

National Board of Examinations

**REVISED CURRICULUM FOR COMPETENCY
BASED TRAINING OF DNB CANDIDATES**

DERMATOLOGY AND VENEREOLOGY
2006



National Board of Examinations
(Ministry of Health & Family Welfare, Govt. of India)
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Preface

The National Board of Examination was established in 1975 with the primary objective of improving the quality of the Medical Education by elevating the level and establishing standards of post graduate examinations in modern medicine on all India basis. There are more than 450 N.B.E accredited institutions/ Hospitals , imparting DNB training programmes in 28 Broad specialties and 16 super specialties. Besides, there are Post-doctoral fellowship programmes in 14 specialties and Post-graduate dental programmes in 9 specialties. In order to have standardized and quality training in all the accredited hospitals, National Board of Examinations has a well structured curriculum. The curriculum is being revised periodically to incorporate newer topics and introduce more innovative training methods. The present curriculum has been revised by National Board of Examinations' experts and has details of the training objectives, schedule, methods, technical contents. There are lists of skills in various procedures/ surgical techniques which a DNB candidate must acquire during the training, reference and text books as well as the journals in the speciality. The curriculum also gives sample theory questions and common cases for practical skill assessment during training every six months in the form of concurrent assessment. The guidelines for thesis and maintenance of log book to record day to day activities carried out by the candidates are also given.

It is expected that the revised curriculum will be useful to the DNB consultants in organizing the DNB training programmes in their respective hospitals. The DNB candidates will also benefit from this document.

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Goal

To provide uniform, standard training in Dermatology, Venereology and Leprosy to the candidates so that after 3 years of training they are able to acquire the necessary competencies in the speciality to work as Senior Resident/ Junior Consultant

Objectives to be achieved by an individual at the end of 3 years of DNB training

The students after the training should be able to:

- Provide quality patient's Care (Diagnosis, Management and Handling emergencies related to Skin, Venereal diseases and Leprosy)
- Describe preventive measures at individual and community levels against communicable Skin, Leprosy and Venereal diseases
- Teach the medical and Paramedical students in the specialities
- Conduct research in the field of Skin, Venereal diseases & Leprosy
- Do the clinical examination of the patient including approach to the patient, history taking, knowledge about basic skin lesions, proper dermatological and systemic examination and familiarity with the elicitation of important clinical signs and tests such as Auspitz, Nikolsky, Darier sign, dermatographism, diascopy, Grattage test, proper evaluation of cutaneous sensation etc.
- Carryout the laboratory investigations related to the diseases of Skin, STD and Leprosy, such as-Scrapings of skin, nails and hair for fungus and ecto parasites, Slit smear examination, Cytopathological Examination Tzanck smear, FNAC, PAP smear, Woods lamp examination, Basic staining procedures example Zeil Nelsen, Geimsa, PAP smear, Dark ground microscopy, Routine and Microscopic examination of urine, Skin biopsy, lumbar puncture etc.
- Knowledge in clinical dermatology and applied basic sciences such as anatomy physiology, biochemistry, immunology, molecular biology, microbiology, pathology and pharmacology including therapeutics in relation to skin, STD and leprosy as listed in the syllabus.
- Describe the current treatment modalities and awareness of latest treatment of various diseases of skin, STD and leprosy.
- describe the preventive aspects, education, counseling services to the patient and National Control Programme of India for Leprosy, STDs and HIV infections.
- Do dermatological surgery such as : Skin biopsy, Electrocautery and fulguration, electrolysis, comedone extraction, chemical peels, Derma abrasion, excision of growths and cysts, skin punch grafting, hair transplantation cryosurgery, nail surgery etc. Needle aspiration of swellings

Tentative Schedule for three years of DNB Training

In-patient (ward) : 6 months

OPD & special clinics(such as allergy, psoriasis, pigmentary, dermatological surgery)

Dermatology 18 months

STD 6 months

Leprosy 3 months

Minor OT & laboratory 3 months

Teaching activities

Minimum of one each of following activities per week is essential for DNB training -Case discussions, Seminars, Journal club, Dermatopathology sessions etc

Thesis

Submission of research work 6 months before the final Examination.

Assessments/ Examinations

Concurrent examination/assessment

The purpose of the concurrent assessment is to give regular feed back to the DNB candidates about their performance and to prepare them for the final terminal examination by giving them exposure to the examination pattern. As a part of the concurrent evaluation the DNB candidates will be assessed every six months by an independent local appraiser selected by National Board of Examinations. This would include theory examination (100 marks of three hours duration) containing 10 short structured question related to the topics covered during the preceding six months by the accredited hospital/institution.

The practical examination (300 marks) will include long case, short case, spots, ward round, viva voce on the topics covered during the period by the hospital/institution.

