

**DETAILED SYLLABUS FOR THE POST OF CHAIR SIDE ASSISTANT
IN
MEDICAL EDUCATION SERVICE
(Cat No.395/2019)**

MODULE 1 (MARKS 10)

GENERAL ANATOMY AND HISTOLOGY

1. General structure of mucous membrane, bones, muscles, blood vessels, lymphatics, glands and nerves.
2. Blood and nerve supply in relation to face in general and teeth associated structures in particular.
3. Elementary knowledge of development of the face and jaws.
4. Muscles of mastication and facial expression.
5. Temporo- Mandibular joint.
6. Course and distribution of V, VII, and IX cranial nerves
7. Circulatory, Respiratory and Nervous System
8. Skin and organs of special senses

ORAL ANATOMY AND PHYSIOLOGY, DISEASES OF TEETH AND GUMS AND DENTAL MATERIALS

1. Bones of the skull, Maxilla and Mandible
2. Oral cavity- lips, tongue pharynx and teeth
3. Structure of teeth and surroundings
4. Dentition: temporary and permanent
5. Nerve and blood supply of teeth and other soft tissues of the oral cavity
6. Muscles of mastication and facial expression
7. Saliva and control of excessive secretion in Dental surgery
8. Dental anatomy and histology - structure, nomenclature and development of human teeth, eruption and occlusion of teeth, periodontium- structure and function.
9. Morphology of teeth.
10. Alveolar process of jaw bones

PHYSIOLOGY

1. General outlines of the physiological process of the human body.
2. General outline of CVS, CNS and endocrine glands, Special senses
3. Salivary glands, ducts and their functions
4. Composition, function of saliva.
5. Mastication, deglutition and phonation,

6. Blood - structure - function - clotting mechanism.
7. Respiratory system

PATHOLOGY AND MICROBIOLOGY (General and oral)

1. General principles of pathology - Inflammation, degeneration and repair
 2. Application of general principles of pathology of teeth and surrounding tissues.
 3. Dental anomalies, Attrition, abrasion, erosion.
 4. Oral manifestations of systemic diseases, Vitamin deficiencies and infectious diseases.
 5. Neoplasm in general.
 6. Elementary knowledge of bacteriology, asepsis, infection, immunity.
 7. Brief description of pathology and bacteriology of dental caries and gingival infections.
 8. Asphyxia
 9. Shock
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MODULE 2 (MARKS 35)

BASIC NURSING (10 marks)

1. Introduction
2. Nursing ethics
3. Health team
4. Inter Personal Relationship
5. Hospital types function
6. Admission of a patient
7. Preparing safe and comfortable environment for patient /preparation sick room
8. Bed and Bed Making
 - a. Principle of bed-making, factor to be considered in selecting and making bed,
 - b. different types of beds and their uses.
 - c. Comfort devices, position
9. Body mechanics
10. Exercises
11. Provision for rest comfort and sleep
12. Assessment of patient / Client
13. Principles and importance of assessment
14. Methods of assessment:
15. Observation, palpation, auscultation, percussion,

16. Developing skill in Observation.
17. Physical Assessment
18. Height, weight, posture, speech
19. Physiological Assessment
20. Temperature, pulse, respiration and blood pressure
21. Characteristics of normal and abnormal (T.P.R. and B.P.) and factors influencing the variations.
22. Urine stool, vomit, sputum, normal and abnormal behaviour and its deviation.
23. Collection of specimens

THERAPEUTIC NURSING CARE AND ASEPTIC PROCEDURES (10 marks)

1. Hand washing, hand scrubbing, use of mask, gown, gloves
2. Disinfection techniques, sterilization techniques.
3. Autoclaving, boiling, flaming, ultra violet rays.
4. Care and Sterilization of:
 - a) Linen, bed, mattress, floor, walls, cupboard and other articles.
 - b) Rubber goods, dressings, instruments, needles, syringes enamel articles.
5. Barrier Nursing and isolation.
6. Importance of first aid and rules of first aid.
7. Concept of emergency.
8. First Aid in Emergency situations
9. Fire, burns, fractures, accidents, poisoning, drowning, haemorrhages,
10. insect bites, foreign bodies.
11. Transportation of the injured.
12. Bandaging and splinting.
13. Hot and cold application
14. Meeting therapeutic needs
 - a. Oxygen administration
 - b. Wound healing

NURSING MANAGEMENT OF PRE & POST OPERATIVE PATIENT& FOOD AND NUTRITION (10 marks)

1. Nurse's functions in operation theatre.
2. Post-operative management – Immediate and Routine
3. Transferring patient from operation theatre.
4. Patient in recovery room.

5. Recovery from anaesthesia.
6. Assessment of common health problem
7. Community organization
8. Admission procedure to MI Room and wards
9. Manipulation of stretcher cases
10. Basic food chemistry in relation to general and oral health
11. Carbohydrates, fats, proteins, vitamins, minerals. Trace elements and water in relation to dental and oral health.
12. General food requirement for growth, maintenance and repair of the body
13. Assessment and charting of individual diet and counselling.
14. Effect of malnutrition on oral health
15. Special diet in maxillofacial injury cases

COMPUTER AND OFFICE MANAGEMENT (5 MARKS)

1. Patient reception
 2. Telephone
 3. Appointment control
 4. Daily schedule
 5. Basic filling systems
 6. Preliminary and Other Dental Procedures and Dental Office Management - Book-Keeping and Typing
 7. Knowledge of the different Dental specialties
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MODULE 3 (10 MARKS)

