1 st)	5(2 nd)	5(IIIrd)
10.	Lower segment Caesarian Section	10(1 st)	10(2 nd), 20(3 rd)	10 (IIIrd)
11.	Manual Removal of Placenta	3		

12.	Breech vaginal delivery	3		
13.	External Cephalic Version	3		
14.	Delivery of twins	3		
15.	Management of Shock	5		
16.	Management of Postpartal Hemorrhage	5	5	
17.	Cervical circlage	3		
	Amino infusion			
	FAMILY PLANNING			
18.	Intra Uterine Contraception Device InseReproductive Tract Infectionson/ removal	5	5	5/10/10
19.	Female Sterilization Post partum and Interval	5	5	2/5/5
20	Suction and Evacuation	5	5	5
	GYNAECOLOGY			
21	PAP's Smear	5		10/20/30
22	Wet Smear examination	5		10/10/10
23	Post Coital Test	5		5/5/5
24	Endometrial Biopsy	5		10/10/10
25	Endometrial aspiration	5		10/10/10
26	Dilation and Curretage/ Fractional Curretage	5		10/10/10
27	Cervical Biopsy	5		5/5/5
28	Cryo/ electrocutery of cervix	5		2/2/2
29	Hystero salpingography	5		10/10/10
30	Diagnostic Laparoscopy	5	5	2(3 rd Year)
31	Opening and closing of abdomen	5	5	-/10/10
32	Operation of uterovaginal prolapse	2	2	-/-/2
33	Operations of Ovarian tumors	5	5	-/-/2
34	Operation for ectopic pregnancy	5	5	-/-/2
35	Vaginal hysterectomy	5	5	-/-/2
36	Abdominal hysterectomy	5	5	-/-/2
37	Myomectomy	2	2	
38	Repair of complete perineal tear			
39	Repair of cervical tear			
40	Caesarean hysterectomy			
41	Internal iliac Ligation			
42	Uterine &Ovarian Artery ligation			
43	Destructive operations			
44	Reposition of inversion uterus			
45	Amino centesis			
46	Venesection			
47	Colposcopy			
48	Loop Electro Surgical Excesion Procedure			
49	Tuboplasties			
50	Paracentesis			
51	Culdosentesis			

52	Endoscopic surgery			
53	Repair of genital fistulae			
54	Operations for urinary continence			
55	Radical operations for gynaecological malignancies			
56	Vaginoplasty			

THESIS PROTOCOL & THESIS

The candidates are required to submit a thesis at the end of three years of training as per the rules and regulations of NBE.

Guidelines for Submission of Thesis Protocol & Thesis by candidates

Research shall form an integral part of the education programme of all candidates registered for DNB degrees of NBE. The Basic aim of requiring the candidates to write a thesis protocol & thesis/dissertation is to familiarize him/her with research methodology. The members of the faculty guiding the thesis/dissertation work for the candidate shall ensure that the subject matter selected for the thesis/dissertation is **feasible, economical and original**.

Guidelines for Thesis Protocol

The protocol for a research proposal (including thesis) is a study plan, designed to describe the background, research question, aim and objectives, and detailed methodology of the study. In other words, the protocol is the 'operating manual' to refer to while conducting a particular study.

The candidate should refer to the NBE Guidelines for preparation and submission of Thesis Protocol before the writing phase commences. The minimum writing requirements are that the language should be clear, concise, precise and consistent without excessive adjectives or adverbs and long sentences. There should not be any redundancy in the presentation.

The development or preparation of the Thesis Protocol by the candidate will help her/him in understanding the ongoing activities in the proposed area of research. Further it helps in creating practical exposure to research and hence it bridges the connectivity between clinical practice and biomedical research. Such research exposure will be helpful in improving problem solving capacity, getting updated with ongoing research and implementing these findings in clinical practice.

Research Ethics: Ethical conduct during the conduct and publication of research is an essential requirement for all candidates and guides, with the primary responsibility of ensuring such conduct being on the thesis guide. Issues like Plagiarism, not maintaining the confidentiality of data, or any other distortion of the research process will be viewed seriously. The readers may refer to standard documents for the purpose.

The NBE reserves the right to check the submitted protocol for plagiarism, and will reject those having substantial duplication with published literature.

