SYLLABUS

Broad outline of theoretical, clinical and practical courses.

1. Study of principles of routine and special techniques used for histopathology including principles of histochemistry, Immunochemistry, applied and theoretical biochemical basis of histochemistry as related to oral pathology.

2. Advanced histological and histopathological study of dental and oral tissues including embryonic considerations, clinical considerations, biology, histology, Pathology, prognosis and management of oral oncology, concepts of oral pre-malignancy.

3. Study of special and applied pathology of oral tissues as well as relation of local pathologic and clinical findings to systemic conditions.

4. Oral microbiology and their relationship to various branches of dentistry.

5. Oral microbiology affecting hard and soft tissues. Study of clinical changes and their significance to dental and oral diseases as related to oral pathology.

6. Forensic odontology.

7. Inter-institutional postings such as cancer hospital, dermatology clinics, regional HIV detection centres, sophisticated instrumentation centres for electron microscopy and other techniques.

8. Maintenance of records of all postgraduate activities.


I APPLIED ANATOMY AND HISTOLOGY

• Muscles of Mastication
• Temporo Mandibular Joint
• Salivary glands
• Muscles of Facial expression
• Bronchial arches
• Tongue
• Infra temporal fossa
• Paranasal sinuses
• Pharynx and Larynx
• Hard and Soft palate
• Lateral wall of nose
• Anterior and posterior triangles
• Trigeminal, Facial, Glossopharyngeal and Hypoglossal nerve.

APPLIED ORALANATOMY

• Structure and relations of the alveolar process and edentulous mouth
• Anatomy of local anesthesia
• Propagation of dental infections
• Development and Growth of Jaw bones
• Development of Teeth and Supporting structures

**ORAL HISTOLOGY**

• Periodontium
• Oral Mucous Membrane in health and disease
• Pulp periodontal complex
• Occlusion and contract areas
• Eruption of Teeth
• Shedding and Eruption
• Innervation of dentin
• Role of Epithelium in development in tooth.

### II APPLIED GENERAL AND ORAL PHYSIOLOGY AND BIOCHEMISTRY

• Mastication and deglutition
• Saliva
• Food and nutrition
• Metabolism of carbohydrates, fats and proteins
• Vitamins and Minerals
• Fluid and electrolyte balance
• Pain, Pathway and mechanism
• Blood : Composition and functions
• Blood : Clotting mechanism, Hemorrhage
• Blood:
  • Blood : Volume
• Cardio vascular homeostasis, Heart sounds
• Pulse and Blood pressure
• Dynamics of blood flow
• Respiratory system: Normal physiology and variations in health and disease, Asphyxia, Hypoxia, artificial respiration
• Endocrinology: Thyroid, parathyroid, adrenals, growth hormone, sex hormone and pregnancy
• Endocrine regulation of blood sugar Biochemistry of Oral tissues

### III. APPLIED PHARMACOLOGY

• Definition, scope and relation to other branches of Medicine.
  Recent facts pertaining to General pharmacology viz. Mode of action, bio-assay, standardization etc.

**Chemo therapy of Bacterial Infections**

a) Sulfonamides
b) Antibiotics

**Anesthetics:**

- a) Local
- b) General
  - Analgesics and anti-inflammatory drugs.
  - Hypnotic, Tranquilizers and antipretics

**Important Hormones:**

- a) ACTH
- b) Cortisone
- c) Insulin and other Oral antidiabetics.
  
  Drug addiction and tolerance
  
  Important pharmacological agents in connection with
  
  Autonomic nervous system viz:

- a) Adrenaline
- b) Noradrenaline
- c) Atropine
  
  Immune = suppressive drugs
  
  Brief mention of hypertensive and hypotensive drugs.
  
  Emergency drugs in dental practice
  
  Latest drugs.

IV **APPLIED GENERAL AND ORAL PATHOLOGY AND MICROBIOLOGY**

- Applied General Pathology  Blood dyscrasias, Bleeding
- Neoplasia  Neoplasia
- Cellular Metabolism  Disorders
- Inflammation and repair
- Degeneration and necrosis
- Vascular changes

**APPLIED ORAL PATHOLOGY**

- Developmental disturbances of oral and dental structures
- Oral tumors and tumor – like conditions Red and White lesions
- Oral manifestations of nutritional and metabolic diseases
- Diseases of blood and blood forming organs
- Cysts – Clinico pathological aspects
- Neoplasms and non-neoplastic diseases of salivary glands

