



Institute of Human Resources Development
(Established by Govt. of Kerala)

Diploma in Dental Assistance
(6 months)

Subjects of Study and Scheme of Assessment

(Scheme-2020)

Code	Subject	No. of Hrs/ week		Minimum Marks			Maximum marks		
		T	P	W/P	CE	Total	W/P	CE	Total
DDA101	Dental Assistant- Roles and Responsibilities	10	-	30	10	50	75	25	100
DDA102	Dental Clinical Procedures	11	-	30	10	50	75	25	100
DDA103	Medical Safety and Sterilisation	09	-	30	10	50	75	25	100
DDA104	On Job Training	-	-	-	100	100	-	200	200
Total Duration : 600Hrs		30	-	Total marks:			225	275	500

* T- Theory P - Practical W - Written CE-Continuous Evaluation T – Total

[Scheme 2020]

DDA101- Dental Assistant- Roles and Responsibilities

(Duration: 100Hours)

Objectives: *The objective of this subject is to aware the students about healthcare systems & dental services*

Module 1:Introduction to Healthcare Systems & Dental Services

Basic Understanding of Healthcare Service Providers (primary, secondary &tertiary).Basic Understanding of Hospital Functions, Basic Understanding of Dental Set-ups and Dental facilities Understanding of Dental Facilities at different level(National/ State / District).Explain the role of the dental team to include; Dentists, Dental Assistants Dento-oral Hygienists. Dental Therapists, Dental Technicians, Others

Module 2 - Role of the Dental Assistant

To develop broad understanding of the Role of Dental Assistant, .To identify Dental Set-ups maintenance needs to be taken care by Dental Assistant. To develop Understanding of Patient Comforts and Safety, To develop understanding of Dental Equipment, Procedures and documentation. Understanding of Healthcare Service Providers (primary, secondary &tertiary).Basic Understanding of Hospital Functions, Basic Understanding of Dental Set-ups and Dental facilities Understanding of Dental Facilities at different level (National / State / District).Explain the role of the dental team to include; Dentists, Dental Assistants Dento-oral Hygienists. Dental Humectation, To exhibit Ethical Behavior, Explain the general standards relating to dental assistants, explain the professional standards relating to dental assistants, Explain the range of duties performed by a dental assistant, Explain the additional skills that a dental assistant could do with experience

Module 3 - Dental & Oral Anatomy and Physiology

Understand Anatomy &Histology of the Gingiva, Understand. Basic Oral Hygiene, Understand Dental Anatomy, Understand Basic Oro-Facial Physiology, Describe the muscles of mastication, Describe the muscles of facial expression, Describe the maxilla, Describe the main salivary glands, Detain the morphology relating to the deciduous and permanent dentition, Describe the anatomy of the Mandible; Describe the anatomy of the tongue

Module 4 - Introduction to Dental and Oral related Medical Terminology

Understand appropriate use of Dentistry related medical terminology in daily activities with colleagues, patients and family.

Module 5 - Dental Office Management

Complete dental records and charts to support treatment planning, describe the various teeth, tooth surfaces and notations which support charts of the dentition, Explain the difference between a basic periodontal examination and a full periodontal assessment. Explain the requirements of a patients personal record to include the requirements of a medical history Schedule dental appointments, Describe the time requirement and allocation for a variety of dental procedures and the rationale for selecting the appointment slot File patients records, Explain the systems which are in place to accurately, safely and securely store data relating to patients, Comply with legislation, data protection and patient confidentiality while scheduling dental appointments and filing patient data.

Reference:

1. Competency Skills for the Dental Assistant, Charline M. Dofka, Delmar Publishers
2. Introduction to Dental Assisting, Haglund, Susan, Halowski, Wendy, Open Learning Institute

[Scheme 2020]

DDA102 Dental Clinical Procedures

(Duration: 110Hours)

Module 1 - Dental Materials, Implants and Instruments

Alginate Impression and Diagnostic Study Model Techniques Dental Implants: A comprehensive Review, Dental Implants and Esthetics, Factors Affecting Implant Loss, Maintenance of Dental Implants, Full Coverage Aesthetic Restoration of Primary Teeth, Part 1 – Anterior Teeth, Fundamentals of Dentifrice: Oral Health Benefits in a Tube, Impression Making for Implant Retained Restorations, Making Occlusal Records Consistent