FINAL EXAMINATION

Theory

Total Marks -	100 each
PAPER I	- Basic Sciences in relation to the Specialty
PAPER II	- Principles & practice of Dermatology
PAPER III	- Dermatology in Internal Medicine
PAPER IV	- Venereology and Leprosy

Practical Examination

Three cases (one long case in Dermatology, one each semilong/short cases of STD, Leprosy), 10 Spot cases, OSCE

Vive voce comprising of Radiological, Biochemical Investigations, Instruments, Drugs and Clinical Problems in Dermatology, Spots of Histopathology with 4 slides

ANNEXURE- I, THEORY SYLLABUS

Fundamentals of Cutaneous Diagnosis-Basic skin lesions, history taking, examination of the patient including relevant diagnostic, clinical tests and aids

Topics Related to Allied Basic Sciences

- The structure, function and development of human skin. Skin as a barrier
- Ultra structural aspects of epidermis, epidermal appendages, dermoepidermal junction, dermis, and sub-cutis
- Molecular biology and genetics in relation to the skin.
- Epidermal cell kinetics and Keratinization
- Lipids of epidermis and sebaceous glands
- Percutaneous absorption
- Biology of eccrine and apocrine sweat glands
- Biology of hair follicles, sebaceous glands and nails
- Biology of melanocytes and melanin formation
- Disorders of keratinisation
- Epidermal proteins
- Dermal connective tissue : collagen, elastin, reticulin, basement membrane and ground substance
- Metabolism of carbohydrates, proteins, fats and steroids by the skin
- Cutaneous vasculature and vascular responses
- Mechanism of cutaneous wound healing
- Cellular and molecular biology of cutaneous inflammation
- Immunologic aspects of skin
- HLA system, Immunoglobulins, cyto kines
- Complement system
- Hyper-sensitivity and allergy
- Cutaneous carcinogenesis
- Basic of cutaneous bacteriology, mycology, virology, parasitology and defence mechanism.
- Common laboratory procedures, stains culture media and related serological tests
- Basic pathologic reaction pattern in skin
- Common and special histopathological stains and procedures used in the diagnosis of skin diseases and Special techniques such as immunofluorescence, immunoperoxidase and other related techniques.

Clinical Dermatology

- Epidemiology of cutaneous diseases
- Psychologic aspects of skin disease and psycho-cutaneous disorders
- Pathophysiology and clinical aspects of pruritus.

Papulo-squamous Diseases

- Psoriasis, Pityriasis rubra pilaris, pityriasis rosea Lichen Planus, lichenoid eruptions
- Parapsoriasis,
- Darier's disease. Prorokeratosis
- Ichthyoses and ichthyosiform dermatoses, Keratodermas

Vesiculo-bullous Disorders

- Erythema multiformae, Stevens-Johnson syndrome, toxic epidermal necrolysis and Variants of pemphigus group of disorders
- Bullous pemphigoid
- Chronic bullous disease of childhood
- Herpes gestationis
- Mechanobullous (hereditary and acquired)
- Epidermolysis bullosa acquisita
- dermatitis herpetiformis
- subcorneal pustular dermatoses

Disorders of Epidermal Appendages

- Disorders of hair and nails
- Disorders of sebaceous glands : Acne
- rosacea, perioral dermatitis,
- Disorders of eccrine and apocrine sweat glands

Tumours

- Naevi and hamartomas
- Precancerous Skin lesions, Squamous cell carcinoma and Basal cell carcinoma, malignant melanoma
- Benign epithelial tumours, appendageal tumours

Disorders of pigmentation

- Vitiligo Albinism, Benign neoplasia and hyperplasias of melanocytes, Dysplastic melanocytic nevi, hyperpigmentation

Inflammatory Disorders of the Dermis

- Acute Febrile Neutrophilic dermatosis
- Erythema elevatum diutinum
- Cutaneous eosinophilic diseases
- Granuloma faciale
- Pyoderma gangrenosum
- Erythema annulare centrifugum and other Figurate Erythemas
- Granuloma annulare
- Malignant atrophic papulosis
- Neoplasms, Pseudo neoplasms and Hyperplasias of the Dermis
- Vascular Anomalies, Kaposi's Sarcoma
- Anetoderma and other Atrophic Disorders of the skin
- Neoplasias and hyperplasias of Neural and Muscular origin
- Elastosis Perforans Serpiginosa, Reactive Perforating Collagenosis, Kyrle's disease