**MICROBIOLOGY**

- Elementary knowledge of bacterial
- Staphylococci, Streptococci, Actinomyccs
- M. Tuberculosis, Treponema palladium, Bacteriods
Viruses – Herpes, AIDS, Hepatitis
Fungi – Candida
Defense Mechanisms
Oral flora
Vaccines
R. In addition to the above subjects, there will be subjects as follows for internal assessment to be completed two months before part I University Examination:
1. Principles of Bio-Statistics
2. Principles of Research Methodology

I. Syllabus of Principles of Biostatics
1. Introduction
2. Collection, classification and presentation
3. Averages (Mean, Median, Mode)
4. Dispersion, Skewness and Kurtosis
5. Correlation
6. Regression
7. Binomial, Poisson and Normal Distributions
8. Tests of significance (Large samples)
9. Measures of morbidity, fertility, morality and survival
10. Clinical trials

2. SELECTED REFERENCES
1. “A short-text book of Medical Statistics” – Sir Austin Brandford Hill (Holder and Stoughton, Kent)
8. “Elements of Medical Statistics” – J.V. Smart (Staples Press London)
3. **PRINCIPLES OF RESEARCH METHODOLOGY**

Core Curriculum:

1. What is Research?
2. What is Research Methodology?
3. Types of Research:
   a) Basis of Fundamental Research
   b) Applied
   c) Clinical
   d) Experimental
4. How does one select a subject for Research?
   a) Intuition
   b) Intuition based on experience
   c) Knowledge of subject and questions that one asks of oneself
   d) Areas of unknown, Aspects that have not been explored. Questions that are Unanswered
   e) Survey of relevant literature, using a library
5. **How does one set about a Research Problem?**
   a) List the aims and objectives
   b) What is there in the literature that has been done, is being done and remains to be undone?
      i) Retrospective Research
      ii) Prospective Research
      iii) Advantages and disadvantages of each. What will therefore be the best in the circumstances
      iv) Develop a protocol to give answers so as to give the necessary data to the light of the hypothesis
      v) Evolve a hypothesis
      vi) Advantages and disadvantages of experimental model
      vii) Develop a model especially designed to test the hypothesis and may be confirmed data.
      viii) How does the data from the experimental model fit the hypothesis? Are the conclusions comparable? Are there any other conclusions Possible?
6. **Objectivity in Research Methodology**
   a) Open trials? Bias and safeguards against it
   b) Double blind, Triple blind studies
   c) Cross over methods
7. **Quantification in Research Methodology**
   a) Instrumental Quantification Rationales and fallacies
   b) Reproducibility
   c) Scoring methods, especially to lend objectivity to subjective observation, Safeguards against subjective bias.

8. Records, Protocols and Analysis

   The logic of Research

**EXAMPLES OF SPECIAL AREAS OF RESEARCH**

   a) Clinical
   b) Experimental
   c) Histological & Morphological
   d) Histochemical
   e) Genetic and
   f) Epidemiologic studies

9. Working knowledge of computers

**SYLLABUS FOR 1ST M.D.S.**

1. **Biostatics and Research Methodology**
   Basic principles of biostatics and study as applied to dentistry and research
   Sampling and planning of health survey
   Probability, normal distribution and indicative statistics.
   Estimating population values
   Analysis of variance
   Association correlation and regression

2. **Applied Gross Anatomy of Head and Neck including Histology:**
   Nerve supply, blood supply, lymphatic drainage and venous drainage of prodental tissues
   Embryology
   Genetics
   Introduction modes of inheritance, chromosomal anomalies of oral tissues and single gene disorders.

3. **Physiology (General and oral)**
   Taste
   Calcium metabolism
   Theories of mineralization
   Hormones (Influence on growth, development and structure of oral soft and hard tissues and para oral tissues)

4. **Cleft Biology**
Cell structure and function (ultrastructural and molecular aspects) intercellular functions, cell cycle and division, cell cycle regulators, cell and cell extra cellular matrix interactions
Detailed molecular aspects of DNA, RNA, and intracellular organelles, transcription and translation and molecular biology techniques.

5. **General Histology**
Light and electron microscopy considerations of Epithelial tissues and glands, bone hematopotetic system, lymphatic system, muscle neural tissue, endocrinal system (thyroid, pituitary, parathyroid)

6. **Biochemistry:**
Methods of identification and purification
Biological oxidation
Various techniques – cell fractionation and ultra-filtration centrifugation, electrophoresis, spectrophotometry, and radioactive techniques.