PROTOCOL REQUIREMENTS

1. All of the following will have to be entered in the online template. The thesis protocol should be restricted to the following word limits.
 - Title : 120 characters (with spacing) page
 - Synopsis [structured] : 250-300
 - Introduction : 300-500
 - Review of literature : 800-1000
 - Aim and Objectives : Up to 200
 - Material and Methods : 1200-1600
 - 10-25 References [ICMJE style]
2. It is mandatory to have ethics committee approval before initiation of the research work. The researcher should submit an appropriate application to the ethics committee in the prescribed format of the ethics committee concerned.

Guidelines for Thesis

1. The proposed study must be approved by the institutional ethics committee and the protocol of thesis should have been approved by NBE.
2. The thesis should be restricted to the size of 80 pages (maximum). This includes the text, figures, references, annexures, and certificates etc. It should be printed on both sides of the paper; and every page has to be numbered. Do not leave any page blank. To achieve this, following points may be kept in view:
 - a. The thesis should be typed in 1.5 space using Times New Roman/Arial/ Garamond size 12 font, 1” margins should be left on all four sides. Major sections viz., Introduction, Review of Literature, Aim & Objectives, Material and Methods, Results, Discussion, References, and Appendices should start from a new page. Study proforma (Case record form), informed consent form, and patient information sheet may be printed in single space.
 - b. Only contemporary and relevant literature may be reviewed. Restrict the introduction to 2 pages, Review of literature to 10-12 pages, and Discussion to 8-10 pages.
 - c. The techniques may not be described in detail unless any modification/innovations of the standard techniques are used and reference(s) may be given.
 - d. Illustrative material may be restricted. It should be printed on paper only. There is no need to paste photographs separately.

3. Since most of the difficulties faced by the residents relate to the work in clinical subject or clinically-oriented laboratory subjects, the following steps are suggested:
 - a. The number of cases should be such that adequate material, judged from the hospital attendance/records, will be available and the candidate will be able to collect case material within the period of data collection, i.e., around 6-12 months so that he/she is in a position to complete the work within the stipulated time.
 - b. The aim and objectives of the study should be well defined.
 - c. As far as possible, only clinical/laboratory data of investigations of patients or such other material easily accessible in the existing facilities should be used for the study.
 - d. Technical assistance, wherever necessary, may be provided by the department concerned. The resident of one specialty taking up some problem related to some other specialty should have some basic knowledge about the subject and he/she should be able to perform the investigations independently, wherever some specialized laboratory investigations are required a co-guide may be co-opted from the concerned investigative department, the quantum of laboratory work to be carried out by the candidate should be decided by the guide & co-guide by mutual consultation.
4. The clinical residents are not ordinarily expected to undertake experimental work or clinical work involving new techniques, not hitherto perfected OR the use of chemicals or radioisotopes not readily available. They should; however, be free to enlarge the scope of their studies or undertake experimental work on their own initiative but all such studies should be feasible within the existing facilities.
5. The DNB residents should be able to freely use the surgical pathology/autopsy data if it is restricted to diagnosis only, if however, detailed historic data are required the resident will have to study the cases himself with the help of the guide/co-guide. The same will apply in case of clinical data.
6. Statistical methods used for analysis should be described specifically for each objective, and name of the statistical program used mentioned.

General Layout of a DNB Thesis:

- **Title-** A good title should be brief, clear, and focus on the central theme of the topic; it should avoid abbreviations. The Title should effectively summarize the proposed research and should contain the PICO elements.

- **Introduction-** It should be focused on the research question and should be directly relevant to the objectives of your study.
- **Review of Literature** - The Review should include a description of the most relevant and recent studies published on the subject.
- **Aim and Objectives** - The 'Aim' refers to what would be broadly achieved by this study or how this study would address a bigger question / issue. The 'Objectives' of the research stem from the research question formulated and should at least include participants, intervention, evaluation, design.
- **Material and Methods-** This section should include the following 10 elements: Study setting (area), Study duration; Study design (descriptive, case-control, cohort, diagnostic accuracy, experimental (randomized/non-randomized)); Study sample (inclusion/exclusion criteria, method of selection), Intervention, if any, Data collection, Outcome measures (primary and secondary), Sample size, Data management and Statistical analysis, and Ethical issues (Ethical clearance, Informed consent, trial registration).
- **Results-** Results should be organized in readily identifiable sections having correct analysis of data and presented in appropriate charts, tables, graphs and diagram etc.
- **Discussion**—It should start by summarizing the results for primary and secondary objectives in text form (without giving data). This should be followed by a comparison of your results on the outcome variables (both primary and secondary) with those of earlier research studies.
- **Summary and Conclusion-** This should be a précis of the findings of the thesis, arranged in four paragraphs: (a) background and objectives; (b) methods; (c) results; and (d) conclusions. The conclusions should strictly pertain to the findings of the thesis and not outside its domain.
- **References-** Relevant References should be cited in the text of the protocol (in superscripts).
- **Appendices** -The tools used for data collection such as questionnaire, interview schedules, observation checklists, informed consent form (ICF), and participant information sheet (PIS) should be attached as appendices. Do not attach the master chart.