Lymphomas, Pseudolymphomas and Related Conditions

Disorders of Subcutaneous Tissue

- Panniculitis
- Lipodystrophy

- Neoplasms of the subcutaneous Fat

Disorders of the Mucocutaneous Integument, dermatitis & eczemas

- Biology and disorders of oral mucosa
- Disorders of anogenitalia of males and females
- Cutaneous changes in disorders of altered reactivity
- Genetic Immunodeficiency Disease
- Urticaria and Angioedema
- Disorders associated with complement abnormalities
- Graft-versus-Host Disease
- Muco-cutaneous manifestations in immunosuppressed host other than HIV-infection
- Contact Dermatitis
- Auto sensitization dermatitis
- Atopic dermatitis (Atopic Eczema)
- Nummular eczematous dermatitis
- Seborrhoeic dermatitis
- Vesicular plantar eczema
- Erythrodermas

Skin Changes Due to Mechanical and Physical Factors

- Occupational skin disease
- Radiation to the skin
- Skin diseases due to cold, heat

Photobiology of skin

- Normal reaction to ultra violet rays and sun exposure

Disorders Due to Drugs and Chemical Agents

- Cutaneous reactions and mucocutaneous reactions to chemicals and drugs
- Pathological response to UVR and sun exposure
- Cutaneous manifestations of drug Abuse

Abnormal vascular response

- Erythemas including annular erythemas
- Urticaria
- Vasculitis

Dermatology and age of man

- Ageing of skin
- Neonatal dermatological problems
- Pediatric and adolescent problems
- Geriatric dermatological problems

Skin Lesions in nutritional and metabolic disorders

- Porphyrias
- Xanthomas
- Disorders of lipid metabolism and storage
- Mucinosis

- Amyloidosis
- Angiokeratoma corporis diffusum
- Lipid proteinosis
- Malabsorption
- Vitamin and mineral deficiency and excess

Skin Manifestations of systemic disorders

- Skin and disorders of the alimentary tract
- Hepatobiliary system and the skin
- Cutaneous changes in renal disorders, cardiovascular, pulmonary disorders and endocrinal disorders
- Skin changes in pregnancy
- Cutaneous changes in haematological disease
- Cutaneous changes in endocrine disorder

Genodermatosis

- Phacomatosis
- Tubero sclerosis
- Incontinentia pigmentation
- Ectodermal dysplasia
- Xeroderma pigmentosa

Connective tissue disorder

- Lupus erythematosus
- Dermatomyositis
- Scleroderma
- MCTD (Mixed connective Tissue Disorders)
- Relapsing polychondritis
- Rheumatoid arthritis, rheumatic fever and gout
- Sjogren's syndrome
- Raynaud's phenomenon
- Multicentric reticulohistiocytosis

Cutaneous Manifestations of Disease in Other Organ Systems

- Sarcoidosis of the skin
- Cutaneous Manifestations of Internal Malignancy
- Acanthosis Nigricans
- Papular Mucinosis
- Neurocutaneous Disease
- Tuberous Sclerosis Complex
- Neurofibromatosis
- Ataxia Telangiectasia
- Bechet's Disease

Bacterial infections

- Pyodermas : Staphylococcus aureus, Streptococcus, and others
- Staphylococcal scalded-skin syndrome
- Soft tissue infections : Erysipelas, Cellulitis
- Systemic bacterial infections with cutaneous manifestations
- Cutaneous tuberculosis and atypical mycobacterial infections
- Actinomycetoma

Fungal infections

- Superficial fungal infection : (dermatophytosis, yeast, others)
- Deep fungal infections

Viral and rickettsial infections

- Herpes simplex virus infections
- Varicella – zoster infection
- Human papilloma virus
- Molluscum contagiosum
- Hepatitis B, C
- Rubella
- Measles

THERAPEUTICS

Topical Therapy

- Pharmacokinetics and topical applications of drugs
- Principles of topical therapy, topical formulations

Topical Agents

- Glucocorticoids, analgesics, anesthetics, antiinflammatory, anti microbial, anti parasitic, antiperspirants, antipruritic, antiviral, astringents, bleaching agents, keratolytics and keratoplastic agents.
- Therapies, antiviral, topical antibiotics, topical antifungal agents, sun-screens, cytotoxic agents, cosmetics and skin care in practice, emollients and moisturizer.

Systemic Therapy

- Systemic glucocorticoids, antihistamines, antibiotics, sulfones, aminoquinolines, cytotoxic and antimetabolic agents, oral retinoids, antihistamines, antiviral drugs, oral antifungal agents, immunosuppressive and immunomodulatory drugs, thalidomide.

Dermatological surgery

- Photochemotherapy and photo therapy, electric cautery, cryotherapy, electrolysis, tattooing, intra-lesional injections, etc.

