BLDE UNIVERSITY

PG CURRICULUM
2016-17
MS Otorhinolaryngology & Head & Neck Surgery

Published by

BLDE UNIVERSITY

[Declared as Deemed to be University u/s 3 of UGC act, 1956, vide notification No.F.9-37/2007-U.3(A)]

The Constituent College

SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE

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SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL AND RESEARCH CENTRE

BLDEU/REG/PG/2016-17/ 505 June 18, 2016

NOTIFICATION

Subject: Revised Curriculum for the Post Graduate Degree and Diploma Course-2016

Reference:

1. Medical Council of India Regulation on Graduate Medical Education, 1997 and subsequent amendments of the same from time-to-time.
2. Minutes of the meeting of the Academic Council of the University held on April 29, 2016.
3. Minutes of the meeting of the BOM of the University held on June 18, 2016.

The Board of Management of University is pleased to approve the Curriculum for Post Graduate Degree and Diploma Course at its meeting held on June 18, 2016.

The revised curriculum shall be effective, from the Academic Session 2016-17 onwards, for Post Graduate Degree and Diploma Course in the Constituent College of the University viz. Shri B. M. Patil Medical College, Hospital and Research Centre, Vijayapura.

REGISTRAR

REGISTRAR
BLDE University, Vijayapura.

To,
The Dean, Faculty of Medicine and Prinicpal
Shri B. M. Patil Medical College,
Hospital and Research Centre,
Vijayapura.

Copy to:-

- The Secretary, UGC, New Delhi
- The Controller of Examinations
- Prof. & HODs of Pre, Para and Clinical Departments.
- PS to Hon'ble President
- PS to Hon'ble Vice-Chancellor

Vision & Mission

- Excellence in all our endeavours.

- Committed to provide globally competitive quality medical education.

- Provide the best health care facilities in this backward region, in particular, to socially disadvantaged sections of the society.

- Constantly striving to become a Reputed research University with world-class infrastructure, latest tech-tools for teaching/research and adopting global best practices.

Section - I

Goals and General Objectives of Postgraduate Medical Education Program

Goal

The goal of postgraduate medical education shall be to produce a competent specialist and / or a medical teacher as stated in the Post Graduate Medical Education Regulations 2000 and its amendments thereof [May2013]

(i) Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;
(ii) Who shall have mastered most of the competencies, pertaining to the specialty, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
(iii) Who shall be aware of the contemporary advances and developments in the discipline concerned;
(iv) Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology; and
(v) Who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

General Objectives

At the end of the postgraduate training in the discipline concerned the student shall be able to:

(i) Recognize the importance of the concerned specialty in the context of the health need of the community and the national priorities in the health sector.
(ii) Practice the specialty concerned ethically and in step with the principles of primary health care.
(iii) Demonstrate sufficient understanding of the basic sciences relevant to the concerned specialty.
(iv) Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.
(v) Diagnose and manage majority of the conditions in the specialty concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
(vi) Plan and advice measures for the prevention and rehabilitation of patients suffering from disease and disability related to the specialty.
(vii) Demonstrate skills in documentation of individual case details as well as morbidity and mortality data relevant to the assigned situation.

(viii) Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behavior in accordance with the societal norms and expectations.
(ix) Play the assigned role in the implementation of national health programs, effectively and responsibly.
(x) Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
(xi) Develop skills as a self-directed learner; recognize continuing educational needs; select and use appropriate learning resources.
(xii) Demonstrate competence in basic concept of research methodology and epidemiology, and be able to critically analyse relevant published research literature.
(xiii) Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
(xiv) Function as an effective leader of a team engaged in health care, research or training.

Statement of the Competencies

Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competencies, which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the program so that he or she can direct the efforts towards the attainment of these competencies.

Components of the PG Curriculum

The major components of the PG curriculum shall be:

- Theoretical knowledge
- Practical/clinical Skills
- Training in writing thesis/research articles
- Attitudes, including communication.
- Training in research methodology, medical ethics & medicolegal aspects
- Teaching skills to the undergraduates, juniors and support teams

Source: Medical Council of India, Regulations on Postgraduate Medical Education, 2000. [amended upto May2013]

Eligibility for Admission:

Eligibility requirements for Post Graduate Diploma and Degree Courses are:

1. The candidates seeking admission to these courses should have passed MBBS from the college recognized by Medical Council of India.

Eligibility requirements for Post graduate degree in superspeciality courses,M.Ch./D.M are:

The candidate seeking admission to these courses should have passed MS/MD from the college recognized by Medical Council of India.

2. As per the requisitions of statutory bodies, as laid out in post graduate regulations 2000 of Medical Council of India and its amendments thereof, the minimum percentage of marks in the entrance test conducted by the University for eligibility for admission to Post Graduate courses in broad specialties and super specialties shall be 50 percent for candidates belonging to General category and 40 percent for the candidates belonging to Scheduled Caste, Scheduled Tribes and Other Backward Classes. Eligibility for persons with locomotor disability of lower limbs category ranging from 30-70% will be 45 percent.

Eligibility for Foreign / PIO / NRI students will be based on qualifying examination marks.

The MCI norms to qualify for Admissions

Candidates seeking admission to these Post Graduate Degree courses should have passed M.B.B.S. recognised by Medical Council of India or equivalent qualification and should have obtained permanent Registration from the Medical Council of India or any of the State/ Medical council or candidate should register the same within one month from the date of admission, failing which the admission of the candidate shall be cancelled. Provided that in the case of a foreign national, the MCI may on the payment of prescribed fee for the registration, grant temporary registration for the duration of post graduate training restricted to the medical college/ institute to which the applicant is admitted for the time being exclusively for post graduate studies; provided further, that temporary registration to such foreign national shall be subjected to the condition that such person is duly registered with appropriate registering authority in his /her country wherefrom he has obtained his basic medical qualification ,and is duly recognized by the corresponding Medical Council or concerned authority..

If the candidate fails to fulfill the relevant eligibility requirements as mentioned above he/she will not be considered eligible for admission for Medical Postgraduate Degree and Diploma Courses even if he/she is placed in the merit list of BLDEU-PGET/BLDEU-SUPERSPECIALTY ET.

Obtaining Eligibility Certificate by the University before making Admission

Candidate shall not be admitted for any postgraduate degree/diploma course unless he/she has obtained and produced the eligibility certificate used by the University. The candidate has to make an application to the University with the following documents along with the prescribed fee:

1. MBBS pass/degree certificate issued by the University.
2. Marks cards of all the university examinations passed MBBS course.
3. Attempt Certificate issued by the Principal
4. Certificate regarding the recognition of the Medical College by the Medical Council of India.
5. Completion of internship certificate.
6. In case internship was done in a non-teaching hospital, a certificate from the Medical Council of India that the hospital has been recognized for internship.
7. Registration by any State Medical council and
8. Proof of SC/ST or OBC or physically handicapped status, as the case may be.

In addition to the above mentioned documents, candidate applying for admission to superspeciality courses has to produce degree/pass certificate of MD/MS degree with prescribed fee.

Intake of Students

The intake of students to each course shall be in accordance with the ordinance in this behalf.

Course Duration

a. M.D. / M.S. Degree Courses:
The course of study shall be for a period of 3 years consisting of 6 terms including examinations. For Candidates possessing recognized two year Postgraduate Diploma in the same subject the duration of the course shall be two years including examinations. (MCI PG REG 2000 10:1)

b. D.M/M Ch Degree Courses; (MCI PG REG 2000, 10:2)
The duration of these courses shall be for a period of 3 years including examinations.

c. Diploma Courses:
The course of study shall be for a period of 2 years consisting of 4 terms including examinations (MCI PG REG 2000, 10.3).

