

Guidelines
for
Competency Based Training Programme
in
DNB- Family Medicine



NATIONAL BOARD OF EXAMINATIONS

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INTRODUCTION

Family Physician is a physician generalist who takes professional responsibility for the comprehensive care of unselected patients with undifferentiated problems and who is committed to the person regardless of age, gender, illness, or organ system. The clinical specialty of family medicine is patient centered, evidence based, family focused, and problem oriented. Family physicians are expert at managing common complaints, recognizing important diseases, uncovering hidden conditions, and managing most acute and chronic illnesses. They emphasize on health promotion and disease prevention. The development of family medicine and its identity as a discipline has been grounded in the core values of continuing, comprehensive, compassionate, and personal care provided within the context of family and community.

The scope of family practice is as broad as the scope of human need. Within the broad spectrum of human needs there are some unique, predictable stages in the life span of an individual and family where the family physician fits uniquely to manage the health and illnesses. These stages include pregnancy and childbirth, care of newborn child, life threatening and life-altering illness, loss and grief, and care at the end of life.

Family physicians not just provide management and treatment of illnesses but also comfort and healing to the patient. A varied range of clinical competencies and adequate training are essential requirements for family physicians. Family physicians not just treat or diagnose various disorders, or diseases, they are required to take care of the patient, which is a much broader concept, involving decision making about when to treat, when not to treat, and how to take responsibility over time for a string of treatment choices. This, along with a continuous patient relationship and being present for the patient at critical points in the health journey, forms the value of family practice.

The importance of family physicians and general practitioners, who provide primary care in institutional and community settings in health systems, is often underestimated. With an increasing demand for specialization by medical graduates, the tradition of the family physician/general practitioner is on a decline. The epidemiologic and demographic transition, as well as the consequences of globalization, urbanization and climate change on health, requires an effective health system based on primary care. This system should focus more on health promotion, disease prevention, and continuity of care, to which family physicians/general practitioners can significantly contribute. As “gatekeepers” at primary care facilities, they can improve the cost-effectiveness of health-care delivery and appropriate triaging for referral care.

As India’s need for primary and secondary levels of health care is enormous, medical educators have called for systemic changes to include family medicine in the undergraduate medical curriculum. National Health Policy also previously highlighted the acute shortage of specialists in family medicine. About 70% of qualified medical graduates in India practice as family physicians. As a result the government of India has declared Family Medicine as focus area of human resource development in health sector in the National Health Policy 2002.

Family Medicine came to be recognized as a medical specialty in India only in the late 1990s. Although family medicine is sometimes called general practice, they are not identical in India. A medical graduate who has successfully completed the Bachelor of Medicine, Bachelor of Surgery (MBBS) course and has been registered with Indian Medical Council or any state medical council is considered a general practitioner. A family physician, however, is a primary care physician who has completed specialist training in the discipline of family medicine. The National Board of Examinations is a unique body which conducts family medicine residency programmes at the teaching hospitals that it accredits. On successful completion of a three-year residency, candidates are awarded Diplomate of National Board (Family Medicine).

Family medicine residents need to learn and demonstrate skills across a spectrum of clinical domains in order to provide initial, continuing, comprehensive and coordinated medical care for all individuals, families and communities and which integrates current biomedical, psychological and social understandings of health. Therefore there is a need to develop a comprehensive curriculum for family physicians so that they can offer a full range of care to meet the complex needs of community.

CURRICULUM STATEMENT

The purpose of this curriculum is to define the process of training and the competencies needed for the award of Diplomate of National Board in Family Medicine.

PROGRAMME GOAL

After qualifying the final examinations the candidate should be able to function as a junior consultant (specialist) in Family Medicine. They should be able to render health services to the community by providing health care to all members irrespective of age, sex, culture and socio-economic background. They should also be able to decide for appropriate referral in order to provide secondary/tertiary health services when necessary. They should be clinically competent and should be able to take personal responsibility for rendering comprehensive and continuing care of his patients in their own family settings.

PROGRAMME OBJECTIVES

At the end of the training period, the candidate should be able to acquire following competencies for:

1. Effective management of common diseases within the limited resources of family practice setting.
2. Identification of complex health problems and their appropriate referral.
3. Promotion of health and prevention of diseases, and support to the national health programmes.
4. Taking care for disadvantages groups in the community such as the elderly, mentally and physically handicapped persons.
5. Use of behavioral sciences related to family practice.