Thesis Protocol Submission to NBE

1. DNB candidates are required to submit their thesis protocol within 90 days of their joining DNB training.
2. Enclosures to be submitted along with protocol submission form:
 - a) Form for Thesis Protocol Submission properly filled.
 - b) Thesis Protocol duly signed.
 - c) Approval letter of institutional Ethical committee. (*Mandatory, non receivable of any one is liable for rejection*)

Thesis Submission to NBE

1. As per NBE norms, writing a thesis is essential for all DNB candidates towards partial fulfillment of eligibility for award of DNB degree.
2. DNB candidates are required to submit the thesis before the cut-off date which shall be 30th June of the same year for candidates appearing for their scheduled December final theory examination. Similarly, candidates who are appearing in their scheduled June DNB final examination shall be required to submit their thesis by 31st December of preceding year.
3. Candidates who fail to submit their thesis by the prescribed cutoff date shall NOT be allowed to appear in DNB final examination.
4. Fee to be submitted for assessment (In INR): 3500/-
5. Fee can be deposited ONLY through pay-in-slip/challan at any of the Indian bank branch across India. The challan can be downloaded from NBE website www.natboard.edu.in
6. Thesis should be bound and the front cover page should be printed in the standard format. A bound thesis should be accompanied with:
 - a. A Synopsis of thesis.
 - b. Form for submission of thesis, duly completed
 - c. NBE copy of challan (in original) towards payment of fee as may be applicable.
 - d. Soft copy of thesis in a CD duly labeled.
 - e. Copy of letter of registration with NBE.
7. A declaration of thesis work being bonafide in nature and done by the candidate himself/herself at the institute of DNB training need to be submitted bound with thesis. It must be signed by the candidate himself/herself, the thesis guide and head of the institution, failing which thesis shall not be considered.

The detailed guidelines and forms for submission of Thesis

Protocol & Thesis are available at

www.natboard.edu.in.thesis.php

LOG BOOK

A candidate shall maintain a log book of operations (assisted / performed) during the training period, certified by the concerned post graduate teacher / Head of the department / senior consultant.

This log book shall be made available to the board of examiners for their perusal at the time of the final examination.

The log book should show evidence that the before mentioned subjects were covered (with dates and the name of teacher(s)) The candidate will maintain the record of all academic activities undertaken by him/her in log book .

1. Personal profile of the candidate
2. Educational qualification/Professional data
3. Record of case histories
4. Procedures learnt
5. Record of case Demonstration/Presentations
6. Every candidate, at the time of practical examination, will be required to produce performance record (log book) containing details of the work done by him/her during the entire period of training as per requirements of the log book. It should be duly certified by the supervisor as work done by the candidate and countersigned by the administrative Head of the Institution.
7. In the absence of production of log book, the result will not be declared.

Leave Rules

1. DNB Trainees are entitled to leave during the course of DNB training as per the Leave Rules prescribed by NBE.
2. A DNB candidate can avail a maximum of 20 days of leave in a year excluding regular duty off/ Gazetted holidays as per hospital/institute calendar/policy.
3. MATERNITYLEAVE:
 - a. A female candidate is permitted a maternity leave of 90 days once during the entire duration of DNB course.
 - b. The expected date of delivery (EDD) should fall within the duration of maternity leave.
 - c. Extension of maternity leave is permissible only for genuine medical reasons and after prior approval of NBE. The supporting medical documents have to be certified by the Head of the Institute/hospital where the candidate is undergoing DNB training. NBE reserves its rights to take a final decision in such matters.
 - d. The training of the candidate shall be extended accordingly in case of any extension of maternity leave being granted to the candidate.
 - e. Candidate shall be paid stipend during the period of maternity leave. No stipend shall be paid for the period of extension of leave.
4. Male DNB candidates are entitled for paternity leave of maximum of one week during the entire period of DNB training.
5. No kind of study leave is permissible to DNB candidates. However, candidates may be allowed an academic leave as under across the entire duration of training program to attend the conferences/CMEs/Academic programs/Examination purposes.