Training Method

The postgraduate training for degree/diploma shall be of residency pattern. The post graduate shall be trained with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions grand

rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings.. Every candidate should be required to participate in the teaching and training program of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Exposure to applied aspects of their learning should be addressed Similarly, clinical subjects' students should be posted to basic medical sciences and allied specialty departments or institutions.

Training of superspecialty should follow similar pattern. In addition, they have to be trained in advanced techniques of diagnosis and treatment pertaining to their specialty, participate actively in surgical operations [M.Ch] as well.

Attendance, Progress and Conduct

A candidate pursuing degree/diploma course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.

Each year shall be taken as a unit for the purpose of calculating attendance. Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons. Every Candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. This shall include assignments, assessment of full time responsibilities and participation in all facets of educational process. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year. Leave benefits shall be as per university rules.

A post graduate student pursuing degree course in broad specialities, MD, MS and superspeciality courses DM, M.Ch would be required to present one poster presentation, read one paper in national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him/her to be eligible to appear at the university degree examinations. (MCI, PG 2000, 13.9)

Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

Monitoring Progress of Studies

The learning process of students should be monitored through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring is done by the staff of the department based on participation of students in various teaching / learning activities. It may be structured and assessment done by using checklists that assess various aspects.

The learning out comes to be assessed include:

- Personal Attitudes,
- Acquisition of Knowledge,
- Clinical and operative skills, skills of performing necessary tests/experiments
- Teaching skills.

Personal Attitudes:

The essential items are:

- Caring attitude, empathy
- Initiative in work and accepting responsibilities
- Organizational ability
- Potential to cope with stressful situations and undertake graded responsibility
- Trust worthiness and reliability
- To understand and communicate intelligibly with patients and others
- To behave in a manner which establishes professional relationships with patients and colleagues
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The Methods used mainly consist of observation. Any appropriate methods can be used to assess these. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers. However every attempt should be made to minimize subjectivity.

Acquisition of Knowledge:

Lectures: Lectures/theory classes as necessary may be conducted. It is preferable to have one class per week if possible. They may, be employed for teaching certain topics. Lectures may be didactic or integrated.

a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested here.

- Bio-statistics
- Use of library,
- Journal review
- Use of computers,
- Appropriate use of AV aids

- Research Methods,
- Search of literature,
- Rational drug therapy
- Medical code of Conduct and Medical Ethics
- National Health and Disease Control Programmes
- Communication skills etc.
- Bio medical waste

These topics may preferably taken up in the first few weeks of the 1st year commonly for all new postgraduates. The specialty wise topics can be planned and conducted at departmental level.

b) Integrated teaching: These are recommended to be taken by multidisciplinary teams for selected topics, eg. Jaundice, Diabetes mellitus, thyroid diseases etc. They should be planned well in advance and conducted.

Journal Review Meeting (Journal Club):

The ability to do literature search, in depth study, presentation skills, use of audio – visual aids, understanding and applying evidence based medicine are to be focused and assessed. The assessment is made by faculty members and peers attending the meeting using a checklist

Seminars / Symposia:

The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio – visual aids are to be assessed using a checklist.

Clinico-Pathological conferences:

This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

Clinical Skills: Day to Day Work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills

Clinical Meetings:

Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list.

Group discussions: Group discussions are one of the means to train and assess the student's ability to analyse the given problem or situation, apply the knowledge and make appropriate decisions. This method can be adopted to train and assess the competency of students in analyzing and applying knowledge.

Death review meetings/Mortality meetings: Death review meetings are important method for reflective learning. A well conducted morbidity and mortality meetings bring about significant reduction in complications, improve patient care and hospital services. They also address system related issues. Monthly meetings should be conducted with active participation of faculty and students. Combined death review meetings may be required wherever necessary.

Clinical and Procedural Skills:

The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book.

Teaching Skills:

Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students

Work diary / Log Book:

Every candidate shall maintain a Work Diary/Log Book and record his/her participation in the training programs conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, conducted by the candidate. A well written and validated Log Book reflects the competencies attained by the learner and points to the gaps which needs address. This Log Book shall be scrutinized by concerned teachers periodically and certified, by the Head of Department and Head of the Institution, and presented during University Practical / Clinical examination.

Periodic Tests:

In case of degree courses of three years duration (MD/MS, DM, M.Ch), the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practical / clinical and viva voce.
One of these practical/clinical tests should be conducted by OSPE (objective structured practical examination or OSCE (objective structured clinical examination) method.

.Records and marks obtained in such tests will be maintained by the Head of Department and sent to the University, when called for,

In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final examination. The tests may include written papers, practical /clinical and viva voce.

One of these practical/clinical tests should be conducted by OSPE or OSCE method.

Records: Records and marks obtained in tests will be maintained by the Head of the Departments and will be made available to the University or MCI.

Procedure for defaulter:

Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Dissertation: Every candidate pursuing MD/MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis and comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation shall be written under the following headings:

1. Introduction
2. Aims or Objectives of study
3. Review of Literature
4. Material and Methods
5. Results
6. Discussion
7. Conclusion
8. Summary

9. References
10. Tables
11. Annexure

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexure. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

Adequate number of copies as per norms and a soft copy of dissertation thus prepared shall be submitted to the Controller of Examinations six months before final examination on or before the dates notified by the University.

The dissertation shall be valued by examiners appointed by the university. Acceptance of dissertation work is an essential precondition for a candidate to appear in the University examination.

Guide:

The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per Medical Council of India Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998 and its amendments thereof. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognized as post graduate teachers.

A Co-guide may be included provided the work requires substantial contribution from a sister department or from another medical institution recognized for teaching/training by this University / Medical Council of India. The co-guide shall be a recognized post graduate teacher of BLDE University

Change of guide:

In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

Schedule of Examination:

The examination for M.D. /M.S and DM/M.Ch courses shall be held at the end of three academic years (six academic terms). The examination for the diploma courses shall be held at the end of two academic years (four academic terms).

The university shall conduct two examinations in a year at an interval of four to six months between the two examinations. Not more than two examinations shall be conducted in an academic year.

Scheme of Examination

M.D. /M.S. Degree

M.D. / M.S. Degree examinations in any subject shall consist of dissertation, written papers (Theory), Practical/Clinical and Viva Voce.

Dissertation:

Every candidate shall carryout work and submit a Dissertation as indicated above. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.

Written Examination (Theory):

Written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers. In basic medical subjects and para-clinical -subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases minimum. However additional assessment methods can be adopted which will test the necessary competencies reasonably well.

The total marks for Practical / clinical examination shall be 200.

Viva Voce:

Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills.

The total marks shall be 100:

- 80 Marks, for examination of all components of syllabus
- 20 Marks for Pedagogy

Examiners:

There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical/clinical and (3) viva voce examination. The candidate should pass independently in practical/clinical examination and Viva Voce vide MCI pg 2000 reg no 14(4) (Ciii)

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

Distinction will not be awarded for candidates passing the examination in more than one attempt.

D.M/M.Ch Degree

DM/M.Ch Degree examinations in any subject shall consist of written theory papers (theory), practical/clinical and Viva voce.

Written Examination (Theory):

Written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks. Out of the **four** papers, the 1st paper in clinical subjects will be on applied aspects of basic medical sciences. Recent advances may be asked in any or all the papers. In basic medical subjects and para-clinical -subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills, competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The total marks for Practical / clinical examination shall be 200.

Viva Voce:

Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills.