6. Effective communication with patients, family, colleagues and other health care workers, and community.
7. Domiciliary care and palliative care.
8. Conducting research, and submit it in the form of a dissertation.
9. Management of a wide range of common medical emergencies in the context of family practice with evidence-based medicine.
10. Decision making regarding the need for, and the appropriate and cost effective use of, modern technological investigations and ability to interpret the results of these investigations.
11. Management, team work and leadership.
12. For solving patient problems within a particular socio-cultural setting, harnessing available community services.
13. To organize and actively engage in community care programmes, focusing on promoting and maintaining health of the community.

ELIGIBILITY CRITERIA FOR ADMISSIONS TO THE PROGRAMME

(A) DNB (Post MBBS) Family Medicine Course:

1. Any medical graduate with MBBS qualification, who has qualified the DNB Centralized Entrance Test (DNB CET) 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 Family Medicine seats purely on merit cum choice basis.
2. Admission to 3 years post MBBS DNB Family Medicine course is only through DNB CET and Centralized Merit Based Counseling conducted by National Board of Examination as per prescribed guidelines.

(B) DNB (Post diploma) Family Medicine Course:

1. Any medical graduate with MBBS qualification who has successfully completed PGDMCH (Post graduate diploma in Maternal & Child Health) or PGDGM (Post Graduate diploma in Geriatric Medicine) course from IGNOU 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) Family Medicine seats purely on merit cum choice basis.
2. Admission to 2 years post diploma DNB Family Medicine course is only through PDCET Centralized Merit Based Counseling conducted by National Board of Examination as per prescribed guidelines. However, such candidates need not to appear in PDCET conducted by

NBE and can participate directly in the centralized counseling for DNB (post Diploma) family medicine seats.

Duration of Course

For post MBBS candidates : 3 years

For post MBBS + PGDMCH/PGDGM (IGNOU) 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.

MINIMUM CRITERIA FOR ACCREDITATION (FAMILY MEDICINE)

DEFINITIONS

HOSPITALS/INSTITUTIONS:

The applicant hospital / institute should be a clinical establishment having requisite infrastructure of at least 200 beds providing comprehensive OPD/IPD based medical service in a single campus. Combination of multiple such places or such establishments shall not be accepted. The applicant hospital / institute should have the mandatory regulatory/licensing approval from the local authority / government for running such establishment, and all statutory requirement / clearances from local authority / government agencies such as municipal, bio hazards/ waste managements, nuclear based managements, use of isotope, PNDR, fire safety, building completion etc. shall be in order and a declaration to this effect shall be furnished by the Head of the Hospital / Institute at the time of submitting the application for specialties such as family medicine.

FIELD POSTING

As per curriculum of Family medicine, 9 months of rotating field postings for community exposure is to be provided at Family Practice Centre (or a primary health centre or a rural/urban health clinic or satellite clinics) through organizing various outreach camps, mass screenings, screening OPD's, Follow up OPD's, epidemiological surveys, immunization camps, preventive & promotional health camps, disease surveillance etc.

Accordingly,

- The hospital must have an arrangement for a family practice centre in the form of either a satellite clinic or a rural/urban health care centre where candidates are posted for their field postings to get first contact physician experience through organizing outreach camps, screening OPD, preventive & promotional health check ups or corporate tie ups within the hospital or offshore etc.

MINIMUM NUMBER OF BEDS / IPD / OPD/ GENERAL OPD IN ALLIED SPECIALTY:

Of the total beds in the hospital, minimum numbers of beds, general beds, OPD, IPD required in allied specialties are as under:

Broad Specialties	Indoor Beds in the Specialty	General beds * in the specialty	Outpatient attendance per year	General *OPD	Inpatient occupancy per year	General bed * occupancy
General Medicine	30	10	3500	30%	800	30%
General Surgery	30	10	3500	30%	800	30%
Obstetrics & Gynaecology	30	10	3500	30%	800	30%
Pediatrics	10	4	1500	30%	400	30%

* General beds are those earmarked beds / cases whose patients are to be looked after by DNB trainees under the supervision of Consultants and charged “at cost” only, with no special fees or profit

PG TEACHER

One of the consultants in the specialty concerned should have teaching experience of 5 years as a PG teacher either in a university set up Or NBE accredited department. The services rendered as a PG teacher in a NBE accredited hospital shall be acceptable, provided the consultant has acted as a guide or co-guide for two DNB students or at least two PG students trained in the recognized department qualified their DNB final examinations and at least three thesis should have been produced in the DNB Programme under supervision of the consultants and accepted by NBE over one cycle of accreditation of three years.