Dermatosurgery : Introduction and approach

- Skin resurfacing : chemical peels
- Skin resurfacing : dermabrasion
- Skin resurfacing : Laser
- Skin punch grafting
- Wound dressings
- Sclerotherapy for varicose and telangiectatic veins
- Tumescence liposuction
- Substances for soft tissue augmentation
- Hair transplantation and alopecia reduction
- Cryosurgery
- Moh's micrographic surgery

- Nail surgery

STD

- Clinical approach to the patient with STD
- Anatomy of male and female genitalia
- Epidemiology of STD's
- Viral STD's including HIV, HSV, HPV, Molluscum contagiosum, HSV etc.
- Bacterial STD's : Syphilis, gonorrhoea, chancroid, donovanosis, bacterial vaginosis
- Chlamydial and mycoplasma infections : Lymphogranuloma venereum, urethritis, cervicitis, NGU
- Fungal : Candidiasis
- Protozoal : Trichomoniasis
- Ectoparasitic : scabies, pediculosis infestations.
- Syndromic management of STD's
- STD's in reproduction health and paediatrics
- STD's and HIV
- Prevention, counseling and education of different STD's including HIV
- National control programmes of STDs and HIV infection
- Medicolegal, social aspects of STD's including psychological and behavioural abnormalities in STD patients

LEPROSY

- Approach to the patient with leprosy
- Epidemiological aspects
- Structure, biochemistry, microbiology of Mycobacterium leprae
- Animal models
- Pathogenesis
- Classification
- Immunology and molecular biological aspects
- Histopathology and diagnosis including laboratory aids
- Clinical features
- Reactions
- Systemic involvement (ocular, bone, mucosa, testes and endocrine etc.)
- Pregnancy and leprosy
- HIV infection and leprosy
- Therapeutic aspects including newer drugs
- Immunotherapy
- Disabilities, deformities and rehabilitation
- Prevention, education and counseling
- National leprosy control and elimination programme

ANNEXURE-II, DETAILS OF THE SKILLS TO BE ACQUIRED DURING THE TRAINING PERIOD

PROCEDURES

- Skin Scrapping for fungus
- Nail Scrapping for fungus
- Hair for fungus
- Slit skin smear examination for AFB
- Smear examination and preparation
 - Tzank smear
 - Zheil Neilson stain
 - Grahnm's stain
 - Leishman's stain
- FNAC
- Intralesional injections
- Skin Biopsy
- Electrosurgery
- Chemical Cauterization
- Cryosurgery
- Punch grafting/biopsy
- Skin resurfacing-Dermabrasion
 - Laser
 - Chemical peels
- Nail Surgery
- Comedone/Milia extraction
- Excision of growth/papilloma/cysts etc.
- Woods lamp examination
- Dark ground microscopy

ANNEXURE –III, SAMPLE CASES FOR PRESENTATION AND DISCUSSION

LONG CASES

- Systemic sclerosis (Scleroderma)
- SLE
- Disseminated discoid lupus erythematosus
- Dermatomyositis/mixed connective tissue disorders
- Psoriatic arthritis
- Pustular psoriasis
- Pemphigus and its variants
- Pemphigoid
- Chronic bullous dermatosis of childhood
- SJ syndrome/TEN
- Dermatitis herpetiformis
- Reiter's disease
- Sarcoidosis
- Tuberculosis of skin
- Erythroderma
- Airborne contact dermatitis
- Pityriasis rubra pilaris
- Ichthyosiform dermatoses
- Parapsoriasis
- Deep fungal infections
- Behcet's disease
- Xanthoma
- Lipid proteinosis
- Exanthematous drug eruptions
- Photodermatosis

STD

- Genital Ulcers
- Venereal warts
- Herpes progenitalis
- Balanoposthitis

LEPROSY

- All types of leprosy cases (TT, BT, BB, BL, LL)
- ENL
- Type I reaction
- Histoid leprosy
- Tropic ulcer and deformities in Leprosy

SHORT CASES

- Neurofibromatosis
- Tubrous sclerosis
- Epidermal Naevi
- Haemangioma
- Sebaceous Naevi
- Alopecia areata and its variants
- Superficial fungal infections
- Benign tumors of skin
- BCC
- Lichen plaus and lichenoid reactions
- Other papulosquamous disorders
- Darrier's disease
- Pityriasis rubra pilaris
- Pityriasis rosea
- Erythema multiformae
- Epidermolysis Bullosa
- Pyoderma gangrenosum
- Acute fibrile neutrophilic dermatoses
- Lymphomas and pseudolymphomas
- Eczemas
- Vasculitis
- Porphyria
- Xanthomas
- Amyloidosis
- DLE
- Morphea
- Scleredema
- Mycetoma
- Varicella Zoster infection
- Molluscum contagiosum
- Scabies/ectoparasites
- Xeroderma pigmentosa
- Acne and related disorders
- Rosacea
- Lymphangioma
- Porokeratosis
- Granuloma annulare
- Angiokeratoma
- Urticaria pigmentosa
- Pigmentary disorders (Melama/ Vitligo etc.)