Module 2 - Pre-clinical procedures of Dental Settings

Demonstrate compliance with personal presentation, personal protective equipment, effective hand washing and safe Prepare the clinical environment for dental procedures, Explain the requirements in advance of patient treatment to include patient's records, models and clinical photographs, Explain the need for and types of instruments, equipment and medicaments for a range of routine dental procedures to include a dental examination; periodontal examination and a scale and polish Decontaminate reusable, dental instruments Prevent cross infection within the dental environment Revision of comply with legislation, data protection and patient

Module 3 - Intra-Oral Preventive & Restorative Dentistry

Assist with performing coronal polish and provide the patient with advice on how to prevent periodontal disease, Discuss the reasons for and methods of assisting a clinician with a coronal polish, State the functions of the hand and mechanical instruments, equipment and medicaments required for a coronal polish Explain the reasons for and advantages of oral hygiene aids which are available to prevent periodontal disease to include; disclosing tablets, manual and electric toothbrushes, inter dental toothbrushes; dental floss and chemical methods of controlling plaque Assist with topical fluoride application and provide the patient with advice on how to prevent dental caries Assist with fissure sealant application Assist with the application of local and topical.

Module 4 - Basic Sensitization on Dental Pharmacology

Understanding of Adjunctive and Prophylactic Use of Antibacterial Agents in Dentistry, Understanding of Commonly Prescribed Medications in Dentistry. Understanding of Effective Nitrous Oxide/Oxygen Administration in pediatric dentistry. Understanding of Local Anesthesia in today's Dental Practice. Understanding of Methamphetamine: Implications for the Dental Team, Understanding of Nitrous Oxide and Oxygen Sedation. Understanding of Oral Anticoagulants and its use in Dental Procedures. Understanding of Pharmacology of Analgesics: Clinical Considerations. Understanding of Pharmacology of Local Anesthetics: Clinical Implications. Understanding of Sedation in the Dental Office: An Overview. Understanding of The Oral Implications of Chemical Dependency & Substance Abuse Basic Sensitization on Dental Radiology. Understanding Digital Radiography in Dentistry: Moving from Film-based to Digital Imaging. Understanding Digital Imaging Techniques and Error Correction. Understanding Intraoral Radiographic Techniques. Understanding Intraoral Radiography: Principles, Techniques and Error Correction. Understanding Osteoporosis: Prevention, Management, and Screening Using Dental Radiographs. Understanding Practical Panoramic Radiography. Understanding Radiation Biology, Safety and Protection for Today's Dental Team. Understanding Radiographic Techniques for the Pediatric Patient.

Module 5 - Basic Sensitization to Oral Pathology

Describe the clinical picture of gingivitis, Describe the clinical picture of periodontitis. Describe the clinical picture of dental caries. Describe the clinical picture of dental fractures. Describe the clinical picture of oral ulcers, Describe the common and uncommon signs and symptoms with which patient visit a dentist. Describe the common investigations undertaken in dental clinic before, during or after any dental, treatment/procedure.

Reference:

Dentistry, Dental Practice, and the Community, By Brian A. Burt, Steven A. Eklund, Elsevier publications

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[Scheme 2020]

DDA103 Medical Safety and Sterilisation

(Duration: 90Hours)

Module 1-Safety & First Aid: Dental Emergencies &Medical Emergencies

Health and Safety; compliance; requirements and procedures. Explain the responsibilities of the of the dental employer and the dental assistant in maintaining health and safety for self, patients an all members of the dental team. State what should be included in a risk assessment Describe the risks associated with working in the dental environment and the methods the dental assistant should employ to prevent risk. To develop understanding and precautions to ensure Patient's Safety. To develop basic understanding and precautions to ensure sample preservation while transporting. Describe common emergency conditions and what to do in medical emergencies. Describe basics of first aid. To develop understanding and precautions to ensure self-safety. Describe dental or medical emergencies occur specific to dental set-up and how to manage all those. Describe control of substances hazardous to health (COSHH). Discuss reporting of diseases, dangerous occurrence regulations RIDDOR.

Module 2 - Personnel Hygiene

To develop understanding of the concept of Healthy Living. To develop understanding & procedures of Hand Hygiene to prevent cross infection including effective hand washing to include; social and clinical techniques. To develop techniques of Grooming. To be equipped with Techniques of Use of PPE: the need for and types. To be vaccinated against common infectious diseases: immunization to reduce the health risks for self, patients and members of the dental team. Understanding of Mandated, Highly Recommended, and Other Vaccines for Oral Health care Personnel Workers.