CRITERIA FOR FACULTY

S. No.	Particulars	For Two Candidates
A	Nodal Programme Coordinator who would be a full time resource person for DNB Family Medicine course at the institute.	1

	<p>He/she should have an extensive experience of family practice like organizing outreach camps, running a satellite clinic, Mass screening, involvement in palliative care, National Health Programme/ Immunization Programme/ Epidemiological surveys, Disease surveillance etc. He /She would stand as an interface between Primary and Secondary level care.</p> <p>He/She could either have a formal qualification in Family Medicine/ Public Health with 5 years of experience post qualification in the specialty or,</p> <p>A post graduate in Pediatrics/Obstetric & Gynaecology/ Medicine/ Community Medicine with at least 8 years of exclusive experience in the field of family practice/public health.</p>	
B	3 Senior Consultants with 8 yrs of experience one from each specialty of Pediatrics, OBG and General Medicine. All 3 of them must work full time as exclusive faculty for the Department of Family Medicine and not for their respective specialty departments in the hospital.	3
C	3 Consultants from allied specialties (General Medicine, General Surgery, OBGY, Pediatrics or any other relevant sub specialty) with 5 yrs of experience post qualification all of whom can work with their respective departments but at the same time shall work as an 'adjunct faculty' of department of Family Medicine	3

RESEARCH EXPERIENCE OF FACULTY

The consultants / faculty in the department should have a total of 5 research publications in indexed journals as a lead author, and / or three thesis completed/ accepted by NBE. At least one publication should have been published within the last 2 years.

SENIOR RESIDENT

At least 2 senior residents are absolutely essential as part of the criteria. Must possess valid degree qualification, the degree should not have been awarded not more than 42months from the date of filing the application.

COMPREHENSIVETRAININGSUPPORT

The department should have facilities for thesis support, museum, for teaching specimen, library facility and designated faculty members and staff who can take charge of the training programme and can also act as authority for compliance of training programme. The applicant hospital shall designate the following authorities from its staff for DNB programme:

- **Head of the Institute (Administrative)** : As Nodal compliance officer for rules and regulations governing the programme as prescribed by NBE.
- **Nodal Programme Coordinator:** As a full time resource person for DNB Family Medicine course at the institute. He/she should have an extensive experience of family practice like organizing outreach camps, running a satellite clinic, Mass screening, involvement in palliative care, National Health Programme/ Immunization Programme/ Epidemiological surveys, Disease surveillance etc. He /She would stand as an interface between Primary and Secondary level care.
- **Assistant Programme Coordinator:** As the resource person for DNB trainees either from the management or academic staff, to maintain establishment and related functions related to the DNB courses and trainees.

STIPEND /WAGE/REMUNERATION /SALARY:

A monthly fee / remuneration / wage or salary that may be paid as a consolidated figure or under heading of fees or allowance to the DNB trainees by the management of the hospital / institute concerned.

As per NBE criteria the accredited hospitals should pay stipend to DNB trainees at par with the stipend being paid to PG trainees of the respective state government or the amount prescribed by the NBE which is HIGHER. The hospital shall give a binding undertaking to that effect clearly specifying the amount of stipend paid to the trainees undergoing training.

GENERAL BEDS

Beds wherein the patients are admitted at cost / subsidized and the DNB trainees are allowed access to these patients as part of their clinical teaching.

WHOLE TIME BASIS

The hospital concerned shall be the principal place of practice of these consultants and the consultant shall have no other institutional attachments/affiliation with other hospitals. Part time and visiting consultant shall not be considered as a part of the faculty. They may provide additional support for the training.

FOR SURGICAL EXPOSURE

- Adequate number of operation theatres
- Adequate equipments as required for the concerned specialty
- Anesthesiologists both for the hospital service and training of candidates
- Other paramedical staff to help in the operation theatre
- Intensive care unit for surgical emergencies
- Post operative ward.