The total marks shall be 100:

- 80 Marks, for examination of all components of syllabus
- 20 Marks for Pedagogy

Examiners:

There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and(3)viva voce examination. The candidate should pass independently in practical/clinical examination vide MCI pg 2000 reg no 144-c (iii).

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75 percent and above.

Distinction will not be awarded for candidates passing the examination in more than one attempt.

Diploma Examination:

Diploma examination in any subject shall consist of Theory (written papers), Practical / Clinical and Viva-Voce.

Theory:

There shall be **three** written question papers each carrying 100 marks. Each paper will be of **three** hours duration. In clinical subjects one paper out of this shall be on basic medical sciences. In basic medical subjects and Para clinical subjects, questions on applied clinical aspects should also be asked.

Practical / Clinical Examination:

In case of practical examination it should be aimed at assessing competence, skills related to laboratory procedures as well as testing students ability to make relevant and valid observations, interpretation of laboratory or experimental work relevant to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.

The maximum marks for Practical/Clinical shall be 150.

Viva-Voce Examination: Viva Voce examination should aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 50.

Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical / clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Controller of Examinations.

Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate of marks is 75% and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

Examiners:

There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.

Number of Candidates per day:

The maximum number of candidates for practical / clinical and viva-voce examination shall be as under:

MD / MS Courses: Maximum of 8 per day
Diploma Course: Maximum of 8 per day
DM/M.Ch Maximum of 3 per day

SECTION II

Post Graduate Courses in Otorhinolaryngology & Head & Neck Surgery

MS In Otorhinolaryngology & Head & Neck Surgery

Goal

The postgraduate course, M.S(Otolaryngology) should enable a medical graduate to become a competent specialist, acquire knowledge and skills in educational technology for teaching medical, dental and health sciences and conduct research in bio-medical science.

The MS course in Otolaryngology is a three year integrated course after satisfactory completion of the course the candidate shall be fully conversant with theory and practical aspects of otolaryngology and be able to practice otolaryngology completely, confidently and safely in the community that he/she serves.

Objectives

1) Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy.
2) Who shall have mastered most of the competencies, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system.
3) Who shall be aware of the contemporary advances and developments in Otolaryngology.
4) Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology:
5) Who shall have acquired the basic skills in teaching the medical and paramedical students.
6) Continue to evince keen interest in learning and teaching Otolaryngology whether he is in a teaching institution or is a practicing surgeon.

Specific Objective

The following objective is laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The Objectives may be considered under the subheadings.

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. Human values, Ethical practice and Communication abilities

Knowledge

- Demonstrate understanding of basic sciences relevant to this specialty.
- Describe Etiology, Pathophysiology, principals of diagnosis and management of common problems including emergencies, in adults and children.
- Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion.
- Describe common malignancies in the country and their management including prevention.
- Identify social, economic, environmental and emotional determinants in a given case, and take them into account for planning therapeutic measures.
- Recognize conditions that may be outside the area of his specialty, competence and to refer them to the proper specialties.
- Update oneself by self study and by attending course, conferences and seminars relevant to the specialty.
- Teach and guide his team, colleagues and other students.
- Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

Skills

- Take a proper clinical history, examine the patients, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis of various ailments in the region.
- Perform common operative procedures in Otorhinolaryngology.
- Provide basic and advances life saving support services (BLS & ALS) in emergency situations.
- Undertake complete patient monitoring including the preoperative and post operative care of the patient.
- Should be able to perform OPD procedures; first observe the procedure, then do it under supervision of a teacher and then perform it independently.

Human Values, Ethical practice and Communication abilities

Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.

- Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
- Provide leadership qualities.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

Course Contents

i) **Theory**

1. Basic sciences

- Evolution of Otorhinolaryngology, Documentation of Patient information, Statistical Analysis, Publication Methodology, Research avenues in Otorhinolaryngology.

- Medicolegal aspects in Otolaryngology
- Genetics in ENT
- Anatomy of the ear
- Physiology of hearing & equilibrium
- Anatomy of nose and paranasal sinuses
- Anatomy of pharynx , oesophagus , deglutition
- Anatomy of larynx and tracheobronchial tree
- Physiology of respiration
- Physiology of generation of speech.
- Surgical anatomy of skull base , cranial nerves,
- Imaging and radiology pertaining to ear, nose and throat (ENT)
- Knowledge of immunology and microbiology as regards ENT
- Radiotherapy and chemotherapy in head & neck cancers
- Wound healing , principles of laser surgery
- Basic of anaesthesia and intensive care in relation to ENT
- Through knowledge of anatomy of head and neck region including thyroid, neck spaces and salivary glands
- Physiology of smell
- HIV in ENT
- Computer navigation and Robotic surgeries in ENT
- Pharmacology in ENT.

2. Audiology and speech

Brief Knowledge of Acoustics, Diagnostic Audiometry, Diagnostic Testing of Vestibular System, Epidemiology, Prevention, Rehabilitation of Balance and Hearing Disorders, Hearing Aids.

3. Otology

- Diseases Of External Auditory Canal
- Diseases of Middle Ear – Acute Suppurative Otitis Media, CSOM.
- Complications Of CSOM

- Plastic Surgery Of Ear
- Otosclerosis
- SN Loss In Adults And Children
- Vertigo, Meniere's Disease
- Ototoxicity
- Tumours: Vestibular Schwannoma, Tumours Middle Ear Cleft, Glomus Jugulare
- Disorders of Facial Nerve
- Cochlear Implants.

4. Laryngology

- Acute and Chronic Infections of Oral Cavity, Pharynx, Tonsils and Larynx
- Trauma And Stenosis of Larynx
- Management of Obstructed Airway and Tracheotomy
- Diagnosis of voice disorders, Acoustic analysis, Videostroboscpic assessment and Disorders of Voice
- Neurological Affections of Pharynx and Larynx
- Pharyngeal Pouch
- Tumours of Larynx
- Angiofibroma and Nasopharyngeal Lesions
- Tumours of Oropharynx and Lymphoma Head and Neck
- Tumours of Hypopharynx
- Surgeries for anterior and lateral skull base lesions
- Benign Diseases of The Neck
- The Thyroid Gland and Disorders

5. Rhinology

- Congenital anomalies of the nose and surgical management
- Disorders and trauma of facial skeleton
- Disorders and nasal septum
- CSF rhinorrhoea
- Epistaxis

- Snoring and sleep apnea
- Chronic granulomas of nose and PNS
- The orbit in relation to ENT
- Transphenoidal hypophysectomy
- Overview of facial pain and headache

ii) Practical , Clinical

Mandatory

- Cadaver Dissection of Head and Neck
- 10 Cadaver temporal bone dissection which includes
    - Cortical Mastoidectomy , Stapedectomy
    - MRM and Radical mastoidectomy
    - Facial nerve decompression
    - Posterior typmanotomy
    - Labyrinthectomy
    - Endolymphatic sac decompression
    - Traslarbyrinthine approach to IAM
    - Stapedectomy

iii) Essential list Surgical Procedures

Following procedures are classified as:

a) To be done independently (PI)

b) To assist a senior specialist, consultant (PA)

c) To wash and observe the procedure (O)

Otology

- To be done independently (PI)
    - Cortical Mastoidectomy – 5 Cases
    - MRM / Radical Mastoidectomy – 5 Case

- Myringoplasty-5 Cases
- Myringotomy and Grommet Insertion – 3 Cases
- Ossiculoplasty- 1 Case

- To wash and observe a senior (O)/To assist a senior specialist, consultant (PA)
  - Facial N Decompression
  - Stapedectomy

