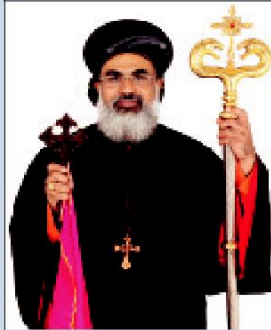


ACADEMIC CALENDAR

2020-2021

Our Patron



His. Grace. Most Rev. Dr. Thomas Mar Koorilos
Metropolitan Archbishop of Thiruvalla



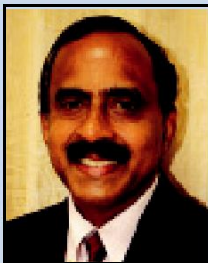
Rev. Fr. Aby
Vadakkumthala
Director Institutions



Rev Fr. Jose Kallumalickal
CEO



Rev. Dr. Mathew
Mazhavancheril
Director
Academics and Research



Dr. K. George Varghese
Principal



Dr Benley George
Vice Principal
(Administration)



Dr Biju Sebastian
Vice Principal
(Academics)

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OUR VISION

'We Care God Cures'

OUR MISSION

To work towards a knowledge society with life in abundance through science and technology, improving health care for our immediate community, the state, the country and the world at large.

PUSHPAGIRI - A BRIEF HISTORY

The Catholic Church has been engaged in the ministry of healing all over the world for the past two thousand years. The same mission also drove the Founder fathers of Pushpagiri at Tiruvalla, Kerala. What started as a small clinic with eight beds in 1959 to cater to rural maternity care has now grown to a full fledged 1200 bedded, hi-tech super specialty Medical College Hospital.

Across a span of half a century, Pushpagiri has travelled forward with a renewed understanding and vision, **'We Care God Cures'**, which proclaims the faith of taking upon each others' burdens and humility before the divine providence from where all cure and healing happens. The unwavering commitment of the Church to provide value-based education also saw its results initially in Nursing Education at Pushpagiri, which began as early as 1964. Following the establishment of Pushpagiri Medical Society in 1992, on the road to improvisation and expansion, Pushpagiri saw a new beginning, a decade later, in 2002 with the starting of one of the first private medical colleges in Kerala - Pushpagiri Institute of Medical Sciences and Research Centre. In the past decade, Pushpagiri further went along to establish premiere institutions in the field of health care education for Nursing (2002), Pharmacy (2004), Dental Sciences (2006) and Allied Health Sciences (2008).

The Pushpagiri Medical Society, a society registered under the Travancore-Cochin Literary Scientific & Charitable Societies Registration Act of 1955, manages the College. The Archbishop of the Catholic Archdiocese of Tiruvalla Most. Rev. Dr. Thomas Mar Koorilos is the Patron of the Society and a seven

member governing board is the policy laying body of the Society. Rev Fr Jose Kallumalickal is the Secretary of Pushpagiri Medical Society. Rev. Fr. Aby Vadakkumthala is the Director of Pushpagiri Group of Institutions. Dr. K. George Varghese is the Principal, Dr Benley George; the Vice Principal (Administration) and Dr. Biju Sebastian: the Vice Principal (Academics) of Pushpagiri College of Dental Sciences.

Pushpagiri College of Dental Sciences, recognized by the Dental Council of India and Ministry of Health & Family Welfare, Government of India was founded in 2006. The institution is the realization of the vision of the Management to provide quality Dental education to aspiring students of Kerala, a good percentage of these students hail from minority communities. The institution has an annual intake of 50 students in BDS course and 14 students in MDS courses.

Pushpagiri College of Dental Sciences ever since its inception had shown excellent academic achievements at the MG University and Kerala University of Health Sciences examinations. The first batch of Pushpagiri College of Dental Sciences secured a 100% pass result in the Final BDS Part II examination conducted by Mahatma Gandhi University, Kottayam. Pushpagiri College of Dental Sciences was the only dental college to achieve this feat among 7 other dental colleges affiliated to Mahatma Gandhi University, Kottayam. Ms Varsha Jeyaprakash, student of 2006 batch secured the first rank in the Final BDS Examination in 2011 conducted by Mahatma Gandhi University, Kottayam. The first batch of students admitted under Kerala University of Health Sciences secured the best pass result among all 22 dental colleges in Kerala. The 2013 batch of 1 BDS students secured 80% pass result in the examination conducted by Kerala University of Health Sciences in August 2014. Ms Jasmin Mary George secured the First rank in the 1 BDS examination conducted by Kerala University of Health Sciences in August 2014. Dr. Karun Koshy Cherian secured the Second rank in the Final MDS examination (Orthodontics) conducted by Kerala University of Health Sciences in June 2017.

The institution had secured the first position among all 24 dental colleges affiliated to the University. The institution has consistently shown results par excellence in all examinations conducted by Kerala University of Health Sciences. The WEEK magazine in the survey 2020 graded Pushpagiri College of Dental Sciences as 28th Best Dental College in India and graded 1st Best Dental College in Kerala.

Pushpagiri College of Dental Sciences was elevated to the status of a Post Graduate Institute in 2013. The institution offers 6 Post Graduate courses in the Departments of Prosthodontics and Crown & Bridge, Periodontology and Oral & Maxillofacial Surgery, Conservative Dentistry & Endodontics, Orthodontics & Dentofacial Orthopedics and Pedodontics and Preventive Dentistry which is approved by the Ministry of Health and Family Welfare, Government of India and Dental Council of India.

In the year 2019 a new diploma course (Dental Operating Room Assistant – DORA) was started in the College with 10

seats. This course is approved by Dental Council of India, New Delhi.

GOVERNING BODY MEMBERS OF PUSHPAGIRI MEDICAL SOCIETY

- Patron:** **H. G. Most Rev. Dr. Thomas Mar Koorilos**
Metropolitan Archbishop of Tiruvalla.
- President:** **Rt. Rev. Msgr. Cherian Thazhamon**
Vicar General, Catholic Archdiocese of Tiruvalla.
- Executive Director:** **Shri Jacob Punnoose**
IPS (Retd.)
- Vice President:** **Dr. Abraham Varghese V.**
- Secretary:** **Rev. Fr. Jose Kallumalickal**
(Chief Executive Officer,
Pushpagiri Group of Institutions).
- Members:** **Rev. Dr. Mathew Mazhavancheril,**
Director, Academics and Research
- Rev. Fr. Thomas Pariyarath,**
Hospital Administrator & Director IT and
Marketing, Pushpagiri Medical College Hospital
- Rev. Fr. John Padipurackal**
Director Finance & Facilities
- Mr. Varghese Alexander**
Chartered Accountant, Alexander & Co., Tiruvalla

INSTITUTIONS UNDER PUSHPAGIRI MEDICAL SOCIETY

- 1. Pushpagiri College of Dental Sciences**
Pushpagiri Medicity, Perumthuruthy, Tiruvalla
Tel. No. 0091 469 2645210; Fax 2645282
www.collegeofdentalciences.pushpagiri.in
email: dentalcollege@pushpagiri.in
- 2. Pushpagiri Institute of Medical Sciences & Research Centre**
 - 2.1. Pushpagiri Medical College Hospital
Tel. No. 0091 469 2700755, Fax 2701045
email: info@pushpagiri.in www.pushpagiri.in
 - 2.2. Pushpagiri Medical College
Tel. No. 0091 469 2733761; Fax 2600020
email: pcm@pushpagiri.in www.pimsrc.edu.in
- 3. Pushpagiri College of Pharmacy** Pushpagiri
Medicity, Perumthuruthy, Tivuvalla
Tel. No. 0091 469 2645450; Fax 2645460
email: pushpagiripharmacycollege@gmail.com
www.collegeofpharmacy.pushpagiri.in
- 4. Pushpagiri College of Nursing**
Tel. No. 0091 469 2602441; Fax 2700168
email: pcon@pushpagiri.in
- 5. Pushpagiri College of Allied Health Sciences**
Tel. No. 0091 469 2700755; Fax 2701044
- 6. Pushpagiri School of Nursing**
Tel. No. 0091 469 2700755; Fax 2701044
- 7. Pushpagiri Centre for CGFNS & IELTS
Training** Tel. No. 0091 469 2700755; Fax 2701044
- 8. Pushpagiri Research Centre**
Tel. No. 0091 469 2731005; Fax 2731005
email: prc@pushpagiri.in www.prc.pushpagiri.in
- 9. Pushpagiri Centre for Virology**
Tel. No. 0091 469 2731005; Fax 2731005,

MANAGEMENT OF PUSHPAGIRI GROUP OF INSTITUTIONS

Rev. Fr. Jose Kallumalickal

Chief Executive Officer, Pushpagiri Group of Institutions

Tel: +91 9447152704 (M)

+91 469 2700755 Ext. 401, (O) +91 469 2603833

Email: ceo@pushpagiri.in

Shri Jacob Punnoose IPS (Retd.)