SUPPORTIVESERVICES

- Radiology and other essential contrast studies
- Clinical Hematology
- Clinical Microbiology
- Clinical Pathology/Histopathology and Cytology
- Any special investigative procedures required for the concerned specialty.
- Department of Dietetics with trained dietician

OUTPATIENTDEPARTMENT

The hospital should possess adequate space for

- Registration of patients along with facilities for record keeping.
- Adequate number of rooms for examining the patients in privacy.
- Case conference room (OPD) teaching room.
- One or more side rooms for OPD procedures such as pleural aspirations dressings plaster application, minor operation rooms etc.
- Site laboratory to provide immediate facilities, for routine investigative procedures

IN PATIENT DEPARTMENT

The hospital should possess adequate space for doctor's duty room with adequate toilet, adequate space for each bed and in between for side laboratory, for clinical investigations and separate room for clinical conference (ward teaching).

TRAINING IN BASIC BASICS

The facilities for training/teaching in Basic Sciences concerning the specialties are required to be fulfilled. The hospital seeking accreditation should arrange appropriate number of lectures /demonstrations /group discussions / seminars in Basic sciences as related to the specialty concerned.

Accredited hospitals should also give each of their DNB trainees a mandatory One month rotation training each year, (in addition to the routine duties) in their Hospital's Laboratory so as to enable them to gain knowledge in Laboratory procedures in subjects like Pathology, Histopathology, Biochemistry, Microbiology, Genetics etc.

The institution may also arrange for training in all Basic Sciences as per the curriculum.

An undertaking to this effect is to be submitted to NBE while applying for Accreditation. An undertaking from the Principal of a Medical College or undertaking from the Specialist/faculty member of the concerned specialty needs to be submitted with the application form regarding consent of the specialist / faculty for training in basic sciences.

GUESTLECTURES

Guest lectures shall be arranged by the accredited institute / hospital for topics / area of curriculum that require specific attention / focus and/or can not be covered as a matter of routine

ROTATIONAL POSTINGS

During the course, the candidates will attend 27 months of hospital based and 9 months of Field based mandatory rotational postings.

During hospital based postings, the candidate will be placed in various departments as follows:

- Pediatrics - 6 months
- Obstetrics & gynecology - 6 months
- Internal Medicine including mental health - 6 months
- Emergency Services including ICU - 3 months
- General Surgery - 3 months
- Miscellaneous - 3 months
(Orthopedics, Ophthalmology,
ENT, DVD, Psychiatry etc)

FIELD BASED MANDATORY ROTATIONAL POSTING

9 months of rotating field postings for community exposure will be provided through postings at Family Practice Centre (or a primary health centre or a rural/urban health clinic) and satellite clinics as served through outreach camps, Mass screenings, screening OPD's, Follow up OPD's, epidemiological surveys, immunization camps, Preventive & Promotional health camps, Disease Surveillance etc.

Posting at each of these sites should equally be divided into 50% with tutor's practice where the trainee participates in group discussions and planned programs to carry out project of detection and follow-up under supervision and 50% time for independent work with trainees own allotted practice population and he will be required to study and record 5 family profiles, 15 case histories and 20 domiciliary visits and participate in group discussions focused on clinical situations.

The posting duration spread across 3 years of course as follows:

1 st year	-2 months
2 nd year	-2 months
3 rd year	-5 months

The hospital must arrange for didactic lectures, special clinics as related to concerned specialty, clinical meetings / group discussions/ seminars / workshops / inter unit departmental meetings / journal clubs etc.

TEACHING AND TRAINING ACTIVITIES

Discussions : The main teaching/learning activity will be discussions. These will be focussed on clinical situations arising in the family practice and will cover the specific topics as well as subjects of topical interest.

Case presentations : The candidates will be required to present to the Programmed Director/Preceptor, cases of clinical interest for discussion. The record of such cases will be maintained in the logbook.

Family profiles : The candidates will be required to study the family profiles under the charge of programme director and will be required to maintain records at least of the two families in the logbook.

Case histories : The candidates will be required to record eight case histories (two each of medicine, pediatrics, surgery, obstetrics and gynecology).

Medical and Surgical Procedures: A candidates will maintain a record of the procedures performed, assisted or observed in the logbook.

Emergency/Domiciliary visits: A record of emergencies attended and domiciliary visits made be maintained.

The record for the field posting is to be maintained separately.