Rhinology

- To be done independently (PI)
  - Reduction of fracture nasal bones – 2 cases
  - SMR/Septoplasty- 10 cases
  - Diagnostic nasal endoscopy -10 cases
  - FESS : 5cases
    - Uncinectomy
    - Polypectomy
    - Anterior ethomoidal cell clearance
    - Middle meatal antrostomy
  - Caldwel Luc – one case
  - Antral lavage – 5 cases
- To assist or observe
  - FESS – Posterior. Ethmoid , sphenoid , frontal sinus surgery
  - Maxillo-facial surgeries
  - External operations of frontoethmoid sinus
  - Maxillectomy Total and Partial
  - Rhinoplasty
  - Endoscopic DCR
  - Navigation surgery for anterior or lateral skull base

Laryngology, Head and Neck

- To have done independently
    - Tracheostomy – 5 cases
    - Tonsillectomy – 10 cases
    - Adenoidectomy – 5 cases
    - DL Scopy – 5 cases
    - Oesophagoscopy, Upper oesophagus foreign body removal - 5 cases
    - I&D Peritonsillar abscess: 5 cases
- To Assist or Observe
    - Bronchoscopy
    - Total / Partial Laryngectomy
    - Block dissections of neck
- To Wash and Observe a Senior
    - Thyroid surgery
    - Salivary gland surgery
    - Microlaryngeal surgery
    - Debridement of deep neck space infections

➢ Should be able to perform OPD procedures; first observe the procedure, then do it under supervision of a teacher and then perform it independently. The list includes:

- Ear syringing
- Repair of ear lobe tear
- Removal of foreign bodies from ear and nose
- Dressing of wounds
- Diagnostic Nasal Endoscopy
- Videolaryngoscopy
- Videostroboscopy
- Otomicroscopy
- Suction Clearance of ears
- Anterior Nasal Packing
- Removal of Nasal Packs
- Nasal Douche
- Antral Lavage
- Removal of maggots

Teaching and Learning Activities:

A candidate pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic, laboratory, nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself/ herself from work without valid reasons.

A list of teaching and learning activities designed to facilities students acquire essential knowledge and skills outlined in course contents is given below.

i. **Lectures:** Lectures are to be kept to a minimum. They may however, be employed for teaching certain topics. Lectures may be didactic or integrated.

a) Didactic Lectures: Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples.

1) Bio-statistics
2) Use of library
3) Medical code of Conduct and medical Ethics
4) National Health and Disease Control Programmes
5) Communication Skills etc.

b) Integrated Lectures: These are recommended to be taken up by multidisciplinary teams for selected topics, e.g. Jaundice, Diabetes mellitus Thyroid etc.

ii. **Journal Club**: Recommended to be held once a week. All the PG students are expected to attend actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must make a presentation from the allotted journal (s), selected articles at least three times a year and a total of 6 seminar presentations in two years. The presentations would be evaluated using check lists and would carry weightage for internal assessment. (See checklist in Section IV) a time table with names of the student and the moderator should be announced in advance.

iii. **Subject Seminar:** Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book relevant details further, every candidate must present on selected topics as least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (Sec Checklist in section IV). A timetable for the subject with names of the student and the moderator should e announced in advance.

iv. **Head and Neck Cadaver Dissection** and
Cadaver Temporal bone dissection which includes:

a. Cortical Mastoidectomy

b. MRM and Radical Mastoidectomy,

c. Facial Nerve Decompression,

d. Posterior Tympanotomy,

e. Labyrinthectomy,

f. Endolymphatic Sac Decompression

v. **Ward Rounds :** Ward rounds may be service or teaching rounds

a. Service Rounds: Post graduates and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day.

b. Teaching Rounds: Every unit should have 'grand rounds' for teaching purpose. A diary should be maintained for day to day activities by the students.

vi. **Clinico- Pathological Conference:** Recommended at least once in three months for all post graduate students. Presentation will be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.

vii. **Clinical cases** (minimum of 40 cases) to be presented, which will be assessed by using Check lists (See Section IV).

viii. **Inter-departmental Meetings: (Vertical and Horizontal Integration)** With departments of Pathology and Radio-Diagnosis. Interesting cases and the imaging modalities should be discussed. These meetings should be held once in two months and attended by post graduate students and relevant entries must be made in the Log Book.

ix. **Teaching skills:** Post graduate students must teach under graduate students (e.g. medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by faculty, as well as students. (See mode check list section IV). Record of their participation to be kept in log book. Training of post graduate in educational science and technology is recommended.

Continuing Medical Education programmes (CME): Recommended that at least 2 state level CME program should be attended by each student in 3 years.

x. **Conferences:** Presentation of at least one paper and one in State/National conference. At least one paper must be published/accepted for publication/sent for publication to a peer reviewed indexed journal.

Dissertation: As per the University guidelines

Rotation Posting in other Department

1. Neurosurgery 4 weeks

PG Student should learn how to recognize, investigate the intracranial complications of ENT. He should observe the neurosurgical procedures for these complications.

2. Head & Neck Oncology 4 weeks

PG Student should learn the protocols for chemo and radiotherapy for head and neck cancer. He should observe extensive procedures for advanced head and neck cancers.

3. Anaesthesia 2 weeks

PG Student should learn the common anesthetic procedures, know about the properties, dosage and side effects of common anesthetic drugs, learn to intubate and manage critically ill patients.

4. Speech & Hearing 2 weeks

PG Student should learn about advanced audiological investigations particularly in relation to congenitally deaf children. He should acquaint himself with common speech therapy procedures.

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching, learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in Section IV.

The learning outcomes to be assessed should included (i) Personal Attitudes, ii) Acquisition of Knowledge, iii) Clinical and operative skills iv) Teaching skills v) Dissertation.

i) Personal Attitudes. The essential items are:

Caring attitudes,

Organizational ability,

Potential to cope with stressful situations and undertake responsibility

Trust worthiness and reliability

To understand and communicate intelligibly with patients and others

To behave in a manner which establishes professional relationship with patients and colleagues

Ability to work in team

A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) Acquisition of Knowledge: The methods used comprise of Log Book which re cords participation in various teaching, learning activities by the students. The number of activities attended and the number in which presentations are made are to be recorded. The log book should periodically be validated by the supervisors.

Journal Review Meeting (Journal Club): The ability to do literature search, in depth study, presentation skills and use of audio visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Mode1 Checklist – I, Section IV).

Seminars, Sypmosia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio visual aids are to be assessed using a checklist (See Model – I Checklist – II Section IV).

Clinico-pathological Conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

iii) Clinical Skills

Day to day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidate sincerity and punctuality, analytical ability and communication skills (see Model checklist III, Section IV).

Clinical Meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist III, Section IV).

Clinical and Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book (Table No.3, Section IV).

iv) Teaching skills: Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (see Model checklist Section IV).

v) Dissertation in the Department: Periodic presentations are to be made in the department. Initially the topic selected is to be presented before submission to the University for registration, again before finalization for critical evaluation and another before final submission of the completed work.

vi) Work diary / Log Book: Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall scrutinized and certified by the Head of the department and Head of the Institution and presented in the university practical, clinical examination.

vii) Periodic tests: The department may conduct three tests, two of them annual tests one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers practical, clinical and viva voce.

viii) Records: Records, log books and marks obtained in tests will be maintained by the head of the department and will be made available to the University or MCI.

Log Book: The log book is a record of the day to day activities of the candidate during his training. Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Scheme of Examination:

i) Theory: Total Marks -400 Marks

There shall be four question papers, each of three hours duration.

Each paper shall consist of 2 long questions carrying 20 marks each and 6 short questions carrying 10 marks each.

Total marks for each paper will be 100. Questions on recent advance may be asked in any or all the papers. Details of distribution of topics for each paper will be as follows.