DNB COURSE	NO. OF ACADEMIC LEAVE
DNB 3 years Course (Broad & Super Specialty)	14 Days
DNB 2 years Course (Post Diploma)	10 Days
DNB Direct 6 years Course	28 days

6. Under normal circumstances leave of one year should not be carried forward to the next year. However, in exceptional cases such as prolonged illness the leave across the DNB training program may be clubbed together with prior approval of NBE.
7. Any other leave which is beyond the above stated leave is not permissible and shall lead to extension/cancellation of DNB course.
8. Any extension of DNB training for more than 2 months beyond the scheduled completion date of training is permissible only under extraordinary circumstances with prior approval of NBE. Such extension is neither automatic nor shall be granted as a matter of routine. NBE shall consider such requests on merit provided the seat is not carried over and compromise with training of existing trainees in the Department.
9. Unauthorized absence from DNB training for more than 7 days may lead to cancellation of registration and discontinuation of the DNB training and rejoining shall not be permitted.

10. Medical Leave

- a. Leave on medical grounds is permissible only for genuine medical reasons and NBE should be informed by the concerned institute/hospital about the same immediately after the candidate proceeds on leave on medical grounds.
- b. The supporting medical documents have to be certified by the Head of the Institute/hospital where the candidate is undergoing DNB training and have to be sent to NBE.
- c. The medical treatment should be taken from the institute/ hospital where the candidate is undergoing DNB training. Any deviation from this shall be supported with valid grounds and documentation.
- d. In case of medical treatment being sought from some other institute/hospital, the medical documents have to be certified by the Head of the institute/hospital where the candidate is undergoing DNB training.

- e. NBE reserves its rights to verify the authenticity of the documents furnished by the candidate and the institute/hospital regarding Medical illness of the candidate and to take a final decision in such matters.

11.

- a. Total leave period which can be availed by DNB candidates is $120+28 = 148$ days for 6 years course, $60+14=74$ days for 3 years course and $40+10 = 50$ days for 2 years course. This includes all kinds of eligible leave including academic leave. Maternity / Paternity leave can be availed separately by eligible candidates. Any kind of leave including medical leave exceeding the aforementioned limit shall lead to extension of DNB training. It is clarified that prior approval of NBE is necessary for availing any such leave.
- b. The eligibility for DNB Final Examination shall be determined strictly in accordance with the criteria prescribed in the respective information bulletin.

EXAMINATION

FORMATIVE ASSESSMENT

Formative assessment includes various formal and informal assessment procedures by which evaluation of student's learning, comprehension, and academic progress is done by the teachers/ faculty to improve student attainment. Formative assessment test (FAT) is called as "Formative" as it informs the in process teaching and learning modifications. FAT is an integral part of the effective teaching. The goal of the FAT is to collect information which can be used to improve the student learning process.

Formative assessment is essentially positive in intent, directed towards promoting learning; it is therefore part of teaching. Validity and usefulness are paramount in formative assessment and should take precedence over concerns for reliability. The assessment scheme consists of Three Parts which has to be essentially completed by the candidates.

The scheme includes:-

Part I:- Conduction of theory examination

Part-II :- Feedback session on the theory performance

Part-III :- Work place based clinical assessment

Scheme of Formative assessment

PART – I	CONDUCT OF THEORY EXAMINATION	Candidate has to appear for Theory Exam and it will be held for One day.
PART – II	FEEDBACK SESSION ON THE THEORY PERFORMANCE	Candidate has to appear for his/her Theory Exam Assessment Workshop.
PART – III	WORK PLACE BASED CLINICAL ASSESSMENT	After Theory Examination, Candidate has to appear for Clinical Assessment.

The performance of the resident during the training period should be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student

1. Personal attributes:

- **Behavior and Emotional Stability:** Dependable, disciplined, dedicated, stable in emergency situations, shows positive approach.
- **Motivation and Initiative:** Takes on responsibility, innovative, enterprising, does not shirk duties or leave any work pending.

- **Honesty and Integrity:** Truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.
- **Interpersonal Skills and Leadership Quality:** Has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has good communication skills.