STD

- Genital Ulcers
- Venereal warts
- Herpes progenitalis
- Balanoposthitis
- Urethral discharge

LEPROSY

- All types of leprosy cases (TT, BT, BB, BL, LL)
- ENL
- Type I reaction
- Histoid leprosy
- Tropic ulcer and deformities in Leprosy

ANNEXURE-IV, SAMPLE QUESTIONS FOR SIX MONTHLY ASSESSMENTS

- Syndromic approach to genital ulcer
- Histoid Leprosy
- Vaccines in Leprosy
- HIV and Skin
- Primary Neuritic Leprosy
- Reversal reactions in leprosy
- HIV and vaccines
- Cutaneous bacterial flora
- Kaposi's sarcoma
- Inguinal Bubo in STDs
- Tacrolimus
- Bacillary angiomatosis
- SLE and Pregnancy
- Desmosome-Tonofilament complex
- Pilosebaceous Unit
- Skin as a barrier
- Cytodiagnosis
- Pathogenesis of psoriasis
- Wood's lamp
- Lasers in dermatology
- Mechanism of contact dermatitis
- Chlamydia trachomatis
- Paraneoplastic pemphigus
- Antioxidants
- Histopathology of-mycosis fungoids
- Porphyrin Haem synthesis
- Diabetic dermopathy
- Management of severe pruritus
- Diagnosis and treatment of PKDL
- Raynaud's phenomenon
- Langerhans cells
- Melanogenesis
- Process of Keratinization
- Structure of nail
- Lichenoid eruption
- Scleroderma
- Hirsutism
- Serology of Leprosy
- Immunofluorescence in dermatology
- Skin failure
- Newer Antihistamines
- Newer anti leprosy drugs
- HAART therapy in AIDS
- Newer antifungal drugs
- Sunscreens
- Reiter's disease

- Systemic complications in leprosy
- Skin manifestations of thyroid disorders
- Immunomodulators in dermatology
- PCR in dermatology
- Genital ulcer disease
- Secondary syphilis
- Gonococcal urethritis
- H. Ducreyi
- LGV

ANNEXURE- V, BOOKS AND JOURNALS WHICH THE CANDIDATE MUST READ

Books

- Text book of Dermatology by A.Rook
- Dermatology in internal medicine by Fitz Patrick
- IADVL text book of Dermatology
- IADVL text book of STD
- Leprosy by Ridley Jopling
- Dermatotomy and cosmetology by Sawant
- Text book of Sexually Transmitted diseases by King Holmes

Journals

- Indian Journal of Dermatology, Venerology & Leprology
- Indian Journal of Leprosy
- Indian Journal of Sexually Transmitted diseases
- International Journal of Dermatology
- International Journal of Leprosy
- Leprosy review
- Archieves of Dermatology
- British Journal of Dermatology

ANNEXURE-VI, GUIDELINES FOR WRITING THESIS/DISSERTATION

Research shall form an integral part of the education programme of all candidates registered for Diploma of NB degrees of the Board. 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

- I. The thesis may be normally restricted to the size to 100 pages. To achieve this, following points 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 relate to the work in clinical subject or clinically oriented laboratory subjects the following steps are suggested:
 - 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.
 - The objectives of the study should be well defined.
 - 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.
 - Technical assistance, wherever necessary, may be provided by the department concerned. The resident of one speciality taking up some problem related to some other speciality should have some basic knowledge about the subject and he/she should be able to perform the investigations independently, wherever some specialised 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.
 - 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 should be feasible within the existing facilities.
 - The residents should be able to use freely 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.

- Statistical methods used for analysis should be described in detail.

Rules for Submission of Thesis/ Dissertation by candidates for DNB

- (i) The protocol of Thesis/ Dissertation should be submitted to the office of the NBE through head of the institutions within three (3) months of joining the training in Medical college/university/DNB accredited institution.
- (ii) No correspondence will be made in regard to acceptance of the protocol except only in the case of rejected protocols for which individual will be informed by office through mail/website.
- (iii) The guide will be a recognized PG teacher in Medical college or university or NBE Accredited institutions. The teacher should have the experience of 5 years in speciality after obtaining the post graduate degree. The certificate of PG teaching and being Guide recognized by University/NBE must be enclosed alongwith thesis/dissertation. The Guide can guide one MD/MS candidate and one university diploma candidate desirous of taking the DNB examination, or one direct NBE candidate. Total number of candidates should be two including all sources.
- (iv) Candidates who will be appearing in the subject under the heading Super Speciality (like Cardiology & Cardio Thoracic Surgery etc.) need not write their thesis/dissertation if they have already written their thesis during their MD/MS/NBE examinations. However they have to submit a proof in support of their having written thesis during their MD/MS examination.
- (v) If the candidates appearing in the broad specialities have already written their thesis in the MD/MS examination, they need not submit the thesis/dissertation. However they are required to submit a copy of the letter accepting the thesis by the University.
- (vi) If thesis is rejected or needs to be modified for acceptance, the Board will return it to the candidate with suggestion of assessors in writing for modification. The result of such candidate will be kept pending till the thesis is modified or rewritten, accordingly as the case may be and accepted by the assessors of the Board.
- (vi) 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 the Board.
- (vii) The thesis is to be submitted 6 MONTHS before the commencement of the DNB examination. Theory result of the candidates whose thesis/dissertation are accepted by the Board will be declared.