Paper I:	Basic Sciences 1. Anatomy 2. Physiology 3. Other basic science topics covered in syllabus	100 marks
Paper II:	Rhinology including recent advances in syllabus	100 marks
Paper III:	Otology including recent advances	100 marks
Paper IV:	Laryngology and pharyngology & Head and Neck Surgery including recent advances	100 Marks

Note: The distribution of chapters, topics shown against the papers are suggestive only.

ii) Clinical: Total Marks - 400 marks

There shall be one long case and three short cases to be examined and presented by each candidate.

Type of cases

Long case	1	120 marks
Short cases	3 (60x3)	180 marks

iii) Viva voce 100 marks

1) **Viva – Voce Examination** : (80 marks)
   All examiners will conduct viva-voce conjointly on candidates comprehension analytical approach, expression and interpretation of data. It includes all components of course contents. In addition candidates may be also be given case reports, charts, gross specimens, Histo-pathology slides, X-rays, ultrasound, CT scans images, Temporal bone dissection etc, for interpretation will be asked. It includes discussion on dissertation also.

2) **Pedagogy Exercise** : (20 marks)
   A topic be given to each candidate in the beginning of clinical examination. He/she is asked to make a presentation on the topic for 8-10 minutes.

Max. Marks	Theory	Clinical	Viva Voce	Grand Total
	400	300	100	800

Books: (Latest Editions of the following)

i. Scott Brown's Text book of Otolaryngology. 8th Edn. Publishers: Butterworth & Co Ltd
ii. Cummings otolaryngology, Head & Neck Surgery. 5th Edn.Publishers: Mosby
iii. Rob & Smith; Operative Surgery. Publishers: 4th Edn. Butterworth - Heinemann
iv. Paparella, Otolaryngology. Publishers: W B Saunders Co.
v. Logan & Turner-Diseases of ENT. Publishers: Wright/Verghese & co
vi. Shambaugh- Surgery of the Ear. 6th Edn. Publishers: W B Saunders Co.
vii. Ballenger- Laryngology. Publishers: 17th Edn. Williams & Wilkins
viii. GeraldEnglish-Otolaryngology.Publishers:Lippencott-Roven, Philadelphia/New york
ix. Stammberger- Endoscopic Sinus Surgery. Publishers: W.B.Saunders Co.
x. Stell & Maran- Head & Neck Surgery. 5th Edn. Publishers: Oxford University Press
xi. Eugene Meyers-Head & Neck Surgery. Publishers: W.B.Saunders Co
xii. David.W.Kennedy-Diseases of the Sinuses, Diagnosis and management , 2001

Journals:

1) The Laryngoscope – Loppincott Williams & William
2) Indian Journal of Otolaryngology – AOI
3) Annals of Otology , Rhinology , Laryngology – Annals Publishing Co
4) Archives of Otolaryngology
5) British Journal of Otorhinolaryngology
6) Indian Journal of Otology
7) Recent advances in Otorhinolaryngology – MOSBY
8) The Otolaryngology Clinics of North America – WB Saunders Company

DIPLOMA IN OTORHINOLARYNGOLOGY (DLO)

Goal:

The postgraduate course, M.S(Otolaryngology) should enable a medical graduate to become a competent specialist, acquire knowledge and skills in educational technology for teaching medical, dental and health sciences and conduct research in bio-medical science.

The MS course in Otolaryngology is a three year integrated course after satisfactory completion of the course the candidate shall be fully conversant with theory and practical aspects of otolaryngology and be able to practice otolaryngology completely, confidently and safely in the community that he/she serves.

Objectives

Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy.
Who shall have mastered most of the competencies, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system.
Who shall be aware of the contemporary advances and developments in Otorhinolaryngology.
Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology
Who shall have acquired the basic skills in teaching the medical and paramedical students.
Continue to evince keen interest in learning and teaching Otolaryngology whether he is in a teaching institution or is a practicing surgeon.

Specific Learning Objective:

The following objectives are laid out to achieve the goals of the course. These objectives are to be achieved by the time the candidate completes the course. The Objectives may be considered under the subheadings.

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. Human values, Ethical practice and Communication abilities

Knowledge:

- Demonstrate understanding of basic sciences relevant to this specialty.
- Describe aetiology, pathophysiology, principals of diagnosis and management of common problems including emergences, in adults and children.
- Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion.
- Describe common malignancies in the country and their management including prevention.
- Identify social, economic, environmental and emotional determinants in a given case, and take them into account for planning therapeutic measures.
- Recognize conditions that may be outside the area of his specialty , competence and to refer them to the proper specialties.
- Update oneself by self study and by attending course, conferences and seminars relevant to the specialty.
- Teach and guide his team, colleagues and other students.
- Undertake audit, use information technology tools and carry out research, both basic and clinical, with the aim of publishing his work and presenting his work at various scientific fora.

Skills:

- Take a proper clinical history, examine the patients, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis of various ailments in region.
- Perform common operative procedures in Otorhinolaryngology.

- Provide basic and advances life saving support services (BLS & ALS) in emergency situations.
- Undertake complete patient monitoring including the preoperative and post operative care of the patient.
- Should be able to perform OPD procedures; first observe the procedure, then do it under supervision of a teacher and then perform it independently.

Human Values, Ethical practice and Communication abilities

- Adopt ethical principles in all aspects of his/her practice. Professional honesty and integrity are to be fostered. Care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
- Provide leadership qualities.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

Course Contents:

i) Theory

1. *Basic sciences*
    - Evolution of Otorhinolaryngology, Documentation of Patient information, Statistical Analysis, Publication Methodology, Research avenues in Otorhinolaryngology.
    - Medicolegal aspects of ENT
    - Anatomy of the ear
    - Physiology of hearing & equilibrium
    - Anatomy of nose and paranasal sinuses
    - Anatomy of pharynx , oesophagus , deglutition

- Anatomy of larynx and tracheobronchial tree
- Physiology of respiration
- Physiology of generation of speech.
- Surgical anatomy of skull base , cranial nerves,
- Imaging and radiology pertaining to ear, nose and throat (ENT)
- Knowledge of immunology and microbiology as regards ENT
- Radiotherapy and chemotherapy in head & neck cancers
- Wound healing , principles of laser surgery
- Basic of anaesthesia and intensive care in relation to ENT
- Through knowledge of anatomy of head and neck region including thyroid, neck spaces and salivary glands
- Physiology of smell
- HIV in ENT
- Computer navigation and robotic surgeries in ENT
- Pharmacology in ENT.

2. Audiology

Brief Knowledge of Acoustics, Diagnostic Audiometry, Diagnostic Testing of Vestibular System, Epidemiology, Prevention, Rehabilitation of Balance and Hearing Disorders, Hearing Aids, Cochlear Implants

3. Otology

- Diseases Of External Auditory Canal
- Diseases of Middle Ear – Acute Suppurative Otitis Media, CSOM.
- Complications Of CSOM
- Plastic Surgery Of Ear
- Otosclerosis
- SN Loss In Adults And Children
- Vertigo, Meniere's Disease
- Ototoxicity
- Tumours: Vestibular Schwannoma, Tumours Middle Ear Cleft, Glomus Jugulare

- Disorders of Facial Nerve
- Cochlear Implants.