7. **General Microbiology**
Definitions of various types of infections
Routes of infection and spread
Sterilization, disinfection and antiseptics
Bacterial genetics
Physiology and growth of microorganisms.

8. **Basic Immunology**
Basic principles of immunity, antigen and antibody reactions
Cell mediated immunity and humoral immunity
Immunology of hypersensitivity
Immunological basic of the autoimmune phenomena
Immunodeficiency with relevance to opportunistic infections
Basic principles of transplantation and tumor immunity

9. **Systemic microbiology/applied microbiology**
Morphology, classification, pathogen city, mode of transmission, methods of prevention, collection and transport of specimen, for laboratory diagnosis, staining methods common culture media, interpretation of laboratory reports and antibiotic sensitivity tests
Cornebactrium diphtheria
Clostridia, bacteroides and fusobacteria
**Virology:**
**Mycology:**
General properties of fungi, classification bases on disease, superficial, subcutaneous, deep opportunistic infections.
General principles of fungal infections, diagnosis rapid diagnosis method of collection of sample and examination for fungi.

10. **Oral Biology (oral and dental histology)**
Structure and function of oral, dental and paraoral tissues including their ultra structure, molecular and biochemical aspects.
Study of morphology of permanent and deciduous teeth (Lectures and practical demonstrations to be given by PG students)
11. **Basic molecular biology and techniques:**
Experimental aspects – DNA extraction, PCR, western blotting.

12. **Basic histo techniques and microscopy**
Routine hematological test and clinical significance of the same
Biopsy procedures for oral lesions
Processing of tissues for paraffin lesions
Microtome and principles of microtomy
Routine stains, principles and theories of staining techniques
Microscope principles and theories of microscopy
Light microscopy and various other types including electron microscopy
Methods of tissue preparation for ground sections decalcified sections.

**Academic activities**
Submission of synopsis of dissertation at the end of six months.
Journal clubs and seminars to be presented by every post graduate student twice a month
To attend interdepartmental meetings
To attend dental camps based on the survey to be done
Part-I year ending examination to be conducted by the college.

**BOOKS RECOMMENDED FOR 1ST YEAR M.D.S.**

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**SYLLABUS FOR 2ND M.D.S.**

1) **BIOSTATICS AND RESEARCH METHODOLOGY**

- Basic principles of biostatistics and study as applied to dentistry and research
- Collection/organization of data/measurement scales presentation of data and analysis
- Measures of variability
- Sampling and planning of health survey
- Probability, normal distribution and indicative statistics
- Estimating population values
- Tests of significance (parametric/non-parametric qualitative methods)
- Analysis of variance
- Association, correlation and regression.
**Approach**

- Didactic lectures on biostatistics and discussion on research methodology by eminent researchers.

- Two-day P.G. orientation course including general approach to PG course, library and main dissertation, journal club topic, selection and presentation, seminars, clinic-pathological meets, teaching methodology and use of audiovisual aids.

2) **APPLIED GROSS ANATOMY OF HEAD AND NECK INCLUDING HISTOLOGY**

- Temporomandibular joint

- Trigeminal nerve and facial nerve

- Muscles of mastication

- Tongue

- Salivary glands

- Nerve supply, blood supply, lymphatic drainage and venous drainage of Oro-facial tissues.

- Embryology
  
  - Development of face, palate, mandible, maxilla, tongue and applied aspects of the same.
  
  - Development of teeth and dental tissues and developmental defects of oral and maxillofacial region (Including dental tissues)

- Maxillary sinus

- Muscles of mastication & facial expression.

**Genetics:**

Introduction to modes of inheritance, chromosomal anomalies of oral tissues and single gene disorders.

**Approach**

- To be covered as didactic lectures/seminars

- Posting in department of anatomy for dissection of head, face and neck
3) **PHYSIOLOGY (GENERAL AND ORAL)**

- Saliva
- Pain
- Mastication
- Taste
- Deglutition
- Wound healing
- Vitamins (Influence on growth, development and structure of oral soft and hard tissues and para-oral tissues)
- Calcium metabolism
- Theories of mineralization
- Tooth eruption and shedding.
- Hormones (Influence on growth, development and structure of oral soft and hard tissues and para oral tissues.
- Blood and its constituents

**Approach:**

To be covered as didactic lectures

4) **CELL BIOLOGY**

- Cell structure and function (ultrastructural and molecular aspects) intercellular junctions, cell cycle and division, cell cycle regulators, cell-cell and extra cellular matrix interactions.
- Detailed molecular aspects of DNA, RNA, and intracellular organelles, transcription and translation and molecular biology techniques.