Executive Director, Pushpagiri Group of Institutions

Tel: +91 9446111211 (M), +91 469 2700755 Ext. 500 (O)

Email: jacobpunnoose@pushpagiri.in

Rev. Fr. Thomas Pariyarath

Hospital Administrator & Director IT and Marketing,

Pushpagiri Medical College Hospital Tel: +91 9446552330

(M), +91 469 2700755 Ext. 469 (O)

Email: administrator@pushpagiri.in

Rev. Dr. Mathew Mazhavancheril

Director- Academics & Research

Tel: +91 97446 85302 (M), +91 469 2700755 Ext 353(O) Email:

academicdirector@pushpagiri.in

Rev. Fr. Aby Vadakkumthala

Director- Institutions

Tel: +91 9495643763 (M), +91 469 2645282, 2645450

Email: institutiondirector@pushpagiri.in

Rev. Fr. John Padipurackal

Director – Finance and Facilities

Tel: +91 9539460076 (M), +91 469 2700755 Ext.475 (O)

Email: facilitydirector@pushpagiri.in

PUSHPAGIRI COLLEGE OF DENTAL SCIENCES ADMINISTRATION

Rev. Dr. Mathew Mazhavancheril

Director- Academics & Research

Tel: +91 97446 85302 (M) +91 469 2700755 Ext 353(O)

Email: academicdirector@pushpagiri.in

Rev. Fr. Aby Vadakkumthala

Director Institutions – Medicity

Campus

Tel: +91 9495643763(M) +91 469 2645282, 2645450

Email: institutiondirector@pushpagiri.in

PRINCIPAL

Dr. K George Varghese

Principal

Tel: +91 9447021617 (M)

+91 469 2645282 (O) Ext. 401(O) 403(Secy)

Email: georgekunthara@gmail.com

VICE PRINCIPAL

Dr. Benley George

Vice Principal (Administration)

Tel: +91 9745015511(M)

+91 469 2645282 (O), Ext. 402 (O)

Email: georgebenley@yahoo.co.in

Dr Biju Sebastian

Vice Principal (Academics)

Tel: +91 9446539062 (M)

+91 469 2645282

Email: drbijuseb00@gmail.com

CURRICULUM & RESEARCH COMMITTEE

Dr K. George Varghese

Principal

Dr Benley George

Vice Principal (Administration)

Dr Aby Mathew T

HOD, Dept. of Prosthodontics

Dr Suja Joseph

Professor, Dept. of Prosthodontics

Dr Thomas George V.

HOD, Dept. of Periodontics

Dr Eapen Thomas

Professor, Dept. of Oral and Maxillofacial Surgery

Dr A Devadathan

HOD, Dept. of Conservative Dentistry and Endodontics

Dr Baby James

Professor, Dept. of Conservative Dentistry and Endodontics

Dr Biju Sebastian

Vice Principal (Academics) & HOD, Dept. of Orthodontics

Dr S. Sunil

HOD, Oral Pathology

Dr Elizabeth Joseph

HOD, Pedodontics

Dr Omal P.M.

HOD, Oral Medicine and Radiology

Academic Programmes in Dental College

Undergraduate course

BDS	50 seats
<i>Postgraduate courses</i>	
MDS (Prosthodontics and Crown and Bridge)	3 seats
MDS (Oral and Maxillofacial Surgery)	2 seats
MDS (Periodontics)	2 seats
MDS (Orthodontics)	2 seats
MDS (Conservative Dentistry)	3 seats
MDS (Pedodontics and Preventive Dentistry)	2 seats
Diploma in Operating Room Assistant (DORA)	10 Seats

BDS COURSE

2.1. Aims & Objectives of BDS Course

A. Aims:

To create a graduate in Dental Science who has adequate knowledge, necessary skills and such attitudes which are required for carrying out all the activities appropriate to general dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The graduate should also understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

B. Objectives:

The objectives are dealt under three headings namely (a) knowledge and understanding (b) skills and (c) attitudes.

(a) Knowledge and understanding

The student should acquire the following during the period of training.

1. Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods and principles of biological functions.
2. Adequate knowledge to evaluate and analyse scientifically various established facts and data.
3. Adequate knowledge of the development, structure and function of teeth, mouth, jaws and associated tissues both in health and disease and their relationship and effect on general state of health and also their bearing on physical and social well-being of the patient.
4. Adequate knowledge of clinical disciplines and methods, which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws.
5. Adequate knowledge on the preventive, diagnostic and therapeutic aspects of dentistry.
6. Adequate knowledge on laboratory steps involved in dental treatment.
7. Adequate clinical experience required for general dental practice.

8. Adequate knowledge of biological function and behavior of persons in health and sickness as well as the influence of natural and social environment on the state of health so far as it affects dentistry.

Skills

A Graduate should be able to demonstrate the following skills necessary for practice of dentistry:

1. Able to diagnose and manage various common dental problems encountered in general dental practice, keeping in mind the expectations and the right of the society to receive the best available treatment wherever possible.
2. Acquire skill to prevent and manage complications if any encountered while carrying out various dental surgical and other procedures.
3. Possess skill to carry out required investigative procedures and ability to interpret laboratory findings.
4. Acquire skill in laboratory procedures involved in dental treatment.
5. Promote oral health and help to prevent oral diseases wherever possible.
6. Competent in control of pain and anxiety during dental treatment.

Attitudes

A graduate should develop during the training period the following attitudes.

1. Willing to apply current knowledge of dentistry in the best interest of the patients and the community.
2. Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
3. Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
4. Willingness to participate in the continuing education programmes to update knowledge and professional skills from time to time.
5. To help and to participate in the implementation of national health programmes.

C. Goals of BDS Curriculum

On completion of the undergraduate training program the graduates shall be competent in the following. –

General Skills

Apply knowledge & skills in day to day practice. Apply principles of ethics.

Analyze the outcome of treatment.

Evaluate the scientific literature and information to decide the treatment.

- Participate and involve in professional bodies.
- Be capable of self-assessment and be willing to update the knowledge & skills from time to time.
- Inclined to do simple research projects.
- Acquire minimum computer proficiency to enhance knowledge and skills.
- Be aware of one's limitations and know when to refer patients to specialists.
- Be familiar with basic Forensic Odontology techniques and manage Geriatric dental problems.
- Death certification

ii. Practice Management

- Evaluate practice location, population dynamics & reimbursement mechanism.
- Able to communicate freely, orally and in writing with all concerned.
- Maintain records.
- Implement & monitor infection control and environmental safety programs.
- Practice within the scope of one's competence Communication & Community Resources.
- Assess patient's goals, values and concerns to establish rapport and guide patient care.
- Co-ordinate & supervise the activities of allied dental health personnel.