4. Laryngology

- Acute and Chronic Infections of Oral Cavity, Pharynx, Tonsils and Larynx
- Trauma And Stenosis of Larynx
- Management of Obstructed Airway and Tracheotomy
- Voice lab, acoustic analysis, videolaryngoscopy and videostroboscopy for assessment and Disorders of Voice
- Neurological Affections of Pharynx and Larynx
- Pharyngeal Pouch
- Tumours of Larynx
- Angiofibroma and Nasopharyngeal Lesions
- Tumours of Oropharynx and Lymphoma Head and Neck
- Tumours of Hypopharynx
- Benign Diseases of The Neck
- The Thyroid Gland and Disorders

5. Rhinology

- Congenital anomalies of the nose and surgical management
- Disorders and trauma of facial skeleton
- Disorders and nasal septum
- CSF rhinorrhoea
- Epistaxis
- Snoring and sleep apnea
- Chronic granulomas of nose and PNS
- The orbit in relation to ENT
- Transphenoidal hypophysectomy
- Overview of facial pain and headache

ii) Practical, Clinical

Mandatory:

Cadaver Dissection of Head and Neck

10 temporal bone (cadaver) dissection which includes

1. Cortical mastoidectomy, Stapedectomy
2. MRM and Radical mastoidectomy
3. Facial nerve decompression
4. Post typmanotomy
5. Labyrinthectomy
6. Endolymphatic sac decompression
7. Traslarbyrinthine approach to IAM

iii) Essential list Surgical Procedures

Following procedures are classified as: a) to be done independently (PI)

b) To assist a senior specialist, consultant (PA)

c) To wash and observe the procedure (O)

Otology

To be done independently (PI)

Cortical Mastoidectomy – 3 cases

Modified Radical Mastoidectomy /radical Mastoidectomy-2 cases

Myringoplasty-2 cases

Myringotomy & Grommet Insertion- 2 cases

To assist a senior specialist, consultant (PA)

Ossiculoplasty

Facial N Decompression

Stapedectomy (PA, O)

Rhinology

To have done independently (PI)

- Reduction of fracture nasal bones – 2 cases
- SMR / Septoplasty – 5 cases
- Diagnostic nasal endoscopy -5 cases
- FESS a) Uncinectomy -2 case
  b) Polypectomy - 2 case
  c) Anterior ethomoidal cell clearance – 2 case
  d) Middle meatal antrostomy – 2 case
- Caldwel Luc – 1 case
- Antral lavage – 3 cases

To assist or observe:

- FESS – Posterior. Ethmoid , sphenoid , frontal sinus surgery
- Maxillofacial surgeries
- External operations of frontoethmoid sinus
- Maxillectomy - Total
  - Partial
- Endoscopic DCR
- Rhinoplasty

Laryngology Head and Neck

To have done independently (PI)

- Tracheostomy – 5 cases
- Tonsillectomy - 5 cases
- Adenoidectomy - 5 cases
- DL Scopy - 5 cases
- Oesophagoscopy – Upper oesophagus foreign body removal - 4 cases
- I&D Peritonsillar abscess-3cases

To assist or observe

- Bronchoscopy
- Total, Partial Laryngectomy
- Block dissections of neck

d) To wash and observe a senior (O)

- Thyroid surgery
- Salivary gland surgery
- Microlaryngeal surgery
- Deep neck space abscess
- Navigation surgery

- Should be able to perform OPD procedures; first observe the procedure, then do it under supervision of a teacher and then perform it independently. The list includes:

  -Ear syringing

  -Repair of ear lobe tear

  -Removal of foreign bodies from ear and nose

  Dressing of wounds

  -Diagnostic Nasal Endoscopy

  -Otomicroscopy

  -Videolaryngoscopy

  -Videostroboscopy

  -Suction Clearance of ears

  -Anterior Nasal Packing

  -Removal of Nasal Packs

  -Nasal Douche

  -Antral Lavage

  -Removal of maggots

  -Chemical and Electrical cautery of small nasal bleeders

-I&D of peritonsillar abscesses

-Closure of minor wounds

Teaching and Learning Activities:

A candidate pursuing the course should work in the institution as a full time student. No candidate should be permitted to run a clinic, laboratory, nursing home while studying postgraduate course. Each year should be taken as a unit for the purpose of calculation of attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself, herself from work without valid reasons.

A list of teaching and learning activities designed to facilities students to asquire essential knowledge and skills outlined in course contents is given below.

1. **Lectures:** Lectures are to be kept to a minimum. They may however, be employed for teaching certain topics. Lectures may be didactic or integrated.
   a) **Didactic Lectures:** Recommended for selected common topics for post graduate students of all specialties. Few topics are suggested as examples.
      1) Bio-statistics
      2) Use of library
      3) Medical code of Conduct and medical Ethics
      4) National Health and Disease Control Programmes
      5) Communication Skills etc.

      These topics may preferably taken up in the first few weeks of the 1st year.

   b) **Integrated Lectures:** These are recommended to be taken by multidisciplinary teams for selected topics, e.g. Jaundice, Diabetes mellitus Thyroid etc.
2. **Journal Club:** Recommended to be held once a week. All the PG students are expected to attend actively participate in discussion and enter in the Log Book relevant details. Further, every candidate must make a presentation from the allotted journal (s), selected articles at least three times a year and a total of 6 seminar presentations in two years. The

presentations would be evaluated using check lists and would carry weightage for internal evaluation. (See checklist in Section IV) a time table with names of the student and the moderator should be announced in advance.

3. **Subject Seminar:** Recommended to be held once a week. All the PG students are expected to attend and actively participate ion discussion and enter in the Log Book relevant details Further, every candidate must present on selected topics as least four times a year and a total of 12 seminar presentations in three years. The presentations would be evaluated using check lists and would carry weightage for internal assessment (Sec Checklist in Section IV). A timetable for the subject with names of the student and the moderator should be announced in advance.
4. **Out Patient Clinic**
5. **Ward Rounds:** Ward rounds may be service or teaching rounds Service Rounds : Postgraduate and Interns should do every day for the care of the patients. Newly admitted patients should be worked up by the PGs and presented to the seniors the following day. Teaching Rounds: Every unit should have 'grand rounds' for teaching purpose. A diary should be maintained for day to day activities by the students.
6. **Clinico-pathological Conference:** Recommended at least once in three months for all post graduate Students. Presentation be done by rotation. If cases are not available due to lack of clinical postmortems, it could be supplemented by published CPCs.
7. **Clinical cases** (minimum of 20 cases) to be presented, which will be assessed by using Check lists (See section IV)
8. **Inter-departmental Meetings :(Vertical and Horizontal Integration):** With departments of Pathology and Radio-Diagnosis. Radio-diagnosis: Interesting cases and the imaging modalities should be discussed. These meetings should be attended by post graduate students and relevant entries must be made in the Log Book.
9. **Teaching skills**: Post graduates must teach under graduate students (e.g. medical, nursing) be taking demonstrations, bed side clinics, tutorials, lectures etc. assessment is made using a checklist by surgery faculty, as well students. (see mode check list chapter IV) record of their participation be kept in log book. Training of post graduate in educational science and technology is recommended

10. **Video Session**
11. **Continuing medical Education Programmes (CME):** Recommended that at least 2 state level CME Programmes should be attended by each student in 2 years
12. **Conferences:** Presentation of at least one paper and one poster in State/National conference.

Rotation Posting in other Department

1. Neurosurgery 4 weeks

PG Student should learn how to recognize, investigate the intracranial complications of ENT. He should observe the neurosurgical procedures for these complications.

2. Anaesthesia 2 weeks

PG Student should learn the common anesthetic procedures, know about the the properties, dosage and side effects of common anesthetic drugs, learn to intubate and manage critically ill patients.

3. Speech & Hearing 2 weeks

PG Student should learn about advanced audiological investigations particularly in relation to congenitally deaf children. He should acquaint himself with common speech therapy procedures.