SYLLABUS

1. Knowledge and skills for life-saving procedures: Medical, Obstetric, Paediatric, including neonatal resuscitation, Surgical and Trauma.
2. Maternal and child health : prevention, screening , health education, nutritional guidance and immunization, ante-natal and post-natal check up, well baby clinic and family planning procedures. Age-specific risk assessment including cancer risk, adolescent health and lifestyle guidance.
3. Principles of anaesthesia: local, regional and intravenous sedation
4. Paediatrics : Growth and development, infectious diseases, malnutrition, immunization and common paediatric illnesses.
5. General Medicine: Initial management of all symptoms/health problems, recognition, assessment, management, follow-up of common medical conditions in the community, prevention and health promotion, geriatric problems in the community, palliative care of terminally ill patients, poisoning, chronic disease conditions; hypertension, diabetes, asthma, ischaemic heart disease, obesity, epilepsy and osteoarthritis.
6. Diseases of public health importance. e.g., - tuberculosis, leprosy, HIV/AIDS, STD and malaria.
7. Reproductive and sexual health problems including HIV/STD.
8. Common dermatological problems and investigations.
9. Mental health problems in a community setting: Common psychological problems pertaining to life-cycle, behavioural problems, substance abuse,

- domestic violence, psychoneurosis, anxiety and depression, dementia and identification of at risk patients by age, sex and environment.
10. Orthopaedics :Reduction of simple fractures and dislocations, trauma management and fundamentals of physiotherapy.
 11. Common ophthalmological problems, both curable and incurable.
 12. Common problems in otorhinolaryngology.
 13. Oral health: management of dental emergencies and preventive measures.
 14. Occupational health.
 15. Radiodiagnosis: Interpretation of x-rays, preparation for radiological and imaging procedures, understanding interpretation and limitations of other imaging technologies.
 16. Hospital and practice management : Management science/organization, management of clinics, resource management, financial management, accounting and auditing and health economics and health insurance schemes.
 17. Basic epidemiology and clinical epidemiology
 18. Biostatistics.
 19. Behavioral and social sciences related to family medicine.

20. Research methodology – use of quantitative and qualitative research methods, use of statistical packages, writing scientific papers.

21. Critical appraisal of literature and evidence-based medicine.

22. Communication skills with patients, peers, through media and publications.

23. Legal and ethical considerations in family practice, Medical negligence and consumer protection act.

PROCEDURAL SKILLS

The students are expected to acquire following skills :

1. Anaesthesiology: Endotracheal intubation; intravenous access (peripheral and central lines, venesection, intravenous infusion); anaesthesia (local, regional, intravenous sedation).
2. Medicine : cardio-pulmonary resuscitation (CPR) and advanced cardiac, trauma, obstetric life supports, lumbar puncture, pleural aspiration, peritoneal aspiration, drainage of tension pneumothorax, nasogastric intubation and lavage; intravenous, intramuscular, intradermal and intralesional injections; intra-articular injection and aspiration; take an ECG.
3. Obstetrics & Gynaecology : conduction of normal delivery, making and suturing of episiotomy, management of breech delivery and retained placenta; repair of perineal laceration; vacuum extraction, forceps extraction; speculum examination, cervical smear, IUCD insertion.

4. Ophthalmology : funduscopy, removal of foreign bodies.
5. Orthopaedics : splinting of fractures, reduction of simple fractures and dislocation; application of casts.
6. Otorhinolaryngology : removal of foreign bodies from nose, syringing of ear, nasal packing; use of otoscope.
7. Paediatrics : resuscitation of the newborn; intraosseous infusions.
8. Pathology : haemoglobin level, erythrocyte sedimentation rate, total and differential leukocyte count, blood picture, routine and microscopic examination of urine and stool; taking swabs from various orifices and wounds; Fine Needles Aspiration; performing Gram stain and Ziehl-Neelsen stain; microscopy of urethral and vaginal discharge; blood sugar with glucometer; use of uristix etc.
9. Surgery : Assessment and closure of traumatic wounds; burns; incision and drainage of abscess; in-growing toe-nails; excision and biopsy of superficial swellings; venesection; urethral catheterization; suprapubic cystostomy; circumcision in adults; intercostals tube drainage; tracheostomy; screening for breast cancer.