- Participate in improving the oral health of the individuals through community activities.

iii. Patient Care – Diagnosis

- Obtaining patient's history in a methodical way.
- Performing thorough clinical examination.
- Selection and interpretation of clinical, radiological and other diagnostic information.
- Obtaining appropriate consultation.
- Arriving at provisional, differential and final diagnosis.

iv. Patient Care - Treatment Planning

- Integrate multiple disciplines into an individual comprehensive sequenced treatment plan using diagnostic and prognostic information.
- Be able to order appropriate investigations.

v. Patient Care – Treatment

- Recognition and initial management of medical emergencies that may occur during Dental treatment.
- Perform basic cardiac life support.
- Management of pain including post operative.
- Administration of all forms of local anesthesia.
- Administration of intra muscular and venous injections.
- Prescription of drugs, pre operative, prophylactic and therapeutic requirements.
- Uncomplicated extraction of teeth.
- Transalveolar extractions and removal of simple impacted teeth.
- Minor oral surgical procedures.
- Management of Oro-facial infections.
- Simple orthodontic appliance therapy.
- Taking, processing and interpretation of various types of intra oral radiographs.
- Various kinds of restorative procedures using different materials available.

- Simple endodontic procedures.
- Removable and basic fixed Prosthodontics.
- Various kinds of periodontal therapy.

D. Competencies Expected- Specialty wise

OR

ORAL MEDICINE & RADIOLOGY

- On completion of the undergraduate training programme the graduate should:
- Be able to identify the common dental problems like dental caries and periodontal disease and their sequelae
- Be able to differentiate the normal variations and oral mucosal lesions
- Be able to identify pre cancerous and cancerous lesions of the oral cavity and refer to the concerned specialty for their management.
- Have an adequate knowledge about common laboratory investigations and interpretation of their results.
- Have adequate knowledge about medical complications that can arise while treating systemically compromised patients and take prior precautions/ consent from the concerned medical specialist.
- To formulate a clinical diagnosis, order investigations, seek expert consultations to come to a final diagnosis and chart out a proper treatment plan for patients with oral lesions.
- Have adequate knowledge about radiation health hazards, radiation safety and protection.
- Be competent to take intra-oral radiographs and interpret the radiographic findings
- Gain adequate knowledge of various extra-oral radiographic procedures, TMJ radiography and sialography.
- Be aware of the importance of intra- and extra-oral radiographs in forensic identification and age estimation.
- Be familiar with jurisprudence, ethics and understand the significance of dental records with respect to law.

ORAL & MAXILLOFACIAL SURGERY

On completion of the undergraduate training programme the graduate should:

- Be able to apply the knowledge gained in the basic medical and clinical subjects in the management of patients with surgical problems.
- Be able to diagnose, manage and treat patients with basic oral surgical problem
- Have a broad knowledge of maxillofacial surgery and oral Implantology.
- Be familiar with legal, ethical and moral issues pertaining to patient care and communication skills.
- Have acquired the skill to examine any patient with an oral surgical problem in an orderly manner.
- Understand and practice the basic principles of asepsis and sterilization.
- Be competent in the extraction of the teeth under local anesthesia.
- Be Competent to carry out certain minor oral surgical procedures under Local Anesthesia like trans-alveolar extraction, frenectomy, Dentoalveolar procedures, simple impaction, biopsy, etc.
- Be Competent to assess, prevent and manage common complications that arise during and after minor oral surgery.
- Able to provide primary care and manage medical emergencies in the dental office.
- Be familiar with the management of major oral surgical problems and principles involved in the in-patient management.
- Be able to Certify Death

PERIODONTOLOGY

On completion of the undergraduate training programme the graduate should:

- Be able to diagnose the patient's periodontal problem, plan and perform appropriate periodontal treatment.
- Be Competent to educate and motivate the patient.

- Be Competent to perform thorough oral prophylaxis, subgingival scaling, root planning and minor periodontal surgical procedures.
- Give proper post treatment instructions and do periodic recall and evaluation.
- Be Familiar with concepts of osseointegration and basic surgical aspects of implantology.

CONSERVATIVE DENTISTRY AND ENDODONTICS

On completion of the undergraduate training programme the graduate should:

- Be Competent to diagnose all carious lesions.
- Be Competent to perform Class I and Class II cavities and their restoration with amalgam.
- Be able to restore class V and Class III cavities with glass ionomer cement.
- Be able to diagnose and appropriately treat pulpally involved teeth (pulp capping procedures).
- Be able to perform RCT for anterior teeth
- Be competent to carry out small composite restorations
- Understand the principles of aesthetic dental procedures

ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

On completion of the undergraduate training programme the graduate should:

- Understand about normal growth and development of facial skeleton and dentition.
- Be able to pinpoint aberrations in growth process both dental and skeletal and plan necessary treatment
- Be able to diagnose the various malocclusion categories
- Be able to motivate and explain to the patient and parent/guardian about the necessity of treatment
- Be able to plan and execute preventive orthodontics (space maintainers or space regainers)
- Be able to plan and execute interceptive orthodontics (habit breaking appliances)

- Be able to manage treatment of simple malocclusion such as anterior spacing using removable appliances
- Be able to handle delivery and activation of removable orthodontic/myofacial appliances.
- Be able to diagnose and appropriately refer patients with complex malocclusion to the specialist.

PUBLIC HEALTH DENTISTRY

On completion of the undergraduate training programme the graduate should:

- Apply the principles of health promotion and disease prevention.
- Have knowledge of the organization and provision of health care in community and in the hospital service
- Have knowledge of the prevalence of common dental conditions in India
- Have knowledge of community based preventive measures
- Have knowledge of the social, cultural and environmental factors, which contribute to health or illness.
- Be able to administer hygiene instructions, topical fluoride therapy and fissure sealing.
- Be able to educate patients concerning the etiology and prevention of oral disease and encourage them to assume responsibility for their oral health.

PROSTHODONTICS AND CROWN & BRIDGE

On completion of the undergraduate training programme the graduate should:

- Be able to understand and use various dental materials.
- Be competent to carry out treatment of conventional Simple complete and partial removable dentures and anterior crowns.
- Be able to carry out Prosthodontic laboratory procedures.
- Be familiar with the concepts of osseointegration and the value of implant- supported Prosthodontic procedures.
- Be able to diagnose and appropriately refer patients requiring complex treatment procedures to the specialist

PAEDIATRIC AND PREVENTIVE DENTISTRY

On completion of the undergraduate training programme the graduate should:

- Be able to instill a positive attitude and behavior in children towards oral health and understand the principles of prevention and preventive dentistry right from birth to adolescence.
- Be able to guide and counsel the parents/guardian in regards to various treatment modalities including different facets of preventive dentistry.
- Be able to treat dental diseases occurring in child patient.
- Be able to manage the physically and mentally challenged / disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.

2.3 Medium of Instruction

The medium of Instruction and examinations of BDS course will be in English language.

2.4 General Outline of BDS Degree Course

1) The undergraduate course involves organisation of year-wise teaching program. However, this course, as a whole, should demonstrate integration of the basic sciences, clinical dentistry and practical or laboratory skills. The course should be designed and integrated in such a way as to permit smooth progression from pre-clinical to clinical phase. Collaboration should be encouraged between teachers of basic sciences, dental sciences and clinical subjects.

2) The undergraduate dental course consists of three main components. The first component consists subjects common to modern medicine and dentistry like anatomy, physiology, biochemistry and behavioral science, leading to pharmacology, pathology, microbiology and then on to general medicine and general surgery. The second component runs concurrently with the first and deals with special aspects of oral and dental tissues, oral biology and oral pathology. Finally, the third component based on the foundations of the first two, deals with the clinical and technical aspects of dentistry as is required for general dental practice.

3) The first component of the course is intended to provide initially, an appreciation of normal human structure, development, function and

behavior, leading to understanding of the diseases, its prevention and treatment. The main objective is to provide student with a broad knowledge of normal structures and functions of the body, the alterations which take place in disease with particular reference to those conditions in which medical and dental co-operation is essential for proper management. At this stage, the student should also be made aware of the social and psychological aspects of patient care with special reference to the relationship between dentist and patient. The behavioral sciences including both sociology and psychology should be introduced at the initial stages of the training program, much before the students actually deal with the patients.