Monitoring Learning Progress

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only also helps teachers to evaluate students, but also students to evaluate themselves. The monitoring be done by the staff of the department based on participation of students in various teaching, learning activities. It may be structured and assessment be done using checklists that assess various aspects. Checklists are given in Section IV.

The learning outcomes to be assessed should included (i) Personal Attitudes, ii) Acquisition of Knowledge, iii) Clinical and operative skills iv) Teaching skills.

i) Personal Attitudes. The essential items are:

Caring attitudes

Organizational ability

Potential to cope with stressful situations and undertake responsibility

Trust worthiness and reliability

To understand and communicate intelligibly with patients and others

To behave in a manner which establishes professional relationship with patients and colleagues.

Ability to work in team

A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items quire a degree of subjective assessment by the guide, supervisors and peers.

ii) Acquisition of Knowledge: The methods used comprise of Log Book which cords participation in various teaching, learning activities by the students. The number of activities attended and the number in which presentations are made are to be corded. The log book should periodically be validate by the supervisors. Some of the activities are listed.

Journal Review Meeting (Journal Club): The ability to de literature search in depth body presentation skills and use of audio – visual aids are to be assessed. The assessment is made by faculty members and peers attending the meeting using a checklist (see Mode1 Checklist – I, Section IV).

Seminars, Symposia: The topics should be assigned to the students well in advance to – facilitate in depth study. The ability to do literature search, in depth study presentation ills and use of audio – visual aids are to be assessed using a checklist (See Model – I Checklist – II Section IV).

Clinico-pathological Conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

iii) Clinical Skills

Day to day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidate sincerity and punctuality, analytical ability and communication skills (see Model checklist III, Section IV).

Clinical Meetings: Candidates should periodically present cases to his peers and faculty embers. This should be assessed using a check list (see Model checklist IV Section IV).

Clinical and Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book (Table No.3, Section IV).

iv) Teaching skills: Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (see Model checklist v, Section IV).

vi) Work diary / Log Book: Every candidate shall maintain a work diary and record his/her participation in the training Programmes conducted by the department such as journal reviews, seminars etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall scrutinized and certified by the Head of the department and Head of the Institution and presented in the university practical, clinical examination.

vii) Periodic tests: The department may conduct three tests, two of them annual tests one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers practical, clinical and viva voce.

viii) Records: Records, log books and marks obtained in tests will be maintained by the head of the department and will be made available to the University or MCI.

Log Book: The log book is a record of the day is day activities of the candidates during his training, Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programmed of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried by the candidate.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases of default the departmental committee may recommend that defaulting candidate be withheld from appearing the examination, if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right.

Scheme of Examination:

i) Theory

There shall be three question papers, each of three hours duration. Each paper shall consist of two long questions carrying 20 marks each and 6 short questions carrying 10 marks each. Total marks for each paper will be 100. Questions on recent advances may be in any or all the papers. Details of distribution of topics for each paper will be as follows:

Paper I:	Rhinology including basic sciences and recent advances	100 marks
Paper II:	Otology including basic science and recent advances	100 marks
Paper III:	Laryngology and pharyngolaryngology &	100 marks
	Broncho oesophagology including basic science and	
	Recent advances	

Note: The distribution of chapters, topics shown against the papers are suggestive only.

ii) Clinical:

There shall be one long case and two short cases to be examined and presented by each candidate.

Type of cases

Long case	1	100 marks
Short cases	2 (50x2)	100 marks

iii) Viva voce

3) Viva – Voce Examination : (100 marks)

All examiners will conduct viva-voce conjointly on candidates comprehension analytical approach, expression and interpretation of data. It includes all components of course contents. In addition candidates may be also be given case reports, charts, gross specimens, Histo pathology slides, X-rays, ultrasound, CT scans images, Temporal bone dissection etc, for interpretation will be asked. It includes discussion on dissertation also.

Maximum marks for	Theory	Practical	Viva	Grand Total
D.L.O.	300	200	100	600

Books: (Latest Editions of the following)

i. Scott Brown's Text book of Otolaryngology. Publishers: Butterworth & Co Ltd
ii. Cummings otolaryngology, Head & Neck Surgery. Publishers: Mosby
iii. Rob & Smith – Operative Surgery. Publishers: Butterworth - Heinemann
iv. Logan & Turner-Diseases of ENT. Publishers: Wright/Verghese& Company
v. Shambaugh- Surgery of the Ear. Publishers: W B Saunders Co.
vi. Ballenger- Laryngology. Publishers: Williams & Wilkins

vii. GeraldEnglish-Otolaryngology.Publishers:Lippencott-Roven, Philadelphia/New york

viii. Stammberger- Endoscopic Sinus Surgery. Publishers: W.B.Saunders Co.

ix. Stell & Maran- Head & Neck Surgery. Publishers: Oxford University Press

Journals:

1) The Laryngoscope – Lippincott Williams & William
2) Indian Journal of Otolaryngology – AOI
3) Annals of Otology , Rhinology , Laryngology – Annals Publishing Co
4) Archives of Otolaryngology
5) British Journal of Otorhinolaryngology
6) Indian Journal of Otology
7) Recent advances in Otorhinolaryngology – MOSBY
8) The Otolaryngology Clinics of North America – WB Saunders Company

SECTION - III

MEDICAL ETHICS & MEDICAL EDUCATION

Sensitization and Practice

Introduction

There is now a shift from the traditional individual patient, doctor relationship, and medical care. With the advances in science and technology and the needs of patient, their families and the community, there is an increased concern with the health of society. There is a shift to greater accountability to the society. Doctors and health professionals are confronted with many ethical problems. It is, therefore necessary to be prepared to deal with these problems. To accomplish the Goal (i), General Objectives (ii) stated in Chapter II (pages 2.1 to 2.3), and develop human values it is urged that **ethical sensitization** be achieved by lectures or discussion on ethical issues, clinical case discussion of cases with an important ethical component and by including ethical aspects in discussion in all case presentations, bedside rounds and academic postgraduate programs.

Course Contents

1. Introduction to Medical Ethics

   What is Ethics?
   What are values and norms?
   Relationship between being ethical and human fulfillment
   How to form a value system in one's personal and professional life
   Heteronymous Ethics and Autonomous Ethics
   Freedom and personal Responsibility

2. Definition of Medical Ethics
   Difference between medical ethics and bio-ethics
   Major Principles of Medical Ethics 0
   Beneficence = fraternity
   Justice = equality
   Self determination (autonomy) = liberty

3. Perspective of Medical Ethics
   The Hippocratic Oath
   The Declaration of Helsinki
   The WHO Declaration of Geneva
   International code of Medical Ethics (1993)
   Medical Council of India Code of Ethics

4. Ethics of the Individual
   The patient as a person
   The Right to be respected
   Truth and confidentiality
   The autonomy of decision
   The concept of disease, health and healing
   The Right to health
   Ethics of Behavior modification
   The Physician – Patient relationship
   Organ donation

5. The Ethics of Human life
   What is human life?
   Criteria for distinguishing the human and the non-human
   Reasons for respecting human life
   The beginning of human life
   Conception, contraception
   Abortion
   Prenatal sex-determination
   In vitro fertilization (IVF), Artificial Insemination by Husband (AIH)
   Artificial Insemination by Donor (AID)
   Surrogate motherhood, Semen Intra fallopian Transfer (SIFT),
   Gamete Intra fallopian Transfer (GIFT), Zygote Intra fallopian Transfer (ZIFT),
   Genetic Engineering

6. The family and society in Medical Ethics
   The Ethics of human sexuality
   Family Planning perspectives
   Prolongation of life
   Advanced life directives – The Living Will
   Euthanasia
   Cancer and Terminal Care

7. Profession Ethics
   Code of conduct
   Contract and confidentiality
   Charging of fees, Fee-splitting
   Prescription of drugs
   Over-investigating the patient

Low – Cost drugs, vitamins and tonics
Allocation of resources in health cares
Malpractice and Negligence

8. Research Ethics
   Animal and experimental research / humanness
   Human experimentation
   Human volunteer research – Informed Consent
   Drug trials\
   ICMR Guidelines for Ethical Conduct of Research – Human and Animal
   ICH / GCP Guidelines
   Schedule Y of the Drugs and Cosmetics Act.