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.

Objectives-General & Specific

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.

ANNEXURE-VI, GUIDELINES FOR LOCAL APPRAISERS

Ref. National Board of Examinations/ Monitoring DNB trg2006
Dated 23.6.2006

Sir/Madam,

Thank you for agreeing to act as appraiser for the subject _____
at _____ the
_____.

You are hereby requested to carry out the followings:

- i. Prepare one paper containing ten short questions in the areas covered by the hospital/ institution in the last six months.
- ii. Conduct the theory examination for the candidates in the subject in the hospital.
- iii. Review the thesis progress and log book records for each candidate.
- iv. Conduct practical examination for the DNB candidates in the discipline.
- v. Appraise the infrastructure and facilities in the hospital in the concerned subject as per the enclosed format.
- vi. Send the report in the enclosed format to The Executive Director, National Board of Examinations, Ansari Nagar, Ring Road, New Delhi-110029.
- vii. Give suggestion for improving the DNB training and appraisal.

You are requested to contact _____ of the hospital
_____ at _____ Phone No. _____
You will be paid the honorarium for these activities by the concerned hospital as per the enclosed norm.

Thank you for your co-operation and support.

Yours sincerely

(A.K. Sood)

Copy to

Director/DNB Coordinator should make the necessary arrangements to conduct appraisal by the 31 July 2006.



National Board of Examinations

Guidelines for local Appraisers

- 1. NBE is pleased to suggest your name as local appraiser. The purpose of introducing six monthly appraisals of NBE accredited hospitals/institutions is to further improve the quality of training, assess the training infrastructure for the DNB candidates and also assist the local institutions to develop in to a center of academic excellence. This would further add value to the services being rendered in these accredited hospitals/institutions. Please do not think that this assessment has negative connotation. Please plan your appraisal in such a way as to minimally affect the routine working of the department.**

- 2. The Board expects the local appraiser to be a post graduate in the speciality with teaching and research experience. He/She should have enough time and expertise to carry out the following activities in the allotted hospitals/Institutions:**
 - 2.1 He/she should participate in thesis protocol/progress presentation & discussion; assist the DNB candidates in their thesis work by giving them suggestions and monitoring their progress. He/she should give specific remarks to improve the Thesis work after reviewing the objectives, methodology (sample size, sampling technique, data collection tools etc.), data analysis plan and statistical tests, results and discussion plan etc. of thesis of each candidate. These remarks should also be communicated in writing to the supervisor and the concerned candidate by the appraiser and a copy be sent to National Board of Examinations.**

 - 2.2. He /she is expected to examine the log book maintained by the candidates and give specific remarks to improve the log book maintenance after reviewing the contents of the log book (name of procedure, details of the case, salient findings, remarks of the supervisor for the improvement of the candidate etc). These remarks should also be communicated in writing to the supervisor and the concerned candidate by the appraiser and a copy be sent to National Board of Examinations.**

 - 2.3 He/ should prepare question paper containing ten short structured questions in the speciality on the topics covered during the preceding six months and evaluate the answer sheets. He/she will maintain total confidentiality in these**

activities. The arrangements for six monthly theory and practical examination will be made by local accredited hospitals/institutions.

- 2.3. He/she will formally conduct practical examination (On the topics/areas covered in preceding six months). The practical will have long case, short cases; ward round, spots and viva voce as per the DNB format.
- 2.4. He/she will communicate the result of assessment to the concerned candidates along with detailed feed back on their performance. He/she will give detailed suggestions to each candidate in writing for improving his/her performance. He/she will act as counselor and give specific remarks for improving the overall performance level of the candidate. These remarks should also be communicated in writing to the supervisor and the concerned candidate by the appraiser and a copy be sent to National Board of Examinations.
- 2.5. He/she will prepare the Examination worksheet for each candidate and submit the same to the concerned hospital for records with a copy of the same to the National Board of Examinations.
- 2.6. He/she will submit the report to the Executive Director, NBE, on the format (enclosed herewith).
- 2.7. He/she will also send six monthly report on the infrastructure, patient load and manpower in the concerned speciality of the accredited hospital, to Executive Director, National Board of Examinations, Ring Road, Ansari Nagar, New Delhi-110029.