Module 3 - Disinfection, Cleaning and preventive maintenance of Dental equipment, materials and implants

Understanding of different disinfectant agents used for various Dental equipment, materials and implants. Basic Sensitization to Advanced functions and Dental specialties. Basic sensitization of dental specialties like oral public health, pediatric, geriatric, oral and maxilla-facial, endodontic, orthodontics, periodontics, prosthodontics, etc.. Basic sensitization of advanced equipment and technology used for dental practices. Basic Sensitization on regulatory guidelines set time to time regarding dentistry, radiography, pharmacology, etc.

Module 4 - Infection control and prevention

Understanding of Adjunctive and Prophylactic Use of Antibacterial Agents in Dentistry. Understanding of Administrative Controls and Work Restrictions, Understanding of Clinical Practice Guidelines for a Control/Exposure Control Program in the Oral Healthcare Setting. Understanding of Guidelines for Infection Control in Dental Health-Care Settings, Understanding of Hand Hygiene: Infection Control/Exposure Control Issues for Oral Healthcare Workers, Understanding of Hazard Communications &Hazardous Waste Regulations for Dental Offices, Understand hospital borne infections, Understanding of Hepatitis: Infection Control/Exposure Control Issues for Oral Healthcare Workers, Understanding of HIV: Infection Control/Exposure Control Issues for Oral Healthcare Workers, Understanding of HSV and VZV: Infection Control/Exposure Control Issues for Oral Healthcare Workers, Understanding of Influenza Facts and the Healthcare Worker. Understanding of Introduction to Preventing Transmission of Infectious Agents in Healthcare Settings, .Understanding of Maskcessorize: The Art of Choosing the Proper Face Mask for the Task Understanding of Measles, Mumps, and Rubella: Infection Control/Exposure Control Issues for Oral Healthcare Workers, . Understanding of Mercury in Dentistry: The Facts Understanding of

Mycobacterium Tuberculosis: Infection Control/Exposure Control Issues for Oral Healthcare Workers. Understanding of New Elements of Standard Precautions and Essential Elements of Transmission- based Precautions. Understanding of Sterilization and Disinfection of Patient-care Items in Oral Healthcare Settings. Understand practices to curb infection .Understand prevention and treatment of needle

Module 5 - Bio Medical Waste Management

To gain understanding of importance of proper and safe disposal of bio- medical waste & treatment. To gain understanding of categories of bio- medical waste. To learn about disposal of bio- medical waste – color coding, types of containers, transportation of waste, etc. To gain broad understanding of standards for bio- medical waste disposal. To gain broad understanding of means of bio- medical waste Treatment.

Module 6 - Care of Vulnerable Patients

Understanding Dental Management of Patients with Bleeding Disorders. Understanding Diabetes: A Multifaceted Syndrome Treatment Considerations in Dentistry. Understanding Hypertension: Risk Stratification and Patient Management in Oral Healthcare Settings. Understanding Management of Medical Emergencies in the Dental Office. Understanding Management of Pediatric Medical Emergencies in the Dental Office. Understanding Management of Traumatic Injuries to Children's Teeth. Understanding Oral Anticoagulants and Dental Procedures. Understanding Sedation in the Dental Office: An Overview. Understanding Sports-Related Dental Injuries and Sports Dentistry. Understanding The Patient with Hypertension in the Dental Office. Understanding Asthma Patients in the Dental Office

Reference:

Safety Standards and Infection Control for Dental Assistants, Ellen Roberta Dietz, Thomson Learning

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DDA104 On Job Training

(Duration: 300 Hours)

Module 1 - Assistance in Operative Dentistry

Assist with application of topical and local anaesthetic, Discuss the reasons for and types of topical anaesthetic, Discuss the different types and functions of local anaesthetic to include, adrenaline and non adrenaline, State the different types of local anaesthetic, syringes and explain their function.