2. Clinical Work:

- **Availability:** Punctual, available continuously on duty, responds promptly on calls and takes proper permission for leave.
- **Diligence:** Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management.
- **Academic ability:** Intelligent, shows sound knowledge and skills, participates adequately in academic activities, and performs well in oral presentation and departmental tests.
- **Clinical Performance:** Proficient in clinical presentations and case discussion during rounds and OPD work up. Preparing Documents of the case history/examination and progress notes in the file (daily notes, round discussion, investigations and management) Skill of performing bed side procedures and handling emergencies.

3. Academic Activity: Performance during presentation at Journal club/ Seminar/ Case discussion/Stat meeting and other academic sessions. Proficiency in skills as mentioned in job responsibilities.

FINAL EXAMINATION

The summative assessment of competence will be done in the form of DNB Final Examination leading to the award of the degree of Diplomate of National Board in Obstetrics and Gynecology. The DNB final is a two-stage examination comprising the theory and practical part. An eligible candidate who has qualified the theory exam is permitted to appear in the practical examination.

Theory Examination

1. The theory examination comprises of **Three/ Four** papers, maximum marks 100 each.
2. There are 10 short notes of 10 marks each, in each of the papers. The number of short notes and their respective marks weightage may vary in some subjects/some papers.
3. Maximum time permitted is 3 hours.
4. Candidate must score at least 50% in the aggregate of **Three/ Four** papers to qualify the theory examination.

5. Candidates who have qualified the theory examination are permitted to take up the practical examination.
6. The paper wise distribution of the Theory Examination shall be as follows:

Paper I

- Basic science as applied to Obstetrics and Gynecology
- Research Methodology.

Paper II

- Obstetrics and Neonatology.

Paper III

- General Gynecology and contraception.

Paper IV

- Recent advancement and investigational technology as applied to Obstetrics and Gynecology including:
 - i) Artificial reproductive technology
 - ii) Cloning and Fetal medicine

a) Practical Examination:

1. Maximum Marks: 300.
2. Comprises of Clinical Examination and Viva.
3. Candidate must obtain a minimum of 50% marks in the Clinical Examination (including Viva) to qualify for the Practical Examination.
4. There are a maximum of three attempts that can be availed by a candidate for Practical Examination.
5. First attempt is the practical examination following immediately after the declaration of theory results.
6. Second and Third attempt in practical examination shall be permitted out of the next three sessions of practical examinations placed alongwith the next three successive theory examination sessions; after payment of full examination fees as may be prescribed by NBE.
7. Absentation from Practical Examination is counted as an attempt.
8. Appearance in first practical examination is compulsory;
9. Requests for Change in center of examination are not entertained, as the same is not permissible.
10. Candidates are required not to canvass with NBE for above.

Declaration of DNB Final Results

1. DNB final is a qualifying examination.
2. Results of DNB final examinations (theory & practical) are declared as PASS/FAIL.
3. DNB degree is awarded to a DNB trainee in the convocation of NBE.

RECOMMENDED TEXT BOOKS AND JOURNALS

- Danforth's Obstetrics & Gynaecology
- Dewhurst Text book of Obstetrics & Gyneacology for post graduates
- Shaw's text book of Operative Gynaecology
- Shaw's, Stanton & Souter Gynaecology
- Kistner's Gynaecology
- Coppelson Gynaecological Oncology
- Manju Pandey Biostatistics

OBSTETRICS

- William's Obstetrics
- Turnbull's Obstetrics
- Fernado Arias- Practical guide to High Risk pregnancy & delivery
- De Sweit- Medical Disorders in pregnancy
- D.K. James- High risk pregnancy management options

GYNAECOLOGY

- Telinde's operative Gynecology
- Novak's æ Textbook of Gynaecology
- Speroff Leon's æ Clinical Gynaecology Endocrinology & Infertility
- Jeffcoate's Principles of Gynaecology
- Studd- Progress in Obstetrics & Gynaecology
- Bonner- Recent advances in Obstetrics & Gynaecology

LIST OF JOURNALS

1. Journal of Obstetrics & Gynaecology of India
2. Obstetrics & Gynaecology Survey
3. Obstetrics & Gynaecology Clinics of North America
4. Clinical Obstetrics & Gynaecology
5. British journal of Obstetrics & Gynaecology
6. Contraception
7. International Journal Obstetrics & Gynaecology