3. Remuneration/honorarium to the Appraisers

NBE recommends that suitable honorarium be given to the local appraisers by the concerned accredited hospital/institution, considering the activities performed and number of DNB candidates in the speciality. The recommended minimal amount be given as follows:

- 3.1. Assessment of Infrastructure and facilities in the hospital/institutions in the speciality = Rs. 500/-.**
- 3.2. Participation in thesis protocol presentation and discussion = Rs. 500/-per candidate.**
- 3.3. Development of theory paper = Rs. 500/-.**
- 3.4. Assessment of theory paper(s) = Rs. 500/-**
- 3.5. Holding of practical examination = Rs. 1000/- per candidate.**

This expenditure will be met out of the fee collected from the candidates.



National Board of Examinations
(Ministry of Health & Family Welfare, Govt. of India)
Ansari Nagar, Ring Road, New Delhi-110029.
Tel.No. 011- 26589119, 26589517, 26589656
Website : www.natboard.nic.in

**PROFORMA FOR INFRASTRUCTURE AND DNB
CANDIDATES' PERFORMANCE ASSESSMENT BY APPRAISER
(PLEASE FILL SEPARATE FORM FOR EACH DNB DISCIPLINE)**

01.	Name of the Hospital, Address, Telephone number, Fax number and e-mail				
02.	Name of the Department offering DNB				
03.	No. of beds in the speciality	Total	General (Free)*	Paying	Subsidized
04.	Number of indoor admission during the last six months	Total	General (Free)*	Paying	Subsidized

* Free – which recovers the cost only and are available for training of DNB trainees.

05. Facilities for supportive services

Subject	Please list the type and number of tests done in the reference period of last one month
Pathology	
Biochemistry	

Microbiology

Radiology

Blood Bank

Any other

06. Physical facilities :-

Please list the facilities related to the specialty present in the department

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07.	Library facilities Budget spent on library in last six months.	
------------	---	--

08.	Consultants	Details of PG Qualification	Total experience after PG
	Name of Senior Consultants		
	Name of Junior Consultants		
	Name of Whole time Sr. Residents		

Please attach a copy of salary/ remuneration slips for the last six months.

09.	Track record of the candidates for the last three years : (in the specialty)				
	Year	Registered	Appeared	Passed	Left (with reason)

10. Please attach the details(such as the topic covered, date, the resource persons etc.) of various academic activities carried out by the department like -

- i. Guest lectures**
- ii. Case presentations and discussions**
- iii. Clinical conferences**
- iv. Seminars**
- v. Teaching sessions/ lectures for candidates**
- vi. Other activity specify**

11. Any other information

NATIONAL BOARD OF EXAMINATION

WORK- SHEET FOR ASSESSMENT OF CANDIDATE BY LOCAL APPRAISER

Date: _____

Name & Address of Hospital _____

Name of the candidate and registration No. _____

Training Year of the candidate - _____

First/ second/ Final

Name of Appraiser _____

I Clinical Examination

Case	Agreed Diagnosis	Max. Marks	Marks Awarded				Total Marks	
			History	Clinical Examination	Diagnosis	Management	In words	In Figure
Long case -I		60						
Short case -I		40						
Short case -II		40						
Short case-III		40						
Total		180						

II. Ward Round M. Marks = 40	Marks words	in	Awarded figure	in	Sub Total I + II (Max. Marks = 220)	
					In words	In figure

III. Viva voce Max. Marks = 80

Marks	Pathology	X-rays	Instrument Orthotics prosthetic	Operative surgery	Total
Maximum					
Marks Awarded (In words)					
Marks Awarded (In figure)					

IV. Grand Total (Sum of I+II+III) Max. Marks = 300

 Marks Awarded in words

 Marks Awarded in figure

V. Result _____

VI. Specific description of the strong points in case of pass candidate and of weak points in case of failed candidate. Please list out the specific details which need to be communicated to the candidate to help him improve.

VII. Examiner's Name & Signature _____

**National Board of Examinations, Ansari Nagar, Ring Road
New Delhi-110029**

**FEEDBACK FORMAT FROM DNB CANDIDATES UNDERGOING TRAINING IN THE
HOSPITAL**

Instructions to the DNB candidate-This feedback format is meant for knowing your views and suggestions for improving DNB training programme in your hospital. You may not reveal your identify on the format. The information given by you will be used for improving your training. Please send this form directly to the Executive Director, National Board of Examinations. You can also down load this form from the National Board of Examinations website www.natboard.nic.in and email the form to nbefellow@yahoo.com

- I. Name of the Hospital and Address

- II. Name of the department

- III. Please respond to the following questions related to your DNB training in past six months

3.1	Have you refereed to the DNB curriculum for your specialty in the last six months, if yes how many times ?	
3.2	How many times you have consulted the DNB coordinator in your hospital in the last six months?	
3.3	How many seminars you have attended in the last six months?	
3.4	How many cases you have presented to your consultant(s) in last six months?	
3.5	How many times you have attended the formal lectures covering various aspects of your speciality curriculum?	
3.6	How many guest lectures have been held in your speciality in the last six months in your hospital?	
3.7	How many times you have used internet for your studies in your hospital in the last six months?	
3.8	How many times your thesis progress has been reviewed by your thesis guides/ external appraiser in the last six months?	