Explain the need for different needles or the administration of local and regional block anesthesia, Assist with minor oral surgical procedures, State the range of minor oral surgical procedures that can be performed in the dental environment, Discuss the methods available to remove erupted and un-erupted teeth, Explain the function of instruments and equipment for the purpose of minor oral surgery, Discuss the advice you would give to a patient prior to and following a minor oral surgical procedure, Explain the role of the dental assistant in dealing with post extraction hemorrhage, State the different forms of periodontal surgery and list the instruments, equipment and medicaments required for periodontal surgery, Explain the instruction to be provided to a patient following periodontal surgery, Assist with the removal of sutures, Explain the different types of sutures to support wound, healing following oral injury or surgery, State and explain the function of the range of instruments, equipment and medicaments required to remove sutures, Apply understanding of the anatomy associated with operative procedures. Discuss the nerve supply to the maxillary teeth, soft tissues and hard and soft palate, Discuss the nerve supply to the mandibular teeth, soft tissues and tongue, Revision of comply with legislation, data protection and patient Confidentiality

Module 2 - Assistance in Clinical Dentistry- Endodontic Procedures

Assist with application of topical and local anaesthetic, Assist with the application of rubber dam during endodontic procedures, Assist with non-surgical endodontic procedures, Explain the range of non-surgical endodontic procedures, Discuss the instruments, equipment, medicaments and materials for the treatment of pulpitis, Discuss the instruments, equipment, medicaments and materials for the treatment of pulp capping, Discuss the instruments, equipment, medicaments and materials for the treatment of pulpotomy, Discuss the instruments, equipment, medicaments and materials for the treatment of pulpectomy, Support the patient during non-surgical endodontic procedures, Explain how to support a patient in the event of syncope, Explain the methods and reasons for retracting soft tissues during endodontic treatment, Explain the reasons for high volume aspiration during endodontic procedures, Revision of comply with legislation, data protection and patient Confidentiality

Module 3 - Assistance in Clinical Dentistry- Prosthodontics Procedures

Work with fixed and removable prosthodontics components. Explain the types of removable prosthodontic components to include partial dentures; complete dentures; immediate dentures; over dentures and obturators. Explain the types of fixed prosthodontic components to include crowns; bridges; veneers; implants; inlays and onlays. Explain the reasons for providing patients with removable prosthetic appliances. Discuss the factors which should be considered prior to providing patients with removable prosthetic appliances. Work with removable prosthetic components, Discuss the range of removable prosthodontic components to include partial dentures; complete dentures; immediate dentures; over dentures and obturators. Work with fixed prosthetic components. Discuss the range of fixed prosthodontic components to include partial dentures; complete dentures; immediate dentures; overdentures and obturators. Apply skills to support crown and bridge work and the application of veneers and inlays. Discuss the materials which support crown and bridge work. Explain the stages in crown and bridge preparation. Discuss the role of the dental assistant during crown and bridge fitting. Discuss the materials available to cement crowns, bridges and inlays. Explain the stages in veneer preparation and fitting. Apply skills during denture construction. Explain the stages involved in denture construction. Discuss the instruments, equipment and materials involved in all stages of denture construction.

Application of anatomy associated with prosthodontics treatment. Revision of comply with legislation, data protection and patient Confidentiality.

Module 4 - Assistance in Clinical Dentistry- Periodontal Procedures

Periodontal screening and periodontal treatment. Describe the instrument used to carry out a basic periodontal examination of the periodontium. Describe the scoring following a basic examination of the periodontium as it relates to health status of the periodontium. Describe the scoring following a basic periodontal examination as it relates to treatment planning. Describe the probes used to support a full periodontal screening to include true and false pockets; gingival recession and furcation involvement. Discuss how to record information on a periodontal chart. Describe the supra and sub gingival hand instruments required to remove supra and sub gingival calculus State the advantages and disadvantages of using an ultra sonic scaler to remove plaque and calculus. Explain the complications which may occur following periodontal therapy. Apply understanding and skills to establish the role of plaque and calculus in relation to periodontal disease Discuss the chemical composition, development and the role of plaque in relation to periodontal disease. Discuss the chemical composition, development and the role of calculus in relation to periodontal disease. Discuss the prevention of periodontal disease to include the use of disclosing tablets; tooth brushing and the use of interdental aids. Explain the methods t prevent periodontal disease to include the use of disclosing tablets, tooth brushing and interdental aids, Application of anatomy associated with periodontal treatment. Revision of comply with legislation, data protection and patient Confidentiality.