4) The second component of dental undergraduate program includes instruction in the subjects dealing with dental and oral aspects to ensure a detailed knowledge of the structure and function of the dental and oral tissues. This enables the student to diagnose, prevent and treat the dental and oral diseases and disorders, which were not included in the first component. The subject of oral biology is to be introduced at this level to provide the students a comprehensive knowledge and application of oral physiology, microbiology, biochemistry and oral immunology. Students should be exposed to the basic aspects of forensic odontology at this stage of the course along with oral biology/oral pathology.

5) The third component of the course comprising the clinical and technical aspects of dentistry actually prepares the student to undertake total oral and dental health care of patients of all ages. The emphasis at this stage should be on the prevention of the various dental diseases and how to preserve natural teeth with their supporting structures. The importance of various preventive methods needs to be stressed. The significance of diagnosis of various dental and oral problems needs to be emphasized along with treatment planning before actual treatment procedures are undertaken. In addition to acquiring the knowledge, the students need to gain adequate clinical hands-on-experience in extractions and other minor oral surgical procedures, all aspects of Conservative Dentistry, Endodontics, Crown and Bridge, provision of partial and complete dentures, various periodontal therapeutic procedures and use of removable orthodontic appliances. Familiarity with various radiological techniques, particularly intra-oral methods and proper interpretation of the radiographs, is an essential part of this component of training and has application in clinical diagnosis, forensic identification and age estimation. Training in handling medico-legal cases including death certification should be imparted at this stage. Towards the final stage of the clinical training, each student should be involved in comprehensive oral health care or holistic approach to enable him or her to plan and treat patients as a whole, instead of piece-meal treatment provided in

each specialty. The aim of the undergraduate program should undoubtedly be to produce a graduate, competent in general dental practice.

6) The commitment towards the society as a whole needs to be stressed along with the knowledge and treatment skills gained. Instruction in public health dentistry should emphasise the sociological aspects of health care and palliative care particularly; oral health care, including the reasons for variation in oral and dental needs of different sections of the society. It is important to know the influence of social, behavioral, environmental and economic factors on oral and dental health. Students should be made aware of the National oral health Policy and the importance of being a member of the Health care team delivering medical and oral health care particularly among rural population. Students should also be encouraged to participate in simple research project work

7) The undergraduate curriculum stresses the significance of infection and cross infection control in dental practice. Aspects like sources of infection, measures to be adopted both general and specific for control, particularly the HIV and hepatitis is incorporated in the curriculum so that the graduates are aware of its significance and follow it in their practice.

8) The information technology has touched every aspect of an individual's personal and professional life. The University hence recommends that all undergraduates acquire minimum computer proficiency, which will enable them to enhance their professional knowledge and skills.

2.5 Duration & course of Study

1. The undergraduate dental training program leading to B.D.S. degree shall be of four and a half years duration in addition to one year compulsory paid rotating internship. During this period, the students shall be required to engage in full time study at a Dental college recognized or approved by the Dental Council of India. During the first four and a half years of undergraduate course, the instruction in clinical subjects should be at least for two and a half years.

2. Basic Medical & Dental Subjects

The basic medical and dental sciences comprise of Anatomy - Gross and Microscopic, Physiology, Biochemistry, Pharmacology, science of Dental Materials and Oral biology. Subjects like behavioral sciences, which would be useful to develop communication skills, should also be introduced in the first year itself and spread over the undergraduate course. An introduction to Public Health Dentistry also will be useful to develop the concept of commitment to community. The laboratory skills like pre-clinical Prosthodontics, Crown and Bridge, Conservative dentistry and Orthodontics is to be developed by the students.

Studying dental morphology also is a part of initial training. At the end of this period the student should be in a position to understand and comprehend in general the development, structure and function of the human body in both health and disease.

3. The instruction in basic dental sciences should include theoretical and practical aspects of oral anatomy and physiology, to provide a detailed knowledge of the form and structure of teeth, associated tissues and occlusal relationships. The study should also aim at development of a concept regarding physiological and biochemical processes relevant to oral cavity for better understanding of the changes that occur with the onset of disease in the oral cavity. The student should be made aware of the importance of various dental tissues in forensic investigation.

4. Clinical, Medical and Dental subjects:

The students should be introduced to clinics in the initial stage, preferably in the first year, as an observer to familiarize with clinical set-up and working. The period of instruction in the clinical subjects shall not be less than two and a half years full time. During this, the student shall attend a dental hospital, general hospital, community camps and satellite clinics, in order to obtain instruction and experience in the practice of dentistry. The main objective of training in clinical dental subjects is to produce a graduate, able and competent to recognize or diagnose various dental and oral diseases, to undertake general dental treatment, advice on the provision of specialized treatment available and finally advise the patient on prevention. The student should also understand the relationship between oral and systemic diseases.

5. The general medicine and surgery training should provide sufficient knowledge on human disease to enable the student to understand its manifestations as relevant to the practice of dentistry. This requires clinical teaching on patients and shall be carried out in inpatient and outpatient medical departments and specialist clinics. This clinical instruction should enable the student to understand and perhaps diagnose common systemic diseases, which have relevance to dental practice, by adopting a systematic approach of history taking and clinical examination. The student should also realize the significance of various general and special investigations in the diagnosis of diseases. The ability to recognize physical and mental illness, dealing with emergencies, effective communication with patients, and interaction with professional colleagues also become important aspects of this training.

6. All dental students should receive instruction in first-aid and principles of cardio-pulmonary resuscitation. The students should also attend to the accident and emergency department of a Medical hospital.

7. The purpose of the clinical training is to provide sufficient practical skill in all aspects of clinical dentistry. The instruction should also include patient management skills, treatment of patients of all ages with special reference to children (paediatric), very elderly (geriatric), medically compromised and disabled patients.

8. During the two and a half years of clinical course, the students should receive thorough instruction which involves history taking, diagnosis and treatment planning in all aspects of dentistry and should be competent on graduation to carry out all routine general procedures. In Oral & Maxillofacial Surgery, instruction should include the knowledge of various maxillofacial problems like injuries, infections and deformities of the jaws and associated structures. The clinical experience should include those procedures commonly undertaken in general practice like extraction of teeth, minor oral surgical procedure etc. In Conservative dentistry and Endodontics, Prosthodontics and Crown & Bridge and Periodontology students should be competent on graduation to carry out routine treatments like restorations of various types, endodontic procedures, removable Prosthodontics, and finally various kinds of periodontal therapy. In Orthodontics & Dentofacial Orthopaedics, students should carry out simple appliance therapy including myofacial appliances for patients. Students should also be able to appreciate the role of Dentofacial growth in the development and treatment of malocclusion. In addition, students should be aware of their limitations on graduation, need to refer patients for consultant opinion and/or treatment and also the need for postgraduate and continuous education programmes.

9. In Paediatric & Preventive Dentistry, the students should concentrate on effective management of the behavior of the child patient to instill a positive attitude, on efficacy of preventive measures and clinical management, including the treatment needs particularly for children with disabilities. In oral medicine and Radiology, the student should receive instruction in various common lesions, occurring in the oral cavity and its diagnosis with particular reference to oral cancer. All students should receive instructions and gain practical experience in taking various types of intra and extra oral radiographs and its processing and interpretation. They should be aware of the hazards of radiation and proper protective measures from radiation for the patient, operator and other staff. Since Paediatric dentistry involves the practice of various branches of clinical dentistry, training in Paediatric Dentistry is extended to Part II of the final year.

10. The successful control and management of pain is an integral part of dental practice. Upon graduation the students should be competent to administer all forms of local anesthesia. The value of behavioral methods of anxiety management should be emphasized. The students should also have the practical experience in the administration of intra-muscular and

intra-venous injections. Knowledge of pain mechanisms and strategies to control post-operative pain is essential for practice of dentistry.