**Approach**

To be covered as seminars and didactic lecture/seminars

5) **GENERAL HISTOLOGY**
Light and electron microscopy considerations of epithelial tissues and glands, bone hematopoietic system, lymphatic system, muscle neural tissue, endocrinological system (thyroid, pituitary, parathyroid)

**Approach**

- Topics to be covered as didactic lectures/seminars
- Postings in the department of anatomy and histology for slide discussion
- Record book to be maintained

6) **BIOCHEMISTRY**

- Chemistry of carbohydrates, lipids and proteins
- Methods of identification and purification
- Metabolism of carbohydrates, lipids and proteins
- Biological oxidation
- Various techniques - cell fractionation and ultrafiltration, centrifugation, Electrophoresis, Spectrophotometry, and radioactive techniques.

**Approach**

- Topics to be covered as didactic lectures/seminars
- Postings to the department of biochemistry to familiarize with various techniques
- Record book to be maintained.

7) **GENERAL PATHOLOGY**

- Inflammation and chemical mediators, thrombosis, embolism, necrosis, repair, degeneration, shock, hemorrhage pathogenic mechanisms at molecular level and blood dyscrasias, carcinogenesis and neoplasia

**Approach**

To be covered as seminars and didactic lectures.

8) **GENERAL MICROBIOLOGY**

- Definitions of various types of infections
- Routes of infection and spread
- Sterilization, disinfection and antiseptics
- Bacterial genetics
- Physiology and growth of microorganisms

**Approach**

- To be covered as seminars and didactic lectures
- Record book to be maintained

9) **BASIC IMMUNOLOGY**

- Basic principles of immunity, antigen and antibody reactions
- Cell mediated immunity and humoral immunity
- Immunology of hypersensitivity
- Immunological basis of the autoimmune phenomena
- Immunodeficiency with relevance to opportunistic infection
- Basic principles of transplantation and tumor immunity.

**Approach:**

To be covered as didactic lectures/seminars

10) **SYSTEMATIC MICROBIOLOGY/APPLIED MICROBIOLOGY**

Morphology, classification, pathogenicity, Mode of transmission, methods of prevention, collection and transport of specimen for laboratory diagnosis, Staining methods, common culture media, interpretation of laboratory reports and antibiotic sensitivity tests.

- Staphylococci
- Streptococci
- Corynebacterium diphtheria
- Mycobacteria
- Clostridia, bacteroides and fusobacteria
- Actinomycetales
- Spirochetes

**Virology:**

**General Properties:** Structure, broad classification of virusus, pathogenesis, pathology of viral Infections

**Herpes Virus:** List of viruses included, lesions produced, pathogenesis. Latency principles and laboratory diagnosis.

**Hepatitis Virus:** List of viruses, pathogenesis and mode of infection, list of diagnostic tests, and their interpretations, methods of prevention and control.

**Human Immunodeficiency virus:** Structure with relevance to Laboratory diagnosis, type of infection, laboratory tests and their interpretation, universal precautions, specific precautions and recent in diagnosis and prophylaxis.

**Mycology**

- General properties of fungi, classification bases on disease, superficial, subcutaneous, deep opportunistic infections
- General principles of fungal infections, diagnosis rapid diagnosis method of collection of sample and examination for fungi

**Approach**

- To be covered as seminars and didactic lectures.
- Postings to the department of microbiology to familiarize with relevant diagnostic methods
- Record book to be maintained.

11) **ORAL BIOLOGY (ORAL AND DENTAL HISTOLOGY)**

- Structure and function of oral, dental and paraoral tissues including their ultra-structure, molecular and biochemical aspects.
- Study of morphology of permanent and deciduous teeth(Lecture and practical demonstrations to be given by PG students)
**Approach**

- To be covered as seminars and didactic lectures.
- Slide discussion on histological appearance of normal oral tissues.
- Record book to be maintained.

**12) BASIC MOLECULAR BIOLOGY AND TECHNIQUES**

Experimental aspects – DNA extraction, PCR, western blotting.

**Approach**

- To be covered as didactic lectures/seminars.
- Postings in centres where facilities are available for demonstration of routine molecular biology techniques.
- Record book to be maintained.