Module 5 -Assistance in Clinical Dentistry- Orthodontic Procedures

Describe the reasons for orthodontic therapy. Explain the following orthodontic classifications 1 11 Div 1 and 11 Div2 and111. Apply understanding of the anatomy associated with orthodontics. Discuss the range of medicaments and materials which support the application of fixed orthodontic appliances. Explain the range of equipment and materials for fixed orthodontic bond up to include bands, arch wires, brackets and bands. Describe the instruments and equipment used to adjust fixed orthodontic appliances. Describe the instruments, equipment and medicaments used to place orthodontic separators. Describe the instruments, equipment and medicaments used for ade-bond. Describe the instruments, equipment and medicaments used to fit a removable orthodontic appliance. Clinical application of orthodontic appliances. Explain what is involved in orthodontic treatment planning. Explain the components of and function of the components of a removable orthodontic appliance. Explain the appointment stages involved in removable orthodontic treatment. Explain the appointment stages involved in fixed orthodontic treatment. Risks and benefits of orthodontic treatment. Revision of comply with legislation, data protection and patient Confidentiality.

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Note: At the end of the Training, students must submit a training report and it will be assessed along with the viva-voce conducted by the examiners internally.

[Scheme-2020]

DIPLOMA IN DENTAL ASSISTANCE

1. Question Paper Pattern

Duration of Exam. : 3 Hrs.

Maximum Marks : 75

Part - A Short Answer type Questions with answer size up to 1 page per question. 3 Marks each

Part - B Descriptive type Questions with answer size up to 2 to 3 pages per question. 10 marks each.

Marks Distribution

Part	No. of questions	Need to be answered	Marks/Question	Total
A	7	5	3	15
B	10	6	10	60
Total				75

Instructions for Question Paper setting:

1. Each part should cover questions from each module in the syllabus.
2. The level of difficulty shall be i) Challenging Questions: 20% ii) Easy/Average Questions: 80%.
3. The question paper setters must prepare and submit the question papers as per the following guidelines.
 - i) Question paper must be designed and prepared to fit in an A4 size paper with one inch margin on all four sides
 - ii) Prepare the question in MS-Word/Open Libre office-Writer document format. Use only "Times New Roman" font size 10 point. Align text to both left and right margins.
 - iii) Please leave 5cm.free area at the top of the front page of each question paper to place examination details/Question paper header by the examination department.
 - iv) Avoid placing 1 or 2 questions in the last part in a fresh page, unless it is absolutely necessary. In such case ,try to accommodate above questions in the previous page(s) by adjusting top/bottom margins and line spacing, if possible. This will reduce printing expenses.
 - v) Specify marks for each question/part clearly.
 - vi) Clearly specify the number of questions to be answered for each part.
 - vii) Avoid repeating questions in Section C from the immediate previous examination
 - viii) Key for evaluation must be prepared and enclosed in a separate cover and should be submitted along with the question paper set on a separate envelope .Key for evaluation must specify evaluation guidelines for each part in the question paper, otherwise the key prepared will be treated as Incomplete and will be rejected.
 - ix) Submit Question paper in Laser print out format only. Hand written and printed in poor quality printers is not acceptable.

DIPLOMA IN DENTAL ASSISTANCE

2. Scheme for Continuous Evaluation.

1. For Theory Papers : Weightage

- a). Average of minimum Two test papers : 30%
- b). Average of minimum Two Assignments : 30%
- c). Score for Class Attendance. : 20%
- d). Overall performance in the class. : 20%

2. For Practical Papers : Weightage

- a). Average of minimum Two Practical tests : 30%
- b). Average of minimum Two Practical Assignments : 30%
- c). Score for Practical Attendance. : 20%
- d). Overall performance in the Practical. : 20%

3. Teachers shall submit Mark list for Continuous Evaluation to the Head of Institution in the following format.

Subject:

Sl no.	Regno.	Name	a.Test	b.Assignment	c.Attend	d.Performance	Total

4. Head of Institution/Co-ordinator shall forward Continuous evaluation marks to the Examination Department in the following format only.

Centre:

Sl no.	Regno.	Name	DDA101 25	DDA102 25	DDA103 25	DDA104 25

5. Continuous evaluation(CE) marks must be published in the notice board at least one week before the commencement of theory examinations after getting approval from the Head of Institution/Co-ordinator.

Thiruvananthapuram
January 01, 2020

Sd/-
Director