11. Instruction should be given in dental jurisprudence, legal and ethical obligations of dental practitioners and the constitution and functions of Dental Council of India. Students should be made competent in the management of medico legal cases and death certification.

12. Infection and cross infection control assume significance in dental practice. The students should be made aware of the potential risk of transmission of various infectious diseases particularly HIV and hepatitis in the dental surgery. The students should be aware of their professional responsibility for the protection of the patients, themselves and their staff and the requirements of the health and safety regulations.

13. The subjects of Aesthetic dentistry, Oral Implantology, Behavioral sciences and Forensic Odontology have assumed great significance. Hence, these four specialties are incorporated into the undergraduate curriculum. The instruction and clinical training in aesthetic dentistry shall be carried out by the departments of Prosthodontics and Crown & Bridge and Conservative Dentistry & Endodontics. Similarly, the instruction and clinical training in Oral Implantology shall be done by the departments of Prosthodontics and Crown & Bridge, Oral & Maxillofacial Surgery, and Periodontology. The instruction in behavioral sciences should ideally commence before the students come in contact with the patients and shall be carried out by the departments of Public Health Dentistry and Paediatric and Preventive Dentistry. Forensic Odontology including procedures of death certification will be a part of Oral Pathology & Oral Microbiology, Oral Medicine & Radiology and Oral & Maxillofacial Surgery.

14. With increased life expectancy and treatment facilities, Palliative care has gained importance in the modern world. Palliative medicine is the branch of medicine involved in treatment of patients with advanced, progressive, life-threatening disease for whom the focus of care is maximising their quality of life through expert symptom management, psychological, social and spiritual support as part of a multi-professional team. Understanding the role of dental surgeon in the field of palliative care this subject is introduced in the syllabus to be handled by faculty under public health dentistry trained in palliative care.

SUBJECTS OF STUDY

1. General Human Anatomy including Embryology and Histology
2. General Human Physiology
3. Biochemistry, Nutrition and Dietetics
4. Dental Anatomy, Embryology and Oral Histology

I BDS SUBJECTS

I. GENERAL HUMAN ANATOMY INCLUDING EMBRYOLOGY AND HISTOLOGY

a) GOAL

The students should gain the knowledge and insight into, the functional anatomy of the normal human head and neck, functional histology and an appreciation of the genetic basis of inheritance and disease, and the embryological development of clinically important structures. So that relevant anatomical & scientific foundations are laid down for the clinical years of the BDS course.

b) OBJECTIVES:

i. Knowledge & understanding:

At the end of the 1st year BDS course in Anatomical Sciences the undergraduate student is expected to:

(1) Know the normal disposition of the structures in the body while clinically examining a patient and while conducting clinical procedures.

(2) Know the anatomical basis of disease and injury.

(3) Know the microscopic structure of the various tissues, a prerequisite for understanding of the disease processes.

(4) Know the nervous system to locate the site of lesions according to the sensory and or motor deficits encountered.

(5) Have an idea about the basis of abnormal development, critical stages of development, effects of teratogens, genetic mutations and environmental hazards.

(6) Know the sectional anatomy of head neck and brain to read the features in radiographs and pictures taken by modern imaging techniques.

(7) Know the anatomy of cardio-pulmonary resuscitation.

ii. Skills

1) To locate various structures of the body and to mark the topography of the living anatomy.

2) To identify various tissues under microscope.

3) To identify the features in radiographs and modern imaging techniques.

4) To detect various congenital abnormalities.

c) INTEGRATION

By emphasizing on the relevant information and avoiding unwanted details, the anatomy taught integrally with other basic sciences & clinical subjects not only keeps the curiosity alive in the learner but also lays down the scientific foundation for making a better doctor, a benefit to the society.

This insight is gained in a variety of ways:

- i. Lectures & small group teaching
- ii. Demonstrations
- iii. Dissection of the human cadaver
- iv. Study of dissected specimens
- v. Osteology
- vi. Surface anatomy on living individual
- vii. Study of radiographs & other modern imaging techniques.
- viii. Study of Histology slides.
- ix. Study of embryology models
- x. Audio-visual aids

Throughout the course, particular emphasis is placed on the functional correlation, clinical application & on integration with teaching in other bio dental disciplines.

d) AN OUTLINE OF THE COURSE CONTENT:

General anatomy: Introduction of anatomical terms and brief outline of various systems of the body.

- i. Regional anatomy of head & neck with Osteology of bones of head & neck, with emphasis on topics of dental importance.
- ii. General disposition of thoracic, abdominal & pelvic organs.
- iii. The regional anatomy of the sites of intramuscular & intra vascular injections, & lumbar puncture.
- iv. General embryology & systemic embryology with respect to development of head & neck.
- v. Histology of basic tissues and of the organs of gastrointestinal, respiratory, Endocrine, excretory systems & gonads.
- vi. Medical genetics

a) THEORY:100HOURS**THEORY**

	TOPICS	HOURS
1	Introduction to anatomical terms, position, skin, superficial fascia and deep fascia	1
2	Simple epithelium, compound epithelium, Glandular epithelium	1
3	Scalp	1
4	Muscles of facial expression	1
5	Norma verticalis & Norma frontalis	1
6	Norma occiptalis & norma lateralis	1
7	Cervical vertebrae	1
8	Deep cervical fascia	1
9	Development of face	1
10	Brachial plexus	1
11	Classification of joints	1
12	Connective tissue	2
13	Cartilage	1
14	Bone	2
15	Muscle	1
16	Nervous tissue – Neurons, classification, regeneration, optic nerve, sciatic nerve, sensory & autonomic ganglia	2
17	Thyroid gland & development & developmental anomalies	1
18	Lymphatic drainage of head & neck.	1
19	Lacrimal apparatus & eyelid	1
20	Parotid gland & development	1
21	Dural venous sinuses – classification, cavernous sinus in detail	1
22	Pituitary gland and development & anomalies	1
23	Vascular tissue – Large artery, Medium sized artery, Large vein	1
24	Lymphatic tissue	2

	TOPICS	HOURS
25	Skin and its appendages – hair follicle – Sebaceous gland – sweat gland – nail	1
26	Anterior cranial fossa	1
27	Middle cranial fossa	1
28	Posterior cranial fossa	1
29	Parietal bone	1
30	Occipital bone	1
31	Frontal bone	1
32	Temporal bone	2
33	Norma basalis	2
34	General embryology – oogenesis	1
35	General embryology – spermatogenesis	1
36	General embryology – fertilization	1
37	General embryology – implantation bilaminar	1
38	General embryology – bilaminar germ disc	1
39	General embryology - Neural tube formation, trilaminar germ disc, neural crest, Intraembryonic mesoderm & its fate, Notochord	2
40	General embryology - Folding of embryo	1
41	General embryology - Placenta & foetal membranes	2
42	Pharyngeal pouches & cleft	1
43	Bony orbit	1
44	Muscles of mastication	1
45	Temporomandibular joint	1
46	Hyoglossus muscle and its relations	1
47	Mandible	2
48	Maxilla	2
49	Zygomatic & hyoid bones	1
50	Pharynx	2
51	Nasal cavity & its lateral wall	1
52	Larynx	2
53	Tongue and its development & developmental anomalies	1
54	Middle ear & development	1