**13 BASIC HISTO TECHNIQUES AND MICROSCOPY**

- Routine hematological tests and clinical significance of the same.
- Biopsy procedures for oral lesions.
- Processing of tissues for paraffin lesions.
- Microtome and principles of microtomy.
- Routine stains principles and theories of staining techniques.
- Microscope, principles and theories of microscopy.
- Light microscopy and various other types including electron microscopy.
- Methods of tissue preparation for ground sections, decalcified sections.

**Approach**

- Topics to be covered as seminars.
- Preparation of round and decalcified sections, tissue processing, sectioning and staining.
- Record book to be maintained.
ACADEMIC ACTIVITIES:

- Submission of synopsis of dissertation at the end of six months
- Journal clubs and seminars to be presented to every post graduate student twice a month
- To attend interdepartmental meetings
- To attend dental camps based on the survey to be done
- Part I year ending examination to be conducted by the college.

SYLLABUS FOR 3RD M.D.S

ORAL PATHOLOGY

- Developmental defects of oral and maxillofacial region and abnormalities of teeth
- Dental caries (Introduction, Epidemiology, microbiology, cariogenic bacterial including properties, acid production in plaque, development of lesion, response of dentine pulp unit, histopathology, root caries, sequelae and immunology)
- Pulpal and peri-apical diseases.
- Infections of oral and para oral regions (bacterial, viral and fungal infections)
- Non-neoplastic disorders of salivary glands.
- Bone pathology
- Hematological disorders
- Physical and chemical injuries, allergic and immunological diseases
- Cysts of Oro facial region (odontogenic & non-odontogenic)
- Dermatologic diseases
- Periodontal diseases
- Oral manifestations of systemic diseases
- Facial pain and neuromuscular disorders including TMJ disorders
- Regressive alterations of teeth
CLINICAL PATHOLOGY

- Laboratory investigations. Hematology, Microbiology and Urine analysis
- Posting to clinical pathology for relevant training
- Record book to be maintained.

SPECIALIZED HISTOTECHNIQUES AND SPECIAL STAINS

Special staining techniques for different tissues.

Immunohistochemistry.

Preparation of frozen sections and cytological smears.

Approach:

Training to be imparted in the department or in other institutions having the facility

Record book to be maintained.

RECORDING OF CASE HISTORY AND CLINICO PATHOLOGICAL DISCUSSIONS:

Approach

Posting to the department of oral medicine. Diagnosis and Radiology and oral and maxillofacial surgery. Record of case histories to be maintained.

DERMATOLOGY

Study of selected mucocutaneous lesions-etiopathogenesis, pathology, clinical presentation and diagnosis.

Approach

- Posting to the dept. of Dermatology of a medical college
- Topics to be covered as seminars
- Record of cases seen to be maintained

ORAL ONCOLOGY

Detailed study including pathogenesis, molecular and biochemical changes of various tumors, tumor like lesions and premalignant lesions affecting the hard and soft tissues of oral and para-oral tissues. Tumor markers
Approach
To be covered as seminars
Posting to a cancer center to familiarize with the pathological appearances, diagnosis, radiodiagnosis and treatment modalities.

**ORAL MICROBIOLOGY AND IMMUNOLOGY**

- Normal Oral microbial flora
- Defense mechanism of the oral cavity
- Microbiology and immunology of Dental caries and periodontal diseases
- Dental caries (Introduction, epidemiology, microbiology, cariogenic bacteria including properties, acid production in plaque, development of lesion, response of dentin-pulp unit, histopathology, root caries, sequelae and immunology)
- Tumor immunology
- Infections of pulp and periapical and periodontal tissues
- Oral sepsis and bacterimia
- Microbial genetics
- Infections of oral and para oral regions (bacterial, viral and fungal infections)

Approach
To be covered as seminars

**FORENSIC ODONTOLOGY**

Legal procedures like inquest, medico-legal evidences post mortem examination of violence around mouth and neck identification of deceased individual dental importance.

Bite marks rugae patterns and lip print.

Approach
To be covered as seminars
Posting to a cancer center to familiarize with the pathological appearances, diagnosis, and radiodiagnosis and treatment modalities.
**HISTOPATHOLOGY - SLIDE DISCUSSION**

Record book to be maintained

**LABORATORY TECHNIQUES AND DIAGNOSIS**

- Routine hematological tests and clinical significance of the same
- Biopsy procedures for oral lesions
- Processing of tissues for paraffin sections
- Microtome and principles of microtomy
- Routine stains, principles and theories of staining techniques
- Microscope, principles and theories of microscopy
- Light microscopy and various other types including electron microscopy
- Methods of tissue preparation for ground sections, decalcified sections
- Special stains and staining techniques for different tissues
- Immunohistochemistry
- Preparation of frozen sections and cytological smears

**OTHER TOPICS IN ORAL PATHOLOGY**

- Detailed description of diseases affecting oral mucosa, teeth supporting tissues & jaws
- Cysts of the oral & para oral regions
- Systemic diseases affecting oral cavity.