3.9. Please mention the names of any three standard text books in your speciality which are available in the library of your hospital and you have referred to them in the last six months-

3.10. Please mention the names of any one National and any one International journal which you have referred to in your hospital library in the last six months-

3.11. How many clinical procedures you have done under supervision in last six months

Please mention names and number of any three of them

**3.12. How many clinical procedures you have done independently in last six months
Please mention names and number of any three of them.**

3.13. Please give five suggestions to improve your training in your speciality

ANNEXURE- VII, FORMAT FOR LOG BOOK

Instructions for the supervisor

P.G. Training Programme - The post graduate programme broadly should include lecture/demonstration on applied basic sciences, bed side clinics, case presentations. Faculty lectures, symposia/seminar journal clubs, biopsy, radiology discussions and graded clinical responsibility.

Evaluation - It is essential that the trainee maintains a detailed account of the work done by him. The record book will in addition remind the trainee of what he should observe, learn and perform in a programmed and phased manner during the course of training. It is hoped that this record will stimulate the trainee towards greater effort in areas where he is below par and also record his progress. It forms the basis for assessment and evaluation of the trainees progress. Some of the possible criteria on the basis of which a trainee could be evaluated are - soundness of knowledge, application & judgment, keenness to learn, punctuality and promptness, initiative, reliability, clinical skill, behavior with patients, attitudes towards patient's relatives, colleagues, seniors and other staff, ability to express

Depending on the qualities and the level of attainments a candidates could be considered for appraisal, on the basis, for example, of the following 5 letter grading system.

A	Excellent	Above	75%	B	Good	60% -	65%
C	Satisfactory	50%-	60%	D	Poor	30% -	50%
E	Bad	Below	30%				

Besides the grading as indicated above, each student should also be given a formal feed back on his/her weak points and how to overcome his/her deficiencies.

ALL THE CANDIDATES MUST WRITE THE LOG BOOK IN DETAILS WITH REMARKS FROM THE SUPERVISORS AND THESE ENTRIES MUST BE CHECKED BY THE LOCAL APPRAISERS EVERY SIX MONTHS.

1. Name of Trainee : _____

2. Name of Hospital/Institution : _____

3. Address : _____

4. Specialty : _____

5. Name of Supervising Specialist : _____

6. Name of Medical
Director/Superintendent : _____

Date : _____

Signature of Supervising Specialist

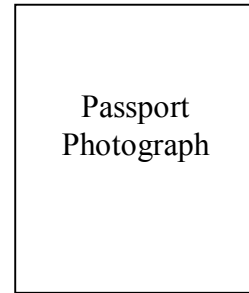
Name (Block Letters) :

Permanent Address :

Date of Birth :

Fathers Name & Address :

Education :



MBBS

Specimen Signature

Name of the College	Date of joining	of	Date of passing	of	No. of attempts	Prizes
---------------------	-----------------	----	-----------------	----	-----------------	--------

House-job

Subject	Date of joining	of	Date of leaving	of	Period
---------	-----------------	----	-----------------	----	--------

Primary Diplomat of N.B.

Subject	Date of Passing	No. of Attempts
---------	-----------------	-----------------

Final Diplomat of N.B.

Subject	Date of joining
---------	-----------------

Posting schedule

S. No.	Specialty	From	To	Period
--------	-----------	------	----	--------

Lectures

S. No.	Date	Topic and name of the resource person
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Seminars

S. No.	Date	Topic and name of the facilitators	Evaluation
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Journal Clubs

S. No.	Date	Topic and name of the facilitators	Evaluation
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Clinical Procedures/Operations Performed

S. No.	Date	Details of the patients and the procedures/Operations performed; names of the supervisors
--------	------	---

Clinical Procedures/Operations Assisted

S. No.	Date	Details of the patients and of the procedures/Operations performed along with the names of the supervisors
--------	------	--

Presentations

S. No.	Date	Details of the Case	Names of the consultants/resource persons	Evaluation
--------	------	---------------------	---	------------

Emergencies

S. No.	Date	Details of the patients and management of emergency cases
--------	------	---

Panel Discussions

S. No.	Date	Details of the case discussed	Names of panelists
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