	TOPICS	HOURS
55	Coats of the eye – uveal tract in detail	1
56	External features of spinal cord	1
57	Leptomeninges	1
58	Blood supply of brain	1
59	Medulla oblongata– external features	1
60	Pons – external features	1
61	Cerebellum	1
62	4 th ventricle	1
63	Mid brain – external features	1
64	3 rd ventricle	1
65	Cerebrum – Sulci, gyri and functional area	1
66	Lateral ventricle	1
67	Optic pathway	1
68	White matter of cerebrum and internal capsule	2
69	Basal ganglia	1
70	III Cranial Nerve & IV Cranial nerves	1
71	V Cranial nerve & VI cranial nerves	1
72	VII cranial nerve	1
73	VIII, IX cranial nerves	1
74	X, XI, XII cranial nerves	1
75	Gastrointestinal system	2
76	Respiratory system	2
77	Cardiovascular system	2
78	Excretory system	2
79	Reproductive system – male (1 hr), female (1 hr)	2
80	Medical genetics – Mitosis, Meiosis, Chromosomes and anomalies	1
81	Medical Genetics - Gene structure and genetic disorders	1
82	Medical Genetics - Mode of inheritance	1

Sl. No.	SEMINARS
1.	Submandibular gland
2.	Nasal septum
3.	Soft palate
4.	Auditory tube
5.	Otic ganglion
6.	Pterygopalatine ganglion
7.	Submandibular ganglion
8.	Ciliary ganglion
9.	Ansa cervicalis
10.	Internal and external jugular veins
11.	Subclavian artery
12.	Autonomic nervous system
13.	Paranasal air sinuses
14.	Lingual artery
15.	Circle of Willis
16.	Choroid plexuses of the ventricles

a) PRACTICAL :175HOURS

SI. PRACTICALS

No.

HISTOLOGY

1. Simple epithelium
2. Compound epithelium
3. Glandular epithelium
4. Connective tissue
5. Cartilage
6. Bone
7. Muscle
8. Neuron – Optic Nerve - Peripheral Nerve
9. Ganglia
10. Blood vessels
11. Lymphatic tissue – Lymph node, - Spleen, - Thymus, - Tonsil
12. Skin – Thin skin, Thick skin
13. Placenta & Umbilical cord
14. Trachea & lung
15. Spinal cord, Cerebellum, Cerebrum
16. Cornea & Retina
17. Thyroid & Parathyroid gland
18. Suprarenal & Pituitary glands
19. Kidney, Ureter, Urinary bladder
20. Ovary, Corpus luteum, Testis
21. Tongue – filiform, fungiform, circumvallate papillae
22. Salivary glands – Mucous – Serious – Mixed
23. Liver, Pancreas

DISSECTION

24. Introduction to dissection
25. Scalp
26. Superficial dissection of face – muscles of face
27. Side of the neck & Posterior triangle
28. Back of the neck – suboccipital triangle

29. Anterior triangle
30. Deep dissection of the neck – Thyroid gland parathyroid gland trachea, oesophagus, Brachiocephalic trunk, Subclavian artery Bracheiocephalic vein Thoracic duct. Cervical pleura Neurovascular bundle of the neck, Sympathetic chain, Scalene muscles; Cervical fascia
31. Lymph nodes & lymph vessels of head & neck
32. Prevertebral region – Vertebral artery – Vertebral vein
33. Deep dissection of face – Facial artery – Other vessels -Nerves
34. Structures in the cheek & lips
35. Eyelid & lacrimal apparatus
36. Parotid region
37. Cranial cavity –meninges Dural folds, Venous sinuses
38. Anterior cranial fossa
39. Middle cranial fossa – Pituitary gland
40. Posterior cranial fossa
41. Orbit – structures in the orbit
42. Temporal and infratemporal regions
43. Submandibular region
44. Mouth and pharynx
45. Soft palate and Auditory tube
46. Cavity of the nose
47. Larynx
48. Tongue
49. Organs of hearing & equilibrium – External ear – Middle ear – Internal ear
50. Eye ball
51. Joints of the neck
52. Spinal Cord
53. Introduction to brain
54. Meninges of brain
55. Blood vessels of brain
56. Base of brain
57. Hind brain –Medulla

58. Hind brain – Pons
59. Hind brain – Cerebellum
60. 4th ventricle
61. Midbrain
62. Cerebral hemispheres
63. White matter of cerebrum
64. 3rd ventricle
65. Lateral ventricle
66. Thalami – Optic tract
67. Deep dissection of cerebral hemisphere & Internal capsule
68. Deep nuclei and connections of thalamus

DEMONSTRATION OF SPECIMENS

69. Thoracic wall Chambers of heart Coronary arteries
Pericardium
70. LungsPleural cavity Diaphragm
71. Abdomen – Peritoneal cavityOrgans in abdominal & pelvic
cavities

CLINICAL PROCEDURES

72. Intramuscular injections Deltoid muscleGluteal region
Quadriceps femoris
73. Intravenous injection Median cubital vein Cephalic veinBasilic
veinLong saplenous vein Short saplenous vein
74. Arterial pulsations Superficial temporal FacialCarotid Brachial
Radial Femoral Dorsalis pedisLumbar puncture

g) SCHEME OF EXAMINATION

Distribution of Topics and Type of Questions for University Written examination:

Contents	Types of Questions and Marks	Marks
Questions from any topic included in the theory syllabus	Structured Essays 2x 10 marks	20
Questions from any topic included in the theory syllabus Except from the topics from which the long essays have been set	Short Notes Essays 4 x 5 marks Brief Notes	20
	10x3 marks Total	30
		70

i.	Theory	
	University Written	70 Marks
	Internal Assessment	10 Marks
	Viva Voce:	
	Examiner 1-Gross Anatomy-	
	Examiner 2-Osteology, Surface Marking & embryology	20 Marks
ii.	Practicals:	
	University Practical Examination:	80 Marks
	Gross Anatomy including osteology	
	Spotters (2 mark each) 2x 15	30 Marks
	Discussion on Dissected parts	
	(2 Specimens) 2x15	30 Marks
	Histology –spotters (10 slides) 2x10	20 Marks
	Internal Assessment:	20 Marks
	Grand Total	200Marks

2. GENERAL HUMAN

PHYSIOLOGY a) GOAL

The broad goal of the teaching undergraduate students in Physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and disease.

b) OBJECTIVES

i. Knowledge

At the end of the course, the student will be able to:

- (1) Explain the normal functioning of all the organ systems and their interactions for well co-ordinated total body function.
- (2) Assess the relative contribution of each organ system towards the maintenance of the milieu interior.
- (3) List the physiological principles underlying the pathogenesis and treatment of disease.

ii. Skills

At the end of the course, the student shall be able to:

- (1) Conduct experiments designed for the study of physiological phenomena.
- (2) Interpret experimental and investigative data
- (3) Distinguish between normal and abnormal data derived as a result of tests which he/she has performed and observed in the laboratory.

iii. Integration

At the end of the integrated teaching the student shall acquire an integrated knowledge of organ structure and function and its regulatory mechanisms.

c) THEORY: 120 Hours

Hours

I. GENERAL PHYSIOLOGY

4

Homeostasis: Basic concept, Feedback mechanisms
Structure of cell membrane, transport across cell membrane
Body fluid Compartments: distribution of total body water, intracellular & extracellular compartments, major anions & cations in intra and extra cellular fluid. Membrane potentials. RMP & Action Potential.

2. BLOOD:**15**

Composition & functions of blood, Plasma proteins - Types, concentration, functions & variations, Erythrocyte: Morphology, functions & variations. Erythropoiesis & factors affecting erythropoiesis, ESR- factors affecting, variations & significance. Haemoglobin - Normal concentration, method of determination [P] & variation in concentration, functions. Anaemia - Definition, classification, life span of RBC's, destruction of RBC's, formation & fate of bile pigments, Jaundice - types. Leucocytes: Classification, number, percentage, distribution morphology, properties, functions & variation. Role of lymphocytes in immunity, life span & fate of leucocytes. [Mention Leukemia] Thrombocytes - Morphology, number, variations, function. Haemostasis – Role of vasoconstriction, platelet plug formation in haemostasis, coagulation factors, intrinsic & extrinsic pathways of coagulation, clot retraction. Fibrinolytic system. Tests of haemostatic function, platelet count, clotting time, bleeding time, prothrombin time - normal values, method & variations. Anticoagulants - mechanism of action. Bleeding disorders. Blood groups: ABO & Rh system, method of determination, importance, indications & dangers of blood transfusion, blood substitutes. [mention only] Blood volume: Normal values, variations. Functions of reticulo-endothelial system. Specific gravity, Packed cell volume, Methods of estimation [in practicals] Blood Indices - MCV, MCH, MCHC - definition, normal values, variation. Leucopoiesis Thrombopoiesis.

3. MUSCLE AND NERVE**8**

Classification of nerves, Structure of skeletal muscle - Molecular mechanism of muscle contraction, Neuromuscular junction and NM transmission. Properties of skeletal muscle. Structure and properties of cardiac muscle & smooth muscle.

4. DIGESTIVE SYSTEM :**10**

Introduction to digestion: General structure of G.I. tract, Innervation. Salivary glands: Saliva: composition, regulation of secretion & functions of saliva. Stomach: Composition and functions of gastric juice, mechanism and regulation of gastric secretion. HCl secretion. Physiological basis of Peptic ulcer management [briefly] Exocrine Pancreas - Structure, composition of pancreatic juice, functions of each component, regulation of pancreatic secretion. Liver : structure , composition of bile, functions of bile Gall bladder: structure, functions. Small intestine - Composition, functions Large intestine - Functions. Motor functions of GIT: Mastication, deglutition, gastric filling & emptying, movements of small and large intestine, defecation.

5. EXCRETORY SYSTEM : 8

Structure & functions of kidney, functional unit of kidney & functions of different parts. Juxta Glomerular apparatus. Special functional features of renal circulation. Formation of Urine: Glomerular filtration rate - definition, normal values, factors influencing G.F.R. Tubular reabsorption - Reabsorption of sodium, glucose, water & other substances. Tubular secretion - secretion of urea, hydrogen and other substances. Countercurrent mechanisms. Micturition: anatomy & innervation of Urinary bladder, mechanism of micturition. Determination of GFR. Role of kidney in the regulation of pH of the blood. Urinary bladder: abnormalities.

6. SKIN AND TEMPERATURE REGULATION [basics only] 4

7. ENDOCRINOLOGY 14

General endocrinology - endocrine glands & hormones. Second messengers. Endocrine function of hypothalamus. Hormones of anterior pituitary & their actions, Disorders of secretion of anterior pituitary hormones. Posterior pituitary hormones: actions. Thyroid: secretion & transport of hormones, actions of hormones, regulation. Adrenal cortex & Medulla- action, Other hormones - Angiotensin, local hormones. Pancreatic Hormone. PTH. Endocrine Disorders to be taught with each gland.

8. REPRODUCTION 6

Physiological anatomy of male and female sex organs, Gonadotropic hormones. Sex chromatin. Female reproductive system: Menstrual cycle, functions and hormones of ovary. Ovarian and uterine changes during menstrual cycle. Actions of oestrogen & Progesterone control of secretion of ovarian hormones, fertilization, implantation, maternal changes during pregnancy and parturition. Lactation, milk ejection reflex. Male reproductive system, spermatogenesis, hormones- testosterone. Semen. Contraception.

9. CARDIO VASCULAR SYSTEM 15

Functional anatomy and innervation of heart. Properties of cardiac muscle. Origin & propagation of cardiac impulse and Pacemaker potential. Action potential. Cardiac cycle - Phases, Pressure changes in atria, ventricles & aorta. Volume changes in ventricles. Heart sounds. Jugular venous pulse. Arterial pulse. Electrocardiogram- Basic principles only. Normal electrocardiogram. Heart rate: Normal value, variation. Stroke volume

and Cardiac output: definition, normal values, variations, factors affecting. Arterial blood pressure: Definition, normal values, variations, determinants. Regulation of heart rate, stroke volume, blood pressure: integrated concept. Coronary circulation: special features. Cardiac murmurs. Cardiac output: one method of determination. Cardiovascular homeostasis in exercise & posture.

10. RESPIRATORY SYSTEM

12

Physiology of Respiration: External & internal respiration. Functional anatomy of respiratory passage & lungs. Respiratory movements: Muscles of respiration, Mechanism of inflation & deflation of lungs. Intra pleural & intra pulmonary pressures & their changes during the phases of respiration. Mechanics of breathing - surfactant, compliance & work of breathing [basics only]. Spirometry: Lung volumes & capacities definition, normal values, significance, factors affecting vital capacity, variations in vital capacity, Pulmonary ventilation- alveolar ventilation & dead space - ventilation. Pulmonary circulation: Functional features. Composition of inspired air, alveolar air and expired air. Exchange of gases: Diffusing capacity, factors affecting it. Transport of Oxygen & carbon dioxide in the blood. Regulation of respiration- neural & chemical. Hypoxia, cyanosis, dyspnoea, periodic breathing. Artificial respiration. FEV & its variations. Pulmonary function tests. Respiratory changes during exercise.

11. CENTRAL NERVOUS SYSTEM

10

Organisation of central nervous system. Neuronal organisation at spinal cord level, Synapse: functional significance. Receptors, reflexes, sensations and sensory tracts, motor system. Physiology of pain. Referred pain. Analgesia systems. Functions of thalamus, cerebellum. Vestibular apparatus [basics only]. Cerebral cortex: Basics of higher functions. Formation and functions of CSF: clinical significance. Autonomic nervous system.

12. SPECIAL SENSES

14

Fundamental knowledge of vision, hearing, taste and smell. Errors of refraction. Tests of auditory function.

d) PRACTICALS

The following list of practical is minimum and essential. The entire practical have been categorized as procedures and demonstrations. The procedures are to be performed by the students during practical classes to acquire skills. All the procedures are to be included in the University practical examination. Those categorized as demonstrations are to be shown to the

students during practical classes. However these demonstrations would not be included in the University examinations but question based on this would be given in the form of charts, graphs and calculations for interpretation by the students.

Practicals & demonstrations: 60 hours

Practicals	Hours
Study of Microscope and its uses	02
Collection of blood and study of haemocytometer	02
Haemoglobinometry	02
Determination of RB count	08
Determination of WBC count	04
Determination of blood groups	02
Leishman's staining and differential leucocyte count	10
Calculation of blood indices	02
Determination of bleeding time	01
Determination of clotting time	01
Blood pressure recording	03
Auscultation of Heart sounds	02
Demonstrations	
Determination of Erythrocyte Sedimentation rate(ESR)	02
Determination of packed cell volume(PCV)	02
Determination of specific gravity of blood	02
Fragility test for RBC	02
Clinical examination of Cardiovascular and Respiratory System	03
Determination of vital capacity	02
Artificial respiration	02
Demonstration of deep and superficial reflexes	02
Activity of frog's heart and effects of Acetylcholine, Atropine and	02
Electrocardiography: Demonstration of recording of normal Electro	02
Total	60

e) SCHEME OF EXAMINATION Types
of Questions for written examination

Type of Questions	Marks
Structured Essays 1x 10 marks	10
Short Notes 2 x 5 marks	10
Brief Notes 5 x 3 marks	15
Total	35
i. Theory:	
University written Examination:	35Marks
University Viva:	10Marks
Internal Assessment:	5 Marks
Total:	50 Marks
ii. Practicals:	
Internal Assessment:	10 Marks
University Practicals:	40Marks
Total:	50 Marks
Grand Total	100Marks

Mark distribution for University practical examination

Major Experiments: **20Marks**

Any one of the Major Experiments: R.B.C. Count,
W.B.C. Count, Differential Count, Blood
Pressure Recording

Minor Experiments: **15Marks**

Any one of the minor Experiments: Determination of
Blood Groups, Determination of Bleeding & Clotting
time, Haemoglobin Estimation, Calculation of
absolute Hematological Indices–MCH, MCV, MCHC

Practical Work record: **5 Marks**

3. BIOCHEMISTRY, NUTRITION AND

DIETETICS a) AIMS AND SCOPE

The major aim is to provide a sound but crisp knowledge on the biochemical basis of the life processes relevant to the human system and to dental/medical practice. The contents should be organized to build on the already existing information available to the students in the pre-university stage and reorienting. A mere rehash should be avoided.