9. Ethical work -up of cases
   Gathering all scientific factors
   Gathering all human factors
   Gathering value factors
   Identifying areas of value – conflict, setting of priorities,
   Working our criteria towards decisions

Recommended Reading

1. Francis C. M., **Medical Ethics**, 2nd Ed, 2004Jaypee Brothers, Bangalore/-
2. Ethical guidelines for biomedical research on human participants, ICMR publication 2006
3. Santosh Kumar: the elements of research, writing and editing 1994, Dept of Urology, JIPMER, Pondicherry
4. Srinivas D.K etal, Medical Education Principles and Practice, 1995, National Teacher Training Centre, JIPMER, Pondicherry
5. Indian National Science Academy, Guidelines for care and use of animals in scientific Research, New Delhi, 1994
6. International committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl G Med 1991
7. Kirkwood B.R, Essentials of Medical Statistics, 1st Ed.,Oxford: Blackwell Scientific Publications 1998
8. Mahajan B.K. Methods in bio statistics for medical students, 5th Ed, New Delhi, Jaypee, Brothers Medical Publishers, 1989
9. Raveendran, B. Gitanjali: A Practical approach to PG dissertation, New Delhi, Jaypee Publications, 1998.
10. John A Dent. Ronald M Harden, A Practical guide for medical teacher, 4th Edition, Churchill Livingstone, 2009.
11. Tejinder Singh Anshu, Principles of Assessment in Medical Education, Jaypee brothers

12. Dr. K.Lakshman, A Hand Book on Patient Safety, RGUHS & Association of Medical Consultants, 2012
13. Bernard Mogs, Communication skills in health & social care, 3rd Edition, (S) SAGE, 2015
14. Manoj Sharma , R. Lingyak Petosa, Measurement and Evalution for Health Educators, Jones & Bartlett Learning.
15. David E. Kern, Particia A, Thomas Mark T, Hughes, Curriculum Development for Medical Education. A six-step approach, The Johns Hopkins University press/Baltimore.
16. Tejinder Singh Piyush Gupta Daljit Singh, Principles of Medical Education (Indian Academy of Paediatrics), 4th Edition, Jaypee Brothers, 2013.
17. Robert Reid, Torri Ortiz Linenemann, Jessica L.Hagaman, Strategy Instruction for Students with learning disabilities, 2nd Edition, The Guilford Press London.
18. Lucinda Becker Pan Demicolo, Teaching in higher education, (S) SAGE, 2013.
19. C.N. Prabhakara, Essential Medical Education (Teachers Training), Mehta publishers.
20. Tejinder Singh Piyush Gupta, Principles of Evaluation & Research for health care programmes, 4th Edition, IAP National Publication House (Jaypee Brothers).
21. R.L.Bijlani, Medical Research, Jaypee Brothers, 2008
22. Stephen Polgar Shane A Thomas, Introduction to Research in the Health Sciences, Churchill Livingstone Elsevier, 2013.
23. Amar A,Sholapurkar. Publish & Flourish -A practical guide for effective scientific writing, Jaypee Brothers, 2011
24. Charles R.K.Hind, Communication Skills in Medicine, BMJ, 1997.

Section IV

Format of Model Check List

Check List-I.

MODEL CHECK-LIST FOR EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Student: _____

Name of the Faculty/Observer: _____ Date: _____

Sl No	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Article chosen was					
2.	Extent of understanding of scope & objectives of the paper by the Candidate					
3.	Whether cross references have been consulted					
4.	Whether other relevant publications consulted					
5.	Ability to respond to questions on the paper/subject					
6.	Audio-Visual aids used					
7.	Ability to defend the paper					
8.	Clarity of presentation					
9.	Any other observation					
	Total Score					

Check list-II

MODEL CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS

Name of the Student: _____

Name of the Faculty/Observer: _____ Date: _____

Sl. No.	Items for observation during presentation	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Whether other relevant publications consulted					
2.	Whether cross references have been consulted					
3.	Completeness of Preparation					
4.	Clarity of Presentation					
5.	Understanding of subject					
6.	Ability to answer questions					
7.	Time scheduling					
8.	Appropriate use of Audio-Visual aids					
9.	Overall performance					
10.	Any other observation					
	Total Score					

Check List-III

MODEL CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD /OPD

(**To be completed once a month by respective Unit Heads including posting in other departments)**

Name of the Student _____

Name of the Unit Head _____ Date: _____

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Regularity of attendance					
2.	Punctuality					
3.	Interaction with colleagues and supportive staff					
4.	Maintenance of case records					
5.	Presentation of cases during rounds					
6.	Investigations work up					
7.	Beside manners					
8.	Rapport with patients					
9.	Counselling patient's relatives for blood donation or Postmortem and Case follow up.					
10.	Over all quality of Ward work					
	Total Score					

Check List-IV

EVALUATION FORM FOR CLINICAL PRESENTATION

Name of the Student _____

Name of the Unit Head _____ Date: _____

Sl. No.	Points to be considered	Poor 0	Below Average 1	Average 2	Above Average 3	Very Good 4
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of Presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					
8.	Whether any major signs missed or misinterpreted					
9.	Diagnosis: Whether it follows logically from history and findings					
10.	Investigations required * Complete					
	*Relevant order					
	*Interpetation of investigations					
11.	Ability to react of questioning Whether it follows logically from history and findings					
12.	Ability to defend diagnosis					
13.	Ability to justify differential diagnosis					
14.	Others					
	Grand Total					

Check List-V

MODEL CHECK LIST FOR EVALUATION OF TEACHING SKILL PRACTICE

Sl. No.		Strong Point	Weak Point
1.	Communication of the purpose of the talk		
2.	Evokes audience interest in the subject		
3.	The introduction		
4.	The sequence of ideas		
5.	The use of practical examples and/or illustrations		
6.	Speaking style (enjoyable,monotonous,etc.,specify)		
7.	Attempts audience participation		
8.	Summary of the main points at the end		
9.	Asks questions		
10.	Answers questions asked by the audience		
11.	Rapport of speaker with his audience		
12.	Effectiveness of the talk		
13.	Uses A.V. aids appropriately		

Check List-VI

MODEL CHECK LIST FOR DISSERTATION PRESENTATION

Name of the Student: _____

Name of the Faculty: _____ Date: _____

Sl. No.	Points to be considered divine	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1.	Interest shown in selecting a topic					
2.	Appropriate review of literature					
3.	Discussion with guide & other faculty					
4.	Quality of Protocol					
5.	Preparation of proforma					
	Total Score					

Check List-VII

CONTINUOUS EVALUATION OF DISSERTATION WORK BY GUIDE/CO-GUIDE

Name of the Student: _____

Name of the Faculty: _____ Date: _____

Sl. No.	Items for observation during presentations	Poor	Below Average	Average	Good	Very Good
1.	Periodic consultation with guide/co-guide					
2.	Regular collection of case material					
3.	Depth of analysis/discussion					
4.	Departmental presentation of findings					
5.	Quality of final output					
6.	Others					
	Total Score					

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