**Approach**

Seminars & slide discussions. Record notebook to be maintained. Training in histopathology slide reporting.

**EXPERIMENTAL ASPECTS OF ORAL DISEASES**

**Approach**
Posting is desirable in centers where animal experimentation is carried out to familiarize with laboratory techniques, upkeep & care of experimental animals.

**RECENT ADVANCES IN ORAL PATHOLOGY**

**Approach**

Update of knowledge in Oral Pathology through study of recent journals & Internet browsing, Journal and Group discussions.

**ACADEMIC ACTIVITIES**

- Library assignment to be submitted at the end of 6 months
- Commencement of dissertation work
- Journal clubs and seminars to be presented by every PG student
- Clinico-pathological discussions once a month by every PG student
- To attend interdepartmental meetings
- Lecture and practical classes and slide discussions to be taken for 11 BDS students in oral and dental anatomy, dental histology and oral physiology.
- Year ending examination (theory and practical) to be conducted by the college

**Syllabus for M.D.S.**

**Topics**

- Non-neoplastic disorders of salivary glands
- Bone pathology
- Physical and chemical injuries
- Allergic and immunological diseases
- Cysts of Oro facial region (odontogenic & non odontogenic)
- Oral manifestations of systemic diseases

**Approach**

To be covered as seminars
Slide discussions of the same

Record book to be maintained

**ACADEMIC ACTIVITIES**

- Completion of dissertation work and submission of the same, six months before the final examination.
- Study of journals, Internet browsing, and group discussions, to update knowledge in the recent advances in oral pathology.
- Lecture and practical demonstrations for 3rd BDS Students in oral pathology and microbiology.
- Reporting of histopathology slides.
- Journal clubs and seminars to be presented by every post graduate student twice a month.
- Clinico-pathological discussions by every student once in a month.
- To attend inter-departmental meetings.

3.1.3 FORMATIVE EVALUATION PATTERN

**MONITORING LEARNING PROGRESS**

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only 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 is done using checklists that assess various aspects. Checklists are given in section IV.
I MDS

• Module 1
• Carving of all maxillary and Mandibular teeth
• Synopsis writing for final dissertation
• Journal writing for microscope and microscopy
• Attending basic sciences lecture
• Attending basic biomedical research lecture

Module 2: All clinical hematology posting slides of Dental Anatomy and Histology

▪ Working or library dissertation
▪ Attending subject conference
▪ 5 Journal clubs
▪ 5 Seminars
▪ Preparation of ground sections of teeth & bone

II MDS

Module 1

• Clinical hematology posting :- Completion of oral path journal, Dental Anatomy & Histology
• General Pathology.
• Attending P.G. conference with paper & poster presentation
• Submission of library dissertation

Module 2: Slides reporting exercise

:- 5 Journal clubs
:- 5 Seminars
:- 2 Slide Seminar
One article/manuscript submission
- Attending subject annual conference
- Progress report on final dissertation

III MDS

Module 1: Submission of final dissertation
- Doing IHC staining
- 5 Journal clubs
- 5 Seminars
- 3 Slide Seminar
- Slide reporting exercise

Module 2: Slide reporting & slide seminar
- Revision exercise
- Mock practical drills

3.1.4 SUMMATIVE EVALUATION PATTERN

University Examination of M.D.S

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I MDS

Paper I – Applied Basic Sciences

Paper II – Specialty Subject

Theory Paper                               Total= 100 marks

Q.1   LAQ    2x20 =40

Q.2   SAQ (attempt 6 out of 7) 6x10=60 marks

II MDS

Paper I – Applied Basic sciences

Paper II- Oral Path logy

Paper III- Laboratory Investigation

Paper IV – Essay

    Q.1 Essay (Swith 1 options)      1x100= 100 mark

III MDS

Paper I – Applied Basic sciences

Paper II- Oral Path logy

Paper III- Laboratory Investigation

Paper IV – Essay

    Q.1 Essay (with 1 options)      1x100= 100 marks