Competencies to Be Acquired by the Candidates

- Effective management of common diseases within the limited resources of family practice setting including:
 - Common symptoms/illnesses
 - Psychosocial problems
 - Chronic diseases
 - Common emergencies
- Identification of complex health problems and appropriate referral
- Promotion of health and prevention of disease, and knowledge about the national health programmes
- First aid, CPR, transportation of patients
- Basic laboratory investigations, techniques, interpretation
- Essential drug list, rational prescribing and prescription writing
- Recognition and evaluation of conditions requiring surgical diagnosis and procedure
- Neonatology, growth and developmental disorders, genetic and paediatric illnesses
- Antenatal, intranatal and postnatal care, normal labour and puerperium, diagnosis and management of pregnancy related complications and awareness of family welfare programmes
- Ability to care for disadvantaged groups in the community such as the elderly, mentally and physically handicapped persons
- General epidemiological levels of prevention and control of common CD's and NCD's
- Soft tissues, bone and joint diseases, fractures, dislocations, sprains, PMR
- Recognition of common eye diseases and diagnosis, management and referral of all emergencies in eye

- Recognition and first line management of common diseases of ear, nose and throat
- Prevention diagnosis and management of common dermatological conditions
- Basic principles of anaesthesiology
- Development of managerial skills
- Behavioural and social sciences related to family medicine
- Legal and ethical considerations in family practice
- National health insurance schemes
- Health education
- Nutrition and dietetics, occupational health, reproductive and child health, disaster management
- Research methodology - use of quantitative and qualitative research methods, use of statistical packages, writing scientific papers
- Palliative care and domiciliary care
- Basics of Biostatistics for analysis of qualitative and quantitative data
- Medical Informatics:
 - Information retrieval and handling
 - Literature searches
 - Computer literacy in respect of patient management
 - Search for medical information
 - Statistical packages for analysis of data
- Database management and auditing
- Basics of hospital management Quality assurance
- Management of basic dental emergencies and preventive measures
- Basics of health economics
- Basics of resource and financial management
- Ability to teach and supervise undergraduates, postgraduates and other levels of para-medical staff

- Development in a particular area of expertise within family medicine e.g., counseling for psychosocial problems

Procedures Performed

- Venepuncture And Cut-Down
- Gastric Lavage And Enema
- Lumbar Puncture
- Urethral Catheterization
- Thoracocentesis and Paracentesis
- Skin Biopsy
- Electrocauterization of warts
- Evacuation of Incomplete Abortion Dilation and Curettage
- Using Partogram
- Fine Needle Aspiration Cytology
- Incision and Drainage
- Suturing
- Dressing of Open Wounds
- Circumcision
- Reduction of Paraphimosis
- Water Seal Drainage
- Vasectomy
- Tracheostomy
- Proctoscopy
- Refractive Error Assessment
- Tonometry
- Fundoscopy
- Removal of Foreign Body in Eye
- Otoscopy, Rhinoscopy, Laryngoscopy

- Foreign Body Removal for Ear & Nose
- Ear Syringing
- Hearing Tests
- Transportation Protocol of trauma patients
- Plaster of Paris – Types and application
- Removal of POP
- First Aid In Traumatic Fractures
- Cardiopulmonary Resuscitation
- Defibrillation

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/Dissertation 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/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

- a) The dissertation may be normally restricted to the size of 100 pages, to achieve this, following item may be kept in view :-
 - i. Only contemporary and relevant literature may be reviewed.
 - ii. The techniques may not be described in detail unless any modification / innovations of the standard techniques are used and reference may be given.
 - iii. Illustrative material may be restricted
 - iv. Since most of the difficulties faced by the residents related to the work in clinical subject or clinically oriented laboratory subjects the following steps are suggested :
 - v. The number of clinical cases to be included in the dissertation may be limited. No number is therefore, prescribed and it will vary from topic to topic.
 - vi. For prospective study, as far as possible the number of cases should be such that adequate material, judged from the hospital attendance, will be available and the candidate will be able to

collect the case material within a period of 6-12 months so that he / she is in a position to complete the work within the stipulated time.

- vii. The objective of the study should be limited and well defined.
 - viii. As far as possible, only clinical or laboratory data of investigations of patients or such other material easily accessible in the existing facilities should be used for the study
 - ix. The laboratory work required to be performed by the residents of clinical departments should be minimal. For this purpose 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 and co-guide by mutual consultation.
 - x. The clinical residents may not ordinarily be expected to undertake experimental work or clinical work involving new techniques not hitherto perfected or the use of chemicals or radio isotopes 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 may be feasible within the existing facilities.
 - xi. The residents should be able to use freely the surgical pathology / autopsy data if it is restricted to diagnosis only. If however, detailed histological data are required the resident will have to study the case himself with the help of guide / co-guide. The same will apply in case of clinical data.
- b. Statistical methods used for analyses will be described in detail.