Sterilization& Disinfection

Definitions of various terminologies, Cleaning of instruments

Methods of sterilization and disinfection & Theatre fumigation

Infection control Personal protection, universal precautions

Waste disposal

Aim, segregation, colour coding, disposal

MODULE 4 (MARKS 10)

DISEASES OF TEETH AND GUMS

1. Dental caries
2. Pulp diseases, alveolar abscess and cellulites
3. Periodontal diseases, gingivitis/periodontitis
4. Attrition, Abrasion, Erosion and Fluorosis of teeth
5. Communicable disease

PHARMACOLOGY (MATERIA MEDICA)

General and Dental:

Brief description, nomenclature, derivation, dosage, pharmacological action and therapeutic uses of drugs, commonly used in dentistry. Antiseptic mouth washes

DENTAL EQUIPMENT AND STORES

1. Recognition and knowledge of various Dental equipment and stores used in Dental establishment
2. Organization of Dental stores, Storage, accounting and issue of Dental stores.
3. Handling and maintenance of dental items
4. Poisonous drugs-storage and labelling: Short life items and their care, turnover

DENTAL MATERIALS

General knowledge of various materials used in dentistry and their manipulation. Impression materials and model materials.

1. Dressing materials and various filling materials, temporary and permanent. Various types of fixed and removable appliances used
 2. Materials used in Maxillo facial and surgical prostheses
 3. Impression materials/disinfection
 4. Pouring of cast
 5. Chair side clinical assistance
 6. Aliginate mixing
 7. Cement mixing
 8. Filling materials
 9. General knowledge of various materials use in dentistry and their manipulation.
 10. Impression materials and model materials.
 11. Lay out of instrument trolleys for denture work.
 12. Dressing materials and various filling materials, temporary and permanent.
 13. Various types of fixed and removable appliances used
 14. Materials used in Maxillo facial and surgical prostheses
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MODULE 5 (20 MARKS)

MINOR AND MAJOR SURGICAL ASSISTANCE WITH THE CONCEPT OF B.T.L.S.

1. Fracture Mandible and Maxilla-Main characteristics
2. Maintenance of oral hygiene in fracture jaw cases and periodical attendance of maxillofacial injury cases during post op. period in ward.
3. Nutrition, feeding and transportation of fracture jaw cases
4. AIDS, Hepatitis
5. Basic Trauma Life Support
6. Personal Hygiene and Reception of patients
7. Surgery upkeep and maintenance
8. Infection control in dental practice
9. Sterilization of instruments including its cleaning, trays dressings and various other items used in dental surgery. Asepsis and antiseptic methods used.
10. Care of patients in Shock and Syncope in dental chair
11. Operation theatre technique and present concept in assistance.
12. Preparation of patients for general and local anaesthesia
13. Preparation of Pathological specimen from the mouth for dental museum/lab investigation
14. Dental emergencies and their management
15. Home care after extraction, filling and denture insertion
16. Oral hygiene and brushing technique
17. First aid management and transportation of maxillofacial injury cases
18. Post operative instructions to patients
19. Lay out of instrument trolleys for
 - a. Surgical extraction of teeth
 - b. Alveoloplasty and Apicoectomies
 - c. Fracture jaws
 - d. Endodontics
 - e. Gingivectomies, Mucoperiosteal flaps

MODULE 6 (10 MARKS)

DENTAL RADIOLOGY

1. Fundamental and elementary principles of dental radiology.
2. Technical aspects of dental radiographs i. e. the taking, processing and mounting of dental radiographs.
3. Developing and fixing

4. Radiations hazards and their protections.
5. Dental radiography Dental films their mounting and records keeping
6. Basic knowledge of Taking, processing and mounting of dental radiographs
Protection from radiation hazards

DENTAL DOCUMENTATION AND OFFICE PROCEDURES

1. Knowledge about layout and upkeep of waiting rooms
2. Registration of case and Scheduling of appointments
3. Dental Treatment record maintenance and abbreviations for recording treatment
4. Dental statistics including collection of Dental health information, and its communication
5. Billing and accounting
6. Maintenance of office room and clinic
7. Material maintenance and supply
8. Instruction to patients and recall
9. Preparation of models of normal and pathological oral conditions
10. Designing, drawing and painting of poster on dental health education
11. Procedures for arranging talks, dramas, seminar with audio-visual aids on dental and oral health

MODULE 7 (5 MARKS)

COMMUNITY DENTISTRY AND ORAL HEALTH EDUCATION

1. Introduction to community dentistry
2. Psychological aspects of the child and parents and their counselling
3. Aims and objects of dental health education
4. General epidemiology and environmental health
5. Water supply to community and their implications on dental health
6. Oral hygiene habits
7. Oral hygiene maintenance instructions
8. Habits and their effects on dental structures
9. Oral health in handicapped
10. Dental caries - prevalence and prevention
11. Periodontal diseases- prevalence and prevention
12. Social factors in dental progress, income and living standard of people
13. Tour and upkeep of the dental centre, operatory and various departments

14. Operatory discipline and discipline of the patients

DENTAL JURISPRUDENCE AND ETHICS

1. Dental Ethics, Jurisprudence and Orientation in Dentistry (Theory and Practical)
2. History of Dentistry
3. Professional ethics
4. Legal implication in dental practice
5. Dentists Act 1948, as it relates to registration of dental hygienist and dentists. Legal imposition in relation to dental practice, code of ethics.
6. Place and function of dental profession in the society and discussion of economic problems involved therein

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper