

## **Title of the course: Diploma in Dental Clinical Auxiliary**

### **Preamble:**

Dental Clinical Auxiliary is a paramedical professional who directly assist Dentists. They work under the supervision and guidance of qualified Dentists. They assist Dentists in performing tasks like examination of patients; help the dental professional in delivery of treatment and surgery.

***Dental Assistants greatly increase the efficiency of the dentist in the delivery of quality oral health care and are valuable members of any dental care team.***

### **Objectives:**

The Objectives of the course includes; Dental Clinical Auxiliary should be trained to

- 1) Assist the dentist during a variety of treatment procedures.
- 2) Take and develop dental radiographs (X-Rays).
- 3) Prepare and sterilize instruments and equipment.
- 4) Provide patients with instructions for oral care following surgery or other dental treatment procedures, such as the placement of a restoration (filling).
- 5) Teach patients appropriate oral hygiene strategies to maintain oral health
- 6) Assist in taking impressions of patients' teeth for study casts (models of teeth).
- 7) Communicate with patients and suppliers (e.g., scheduling appointments, answering the telephone, billing and ordering supplies)
- 8) Help to provide direct patient care in all dental specialties, including orthodontics, pediatric dentistry, periodontics, oral surgery and others.
- 9) Prepare and maintain the clinical environment for a range of clinical procedures.
- 10) Demonstrate the recording of information presented to them by a dental clinician relating to the patients dental and oral tissues.
- 11) Maintain patient confidentiality and patient data protection and show how to maintain health and safety for self, members of the dental team, patients and visitors.
- 12) Competence in know-how of basic life support and the ability to support the dental team during a medical emergency.

**Duration:** One Year

**Annual intake:** 2

**Eligibility:** 12<sup>th</sup> passed from a recognized board is the minimum qualification required

**Fee:** 10000/-

**Selection method:** Entrance Examination conducted by the University

**Faculty:** Qualified Dental professional (BDS, MDS)

**Course Faculty, Academic year 2019-2020**

<b>MDS Faculty</b>	
Dr Savita Hadkar Dept. of Pedodontics	Dr. Sushma R. Dept of Oral Pathology
Dr. Seema Patil Dept. of Orthodontics	Dr. Abhijeet Sande Dept of Oral medicine & Radiology
Dr. Pankaj Patil Dept. of Oral & Maxillofacial Surgery	Dr. Sagar Pawar Dept. of Conservative & Endodontics
Dr. Apurval Pisal Dept. of Periodontology	Dr. Sriram Kulkarni Dept. of Public Health Dentistry
Dr Amit Jadav Dept of Prosthodontics	
<b>Nurse &amp; clinical assistant/Clark:</b>	
Mrs. Meenakshi Mane	Mrs. Trupti Gurav
Mrs. Priyanka Pawar	Mr. Mahendra Mohite
Mrs. Kulsumbe Shaikh	Mrs. Sushma Yadav
Mrs. Vishal Chavan	Mrs. Vaishali Jagdale
Mrs. Joytsna Varne	Mrs. Nanda Patil
Mrs. Manisha Koli	Mr. Tofik R. Aga
Mrs Poonam Shinde	Mr. Vikram Jadhav
Mrs. Sarita khandoje	

**Infrastructure:** School of dental sciences with its constituent Departments

**Contributing department/s:** Public health dentistry, Conservative dentistry, Dept of orthodontics, Pediatric dentistry, Periodontics, oral surgery, Oral pathology, Oral medicine and radiology

**Medium of instruction:** English

**Attendance:** Full time (min. 75%)

## Academic Schedule:

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Notification of course: 4<sup>th</sup> week of June

Entrance Exam of candidates: 2<sup>nd</sup> week of July

Enrollment of candidate: 3<sup>rd</sup> week of July

Commencement of course: 1<sup>st</sup> week of August

Orientation lecture for the enrolled student: 1<sup>st</sup> week of August

Compulsory rotating posting in various specialties of Dentistry

2<sup>nd</sup> week of August to 2<sup>nd</sup> week of April (8 months)

Dept. of Oral & Maxillofacial Surgery - 1 month

Dept. of Conservative & Endodontics - 1 month

Dept. of Pedodontics- 1 month

Dept. of Orthodontics -1 month

Dept of Prosthodontics -1 month

Dept of Oral medicine & Radiology- 1 month

Dept. of Periodontology- 1 month

Dept. of Public Health Dentistry -2 weeks

Dept of Oral Pathology- 2 weeks

Choice Based Specialty Clinical Posting 3<sup>rd</sup> Week of April to 3<sup>rd</sup> week July (3 months)

Dept. of Oral & Maxillofacial Surgery & Dept. of Periodontology

OR

Dept. of Conservative & Endodontics & Dept of Prosthodontics

OR

Dept. of Pedodontics & Dept. of Orthodontics

Preparatory leave for Exam 4<sup>th</sup> week of July till commencement of exam

University exam 2<sup>nd</sup> week of August

**Syllabus / course content: (Theory & Practical)**

<b>Section</b>	
<b>1</b>	Health and Safety and Infection Control in the Workplace
<b>2</b>	Emergencies in the Clinical Environment
<b>3</b>	Legal and Ethical Issues in the Provision of Dental Care
<b>4</b>	Anatomical Structures and Systems Relative to Dental Care
<b>5</b>	Oral Disease and Pathology
<b>6</b>	Support to dental practitioner in Patient Care and Management
<b>7</b>	Assisting in evaluation of Patients' Oral Health Needs and Treatment Planning
<b>8</b>	Oral Health Promotion and Preventive Dentistry
<b>9</b>	Chair side assistance in Restorative Dentistry, Oral Surgery, Prosthodontics, Pedodontic, Periodontics, oral medicine, radiology and Orthodontic Procedures
<b>10</b>	Dental Drugs, Materials, Instruments and Equipment management
<b>11</b>	Pain and Anxiety Control in Dentistry
<b>12</b>	Radiography
<b>13</b>	Communication Skills
<b>14</b>	Information and communication technology
<b>15</b>	Record Keeping and store/purchase training

## **SECTION 1**

### **HEALTH AND SAFETY AND INFECTION CONTROL IN THE WORKPLACE**

1.1 Describe the following aspects of current health and safety legislation

and regulation in the workplace in relation to own and other team members' responsibilities:

1.1.1 risk assessment and the Health & Safety at Work Act

1.1.2 Fire Precaution (Workplace) Regulations

1.1.3 Health & Safety (First Aid) Regulations

1.1.4 Control of Substances Hazardous to Health Regulations (COSHH)

1.1.5 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

1.1.6 Environmental Protection Act

1.1.7 Special Waste & Hazardous Waste Regulations

1.2 Describe own and other team members' responsibilities in relation to:

1.2.1 avoiding hazards and taking precautions in the dental environment

1.2.2 the safe disposal of clinical waste, sharps and hazardous chemicals

1.2.3 working with hazardous and non hazardous waste

1.3 Describe infectious diseases, their agents and routes of transmission and

Methods for preventing cross infection.

1.4 Explain:

1.4.1 the principles and methods of sterilisation, disinfection and aseptic techniques

1.4.2 the principles of Universal Precautions

1.5 Explain how personal protection measures are used to control infection.

1.6 Explain how the clinical environment should be prepared and maintained prior to, during and after treatment sessions.

1.7 Describe and demonstrate the safe disposal of dental instruments, sharps and equipment, and out-of-date drugs and materials.

## **SECTION 2**

## **EMERGENCIES IN THE CLINICAL ENVIRONMENT**

2.1 Describe the signs and symptoms of common emergencies and explain the actions to be taken should the following particular events occur:

2.1.1 faint

2.1.2 cardiac arrest

2.1.3 respiratory arrest

2.1.4 asthmatic attack

2.1.5 epileptic seizure

2.1.6 diabetic coma

2.1.7 angina/myocardial infarction

2.1.8 dental haemorrhage

2.2 Identify the hazards associated with the use of drugs in dentistry.

2.3 Describe the records which have to be kept in the event of a health emergency and explain the reasons for this.

2.4 Demonstrate knowledge of first aid.

## **SECTION 3**

### **LEGAL AND ETHICAL ISSUES IN THE PROVISION OF DENTAL CARE**

3.1 Explain what is meant by the term 'valid consent' and discuss related issues for different patients.

3.2 Explain the reasons for, and methods of, maintaining confidentiality in relation to:

3.2.1 duty of care for patients in relation to records and treatment

3.2.2 colleagues

3.2.3 the employing organization

3.3 Describe the importance of Data Protection and access to patient records in relation to own and other team members' responsibilities.

3.4 Describe the importance of keeping up-to-date patient records, the medico-legal implications and handling of complaints.

3.5 Describe how the practice of dentistry is regulated and how these regulations affect own role and that of other members of the oral health care team in:

3.5.1 responsibility

3.5.2 registration

3.5.3 reporting

3.5.4 delegation

3.5.5 professional relationships

#### **SECTION 4**

##### **ANATOMICAL STRUCTURES AND SYSTEMS RELATIVE TO DENTAL**

##### **CARE**

4.1 Have knowledge of the function and structure of general anatomy as relevant to dental nursing:

4.1.1 the circulatory system

4.1.2 the respiratory system

4.1.3 the digestive system

4.2 Describe:

4.2.1 the basic structure of the oral cavity including the:

- nerve and blood supply of the teeth and supporting structures
- mandible and maxilla
- muscles of mastication
- salivary glands

4.2.2 the structure and morphology of deciduous teeth and their eruption dates

4.2.3 the structure and morphology of permanent teeth and their eruption dates

4.2.4 the structure of supporting tissues in the oral cavity

4.2.5 the functions of teeth

#### **SECTION 5**

## **ORAL DISEASE AND PATHOLOGY**

5.1 Describe the inflammatory process and the effects of the disease process in all patients including elderly people and children on:

5.1.1 hard dental tissues

5.1.2 supporting dental tissues

5.1.3 other areas of the oral cavity

5.2 Describe the aetiology and progression of:

5.2.1 dental caries

5.2.2 periodontal disease

5.2.3 other oral diseases including tooth surface loss such as erosion, attrition and abrasion

5.3 Describe micro-organisms and their role in the disease process, especially those associated with:

5.3.1 dental caries

5.3.2 periodontal disease

5.3.3 other oral diseases

5.4 Know the aetiology in the progression of oral cancer.

## **SECTION 6**

### **PATIENT CARE AND MANAGEMENT**

6.1 Describe and demonstrate effective ways of providing chairside support in all clinical procedures to:

6.1.1 patients

6.1.2 other members of the oral health care team

6.2 Describe the special care needs which different patients may have and how These needs can be met effectively

6.2.1 young patients

6.2.2 elderly patients

6.2.3 patients with medical problems

6.2.4 patients with disabilities

6.3 Understand the social, cultural, environmental and psychological factors that Can affect patient management.

6.4 Explain effective ways of dealing with anxious and vulnerable patients.

6.5 Describe and demonstrate effective ways of providing emergency dental care.

6.6 Be familiar with the problems of drug abuse and its effects in dentistry

## **SECTION 7**

### **ASSESSING PATIENTS' ORAL HEALTH NEEDS.**

7.1 Describe the reasons for recording personal details of patients and effective methods that can be used.

7.2 Demonstrate effective methods of recording medical, dental and relevant social details of patients:

7.2.1 world health organization oral health chart

7.2.2 International Dental Federation (FDI)

7.2.3 information technology

7.2.4 other international charts (oral indices)

7.3 Demonstrate effective methods of recording soft tissue conditions using periodontal charts.

7.4 Describe the importance of discussing, explaining and recording different treatment options with the patient, including the cost implications and The patients NHS or other welfare entitlement.

7.5 Describe the maintenance of study models and diagnostic reports.

7.6 Be familiar with how referral procedures work locally.

## **SECTION 8**

### **ASSISTANCE IN ORAL HEALTH PROMOTION AND PREVENTIVE DENTISTRY**

8.1 Describe how diet may affect oral health, including non carious tooth surface loss.

8.2 Describe how the dental team can help a patient to improve their oral condition.

8.3 Describe and demonstrate methods/aids that can be used in maintaining oral hygiene.

8.4 The prevention and control of periodontal diseases and dental caries covers:

8.4.1 identify the instruments and equipment used in the procedure, And describe their use and order of use during the procedure

8.4.2 describe the different stages undertaken during the procedure

8.4.3 identify the materials used during the procedure

8.4.4 explain the pre and post operative treatment care of patients.

## **SECTION 9**

### **RESTORATIVE DENTISTRY**

9.1 **Assistance** in Cavity preparation

Explain why cavities are restored and the different ways this may be done:

- provisional restorations
- amalgam restorations
- composite, glass ionomer restorations and compomers
- inlays - gold/porcelain
- veneers

For each of point 9.1:

9.1.1 identify the instruments and equipment used in the procedure 9.1.2 describe the preparation of a cavity prior to restoration

9.1.3 identify the materials used during the procedure

9.1.4 explain the pre and post operative care of patients

9.2 **Assistance** in Endodontics

Explain the reasons for endodontic treatment and the different procedures that may be used:

- conventional root canal treatment
- apicectomy and retrograde root filling
- pulpotomy/pulpectomy/pulp capping

For each of the above:

9.2.1 identify the instruments and equipment used in the procedure,

9.2.2 describe the different stages during the procedure and the reasons these are undertaken

9.2.3 identify the materials used during the procedure

9.2.4 explain the pre and post operative care of patients

9.3 **Assistance** in Fixed prostheses

Explain the reasons for providing fixed prostheses and the different procedures that may be used:

- crowns and bridges, both permanent and temporary
- dental implants

For crowns and bridges:

9.3.1 describe their types and uses

9.3.2 identify the instruments and equipment used in the procedure,

9.3.3 describe the preparation of a tooth prior to construction of a fixed prosthesis

9.3.4 describe the laboratory stages required to construct a fixed prosthesis

9.3.5 identify the materials used during the procedure

9.3.6 explain the pre and post operative care of patients.

9.4 **Assistance** in Removable prostheses

Explain the reasons for providing removable prostheses and why different types may be used:

- full dentures
- partial dentures (metal base & acrylic base)
- immediate dentures
- repairs, relines and additions

For each of the above:

9.4.1 describe their types and uses

9.4.2 identify the instruments and equipment used in the procedure, and describe their use and the order of use during the procedure

9.4.3 describe the surgery procedures required to construct a removable prosthesis

9.4.4 describe the laboratory stages required to construct a fixed prosthesis and

The need for effective communication with the dental laboratory

9.4.5 identify the materials used during the procedure

9.4.6 explain the pre and post operative care of patients

#### 9.5 **Assistance** in Periodontal surgery

Explain why periodontal surgery may be necessary and give details in simple terms of the different types of procedures:

- gingivectomy
- flap operations

For each of the above:

9.5.1 describe the procedure in simple terms

9.5.2 identify the instruments and equipment used in the procedure

9.5.3 identify the materials used during the procedure

9.5.4 explain the pre and post operative care of patients

### **SECTION 10**

#### **ORAL SURGERY**

Explain why teeth need to be extracted and the complications that may arise during each procedure.

##### 10.1 Extraction of deciduous and permanent teeth

10.1.1 identify the instruments and equipment used in the procedure, and describe the order of use during the procedure

10.1.2 describe the post operative problems which may occur

10.1.3 explain the pre and post operative care of patients

## 10.2 Minor oral surgical procedures

- extraction of erupted and partially erupted teeth
- extraction of buried and impacted teeth and roots
- investigation of hard tissue lesions
- investigation of soft tissue lesions
- intra oral suturing

For each of these areas:

10.2.1 describe the different minor oral surgery procedures and the different stages within them

10.2.2 identify the instruments and equipment used in the procedure, and describe their the order of use during the procedure

10.2.3 explain the pre and post operative care of patients

## **SECTION 11**

### **ORTHODONTIC PROCEDURES**

11.1 Describe the major orthodontic classifications of teeth and jaws.

11.2 Removable, fixed and functional orthodontic appliances:

11.2.1 be aware of each of their different uses

11.2.2 accurately record and provide chairside support during assessments

11.2.3 provide chairside support during fitting of appliances including selection of instruments

11.2.4 pre-treatment care and post-operative instructions

## **SECTION 12**

### **DENTAL DRUGS, MATERIALS, INSTRUMENTS AND EQUIPMENT**

12.1 Describe the drugs and materials commonly used in dentistry and explain their use.

12.2 Demonstrate the correct manipulation of materials commonly used in dentistry.

12.3 Describe the hazards associated with materials commonly used in dentistry

And explain how to minimise the risks associated with these materials.

12.4 Describe the actions to be taken in the case of mercury spillage.

12.5 Demonstrate methods of recording, labelling and storing drugs and materials.

12.6 Describe and demonstrate the care and maintenance of instruments And equipment used in dentistry.

## **SECTION 13**

### **PAIN AND ANXIETY CONTROL IN DENTISTRY**

13.1 Be familiar with management of different forms of facial pain and anxiety control.

13.2 Describe:

13.2.1 the different types of local anaesthetic agent and the contents of a local anaesthetic cartridge

13.2.2 identifying role in methods of administering local anaesthetic

13.2.3 the hazards associated with local anaesthesia

13.2.4 how to treat emergencies associated with local anaesthesia

13.3 Be familiar with:

13.3.1 the differences between conscious sedation and general anaesthesia

13.3.2 the regulations which govern the administration of conscious sedation and general anaesthesia

13.3.3 other techniques of anxiety control in dentistry such as hypnosis

## **SECTION 14**

### **RADIOGRAPHY**

14.1 Describe the following aspects of current radiography legislation and regulation in relation to own and the clinical team's responsibilities.

14.2 Describe:

14.2.1 the use of radiography in assessing oral health needs

14.2.2 the hazards associated with radiation in the dental surgery

14.2.3 the precautions taken to limit radiation hazards

14.2.4 principles and techniques of taking dental radiographs including digital and demonstrate

the processing, recording and maintenance of dental radiographs

14.2.5 faults that can occur in processing radiographs

14.2.6 how dental radiographic films and chemicals can be stored safely and demonstrate the care of dental radiographic equipment

14.2.7 the regulations which govern the taking of dental radiographs

## **SECTION 15**

### **COMMUNICATION**

15.1 Describe and discuss methods of communicating clearly and effectively with patients and colleagues.

15.2 Discuss the reception of patients into the dental environment and the role of the dental nurse in this procedure.

15.3 Explain how dental appointments can be organized effectively.

15.4 Discuss working in a team environment and the role of the dental nurse.

15.5 Provide evidence of using information technology.

**Teaching-learning method:** Didactic lectures, Clinical demonstrations, Hands-on chair side practical and rotating clinical posting

**Assessment pattern:** Periodic assessment in the department. Credit based University Examination

**Credit system:**

There will be periodic monitoring and review of the structure of the qualification to ensure that it meets current educational requirements and the needs of the profession. To ensure that each candidate is given every opportunity to pass, candidates are assessed on each part of the examination by at least two members of the Panel of Examiners and the results of each individual examination centre moderated by a Presiding Examiner.

#### **1. Written paper - part A:**

- 15 Multiple-choice questions
- A diagram and short questions

<ul style="list-style-type: none"> <li>• Short-answer questions</li> <li>• iv. Charting questions</li> </ul>
<p><b>2. Written paper - part B:</b></p> <p>Four conventional-type questions.</p> <ul style="list-style-type: none"> <li>• all four answers carry equal marks;</li> <li>• most of the questions consist of more than one part;</li> <li>• pure essays are not necessary;</li> <li>• neatly laid out note-form answers with sub-headings are acceptable;</li> <li>• diagrams wherever relevant are acceptable.</li> </ul>
<p><b>3. Spotter tests</b></p> <p>In the Spotter the candidate is asked to identify in full 20 items arranged in groups of 4. The candidate may pick up any item to examine it but must replace it carefully in its original position. Shortened terms often used in daily practice (e.g. Cryer's) are not sufficient for examination purposes and full marks would only be awarded for "Cryer's elevator".</p>
<p><b>4. Practical</b></p> <p>Candidates are required to carry out 2 practical tasks from a selection of 4 tests.</p>
<p><b>5. Oral</b></p> <p>Candidates undergo oral questioning to assess their depth of knowledge and understanding. 13 minutes are allowed for the Practical/Oral - up to 5 minutes for the Practical tests and the remainder of the 13 minutes for the Oral.</p> <p>The Spotter, Practical and Oral sections take place on the afternoon of the examination day.</p>

**Log book:** Each candidate has to maintain a log book during the duration of the course

**Text & Reference books:**

- 1) Modern Dental Assisting, 12th Edition by Doni L. Bird, CDA, RDA, RDH, MA and Debbie S. Robinson, CDA, MS
- 2) Essentials of Dental Assisting - Text, Workbook, and Boyd: Dental Instruments, 6e, 6th Edition  
Authors: Debbie S. Robinson & Doni L. Bird & Linda Bartolomucci Boyd

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