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 certificate.
2. DNB candidates are required to submit their thesis before the cut off date which shall be 30th June of same year for candidates appearing for their scheduled December final theory examination. Similarly candidates who shall be appearing in their scheduled June DNB final examination shall be required to submit their thesis by 31st of preceding December.
3. Thesis should be hard bound and the front cover page should be printed in the standard format. A hard bound thesis should be accompanied with:
 - I. A summary of thesis.
 - II. Thesis submission form duly completed.
 - III. NBE copy of challan in original.
 - IV. Soft copy of thesis in a CD duly labeled.
 - V. Copy of letter of registration with NBE.
4. A declaration of thesis work being bonafide in nature and done by the candidate himself at the institute of DNB training need to be submitted bound with thesis.
5. It must be signed by the candidate himself/herself, the thesis guide and head of the institution, failing which thesis shall not be considered.
6. If thesis is rejected or needs to be modified for acceptance, NBE will return it to the candidate with suggestion of assessors in writing for modification.
7. If any unethical practice is detected in work of the Thesis, the same is liable to be rejected. Such candidates are also liable to face disciplinary action as may be decided by NBE.

8. The thesis is to be submitted 6 MONTHS before the commencement of the DNB examination along with thesis evaluation fees of Rs. 1500/- drawn in favor of NATIONAL BOARD OF EXAMINATIONS - payable at New Delhi, for evaluation.

Guidelines for Writing of Thesis/Dissertation

Title - Should be brief, clear and focus on the relevance of the topic.

Introduction – Should state the purpose of study, mention lacunae in current knowledge and enunciate the Hypothesis, if any.

Review of Literature – Should be relevant, complete and current to date.

Material and Methods- Should include the type of study (prospective, retrospective, controlled double blind) details of material & experimental design procedure used for data collection & statistical methods employed; statement of limitations ethical issues involved.

Observations– Should be Organized in readily identifiable sections Having correct analysis of data be presented in appropriate charts, tables, graphs & Diagram etc. These should be statistically interpreted.

Discussion- Observations of the study should be discussed and compared with other research studies. The discussion should highlight original findings and should also include suggestion for future.

Summary and Conclusion

Bibliography - Should be correctly arranged in Vancouver pattern.

Appendix—All tools used for data collection such as questionnaire, interview schedules, observation check lists etc should be put in the annexure.

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 (Fifteen cases) studied by him/her. (Model should be given in the log book) Three case histories pertaining to predominantly
4. Medical problems, three predominantly Surgical, two Paediatrics, while the rest seven may pertain to other disciplines like Obstetrics and Gynaecology, Ophthalmology, ENT, Dermatology, Psychiatry etc.
5. Record of Family Profiles – Candidates will maintain the profiles of at least five families in which at least one member of the family has health problem, eliciting its impact on the family and the role of family taking into account their social cultural and the economic consideration.
6. Procedures learnt – The candidates are expected to learn Medical and Surgical procedures during their advance training in Family Medicine. The record should depict medical and surgical procedures observed, assisted and performed during the period of training.
7. Record of case Demonstration/Presentations

8. Record of participation in EME activities – Direct contact activities (lectures, seminars, workshops conference); Indirect contact activities (correspondence journals, books, audio-video tapes)
9. 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.
10. In the absence of production of log book, the result will not be declared.

Leave

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 weekly off/Gazetted holidays as per hospital/institute calendar.
3. **MATERNITY LEAVE:**
 - 3.1. A female candidate is permitted a maternity leave of 90 days once during the duration of entire DNB course.
 - 3.2. The expected date of delivery (EDD) should fall within the duration of maternity leave.
 - 3.3. 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.
 - 3.4. The training of the candidate shall be extended accordingly in case of any extension of maternity leave being granted to the candidate.
 - 3.5. 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

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 extra-ordinary circumstances with prior approval of NBE. Such extension is neither automatic nor shall be granted as a matter of routine.
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

- 10.1. 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.
- 10.2. 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.
- 10.3. 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.
- 10.4. 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.
- 10.5. 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. The eligibility for DNB Final Examination shall be determined strictly in accordance with the criteria prescribed in the respective information bulletin

FINAL EXAMINATION

Theory Examination

1. The theory examination comprises of 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 4 papers to qualify the theory examination.
5. Candidates who have qualified the theory examination are permitted to take up the practical examination.

b) 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.