The chemistry portion should strive towards providing information on the functional groups, hydrophobic and hydrophilic moieties and weak valence forces that organise macromolecules. Details on structure need not be emphasised.

Discussion on metabolic processes should put emphasis on the overall change, interdependence and molecular turnover. While details of the steps may be given, the student should not be expected to memorise them. An introduction to biochemical genetics and molecular biology is a must but details should be avoided. The exposure to antivitamin, antimetabolites and enzyme inhibitors at this stage, will provide a basis for the future study of medical subjects. An overview of metabolic regulation is to be taught by covering hormonal action, second messengers and regulation of enzyme activities. Medical aspects of biochemistry should avoid describing innumerable functional tests, most of which are not in vogue. Cataloguing genetic disorders under each head of metabolism is unnecessary. A few examples which correlate genotype change to functional changes should be adequate.

At the end of the course the student would be able to acquire a useful core of information, which can be retained for a long time.

b) THEORY: 70 HOURS

No. TOPIC	HOURS ALLOTTED
I CARBOHYDRATES	12 hours
Definition, biological importance and classification.	
Monosaccharide's –Glucose, fructose, galactose, mannose	
Reactions: reducing property, oxidation, osazone, Molisch test. Define anomerism, epimerism with examples.	
Disaccharides-lactose, maltose, sucrose, Glycosidic bond, amino sugars, deoxy sugars	
Polysaccharides. Structures of starch and glycogen, Muco polysaccharides (definition, name, components, biochemical significance. nature of linkages not required) Dietary fibers.	
Digestion and absorption of carbohydrates. associated disorders(in brief)	
Glycolysis, fates of pyruvate Gluconeogenesis.	2

Glycogenesis, glycogenolysis,	2
Significance of pentose phosphate pathway. Importance of glucuronic acid.	1
Regulation of blood glucose. Diabetes mellitus: impaired fasting glucose, impaired glucose tolerance, gestational diabetes mellitus. Evaluation of glycemic status.	2

2 LIPIDS**9 hours**

Definition, biological importance and classification.	
Fats and fatty acids. Essential fatty acids. Introduction to compound lipids.	
Cholesterol.	2
Digestion and absorption of lipids	1
Beta oxidation of fatty acids	1
Fatty acid synthesis, (in brief)	1
Ketone body formation and utilization	1
Outlines of cholesterol synthesis and compounds formed from cholesterol	1
Plasma lipoproteins: Formation, function and dyslipidemia, Atherosclerosis.	2

3 ENZYMES**6 hours**

Definition, classification, specificity and active site. Cofactors.	1
Factors affecting enzyme action	2
Enzyme inhibition	2
Clinical important enzymes- AST,ALT,ALP,PSA, LDH,CK,G6PD,GGT	1

4 PROTEINS**9 hours**

Amino acids: Classification. Introduction to peptides, peptide bond Proteins: Classification. Charge properties.	
Buffer action. Levels of protein organization Denaturation.	3
Digestion and absorption of proteins. Nitrogen balance.	
Essential amino acids. Protein quality and requirement (methods for evaluation of protein quality to be excluded).	2
Protein-calorie malnutrition, Balanced diet.(in brief)	
Formation of Ammonia and Urea cycle.	1
Reactions of amino acids-transamination, trans methylation, trans sulfuration (in brief)	1
Compounds formed from glycine	1
Biologic importance of aromatic amino acids, sulphur containing amino acids,	
Aminoacidurias (in brief)	1

5 INTEGRATION OF METABOLISM	2hours
High energy compounds, Electron transport chain and oxidative phosphorylation.	
6 VITAMINS	5 hours
Fat soluble vitamins A,D,E,K, sources, functions, daily requirements, deficiency, Toxicity	2
Water soluble vitamins B, C, sources, functions, daily requirements, deficiency, Toxicity	3
7 ACID BASE BALANCE	4 hours
Buffers, respiratory and renal regulation, disorders, analysis	
8 MINERALS	6 hours
Classification, daily requirement. Calcium and phosphorous: sources, uptake, excretion, function. Serum calcium regulation.	2
Iron: sources, uptake and transport. Heme and nonheme iron functions; deficiency	2
Iodine: Brief introduction to thyroxine synthesis. General functions of thyroxine.	
Fluoride: function, deficiency and excess	1
Indications of role of other minerals	1
9 HAEMOGLOBIN	3 hours
Structure, synthesis, degradation	1
Hemoglobinopathies	1
Jaundice	1
10 PLASMA PROTEINS	2 hours
Classification and separation. Functions of albumin. immunoglobulins. Biochemistry of AIDS.	
11. LIVER FUNCTION TESTS	1 hours
12. KIDNEY FUNCTION TESTS	1 hours
13. MOLECULAR BIOLOGY	8 hours
Nucleic acids: Building units. Nucleotides. Outline structure of DNA and RNA.	2
Formation and degradation of nucleotides. (in brief) Gout. Lesch- nyhan syndrome	2
Replication. Transcription. (in brief) Antimetabolites	

and antibiotics interfering in replication, transcription	2
Outline of translation process.	2

14. Techniques-colorimetry, ELISA, RIA **2 hours**

c) PRACTICALS, DEMONSTRATION & SEMINAR: 60 hours

i. Practical: 45 hours

Sl.No.	Procedure	Hours
1.	Introduction to lab procedures	1
2.	Normal & abnormal constituents of urine	12
3.	Introduction to clinical chemistry	2
4.	Estimation of blood urea	2
5.	Estimation of serum protein	2
6.	Estimation of blood sugar	2
7.	Estimation of serum creatinine	2
8.	Estimation of serum albumin	2

ii. Demonstration: 20 hours

Sl.No.	Procedure	Hours
1.	Electrophoresis	2
2.	Chromatography	2
3.	GTT charts	2
4.	LFT charts	2
5.	Revision	3

iii. Seminars: 15 hours

SCHEME OF EXAMINATION

Types of Questions for written examination

Type of Questions	Marks
Structured Essays 1 x 10 marks	10
Short Notes 2 x 5 marks	10
Brief Notes 5 x 3 marks	15
Total	35

i. Theory:

University written Examination:	35Marks
University Viva:	10Marks
Internal Assessment:	5 Marks
Total:	50 Marks

ii. Practicals:

Internal Assessment:	10 Marks
University Practicals:	40Marks
Total:	50 Marks
Grand Total	100Marks

Mark distribution for University practical examination;

One procedure for quantitative estimation	15marks
One procedure for qualitative analysis	20marks
Practical Work record:	5 Marks

The following Procedures are suggested for University Practical Examination:

Quantitative Estimation (Any ONE estimation to be done)

Estimation of blood sugar/serum creatinine/blood urea/serum protein/ serum albumin

Qualitative Analysis (Any ONE analysis to be done)

Urine Analysis—normal constituents Report of abnormal urine

4. DENTALANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY

a) INTRODUCTION:

The course includes instructions in the subject of Dental Morphology, Oral Embryology, Oral Histology and Oral Physiology. A composite study of basic Dental Sciences & their clinical applications.

b) SKILLS

e student should acquire basic skills in:

Carving of crowns of permanent teeth in wax. Microscopic study of Oral tissues.

Identification of Deciduous & Permanent teeth

Age estimation by patterns of teeth eruption from plaster casts of differ-ent age groups.

c) OBJECTIVES

For a course on Oral Biology,

The student is expected to appreciate the normal development, morphology, structure & functions of oral tissues & variations in different pathological/ non- pathological states. The student should understand the histological basis of various dental treatment procedures and physiologic ageing process in the dental tissues.

The students must know the basic knowledge of various research methodologies

d) COURSE CONTENT

i. Theory: 105 hours

DENTAL ANATOMY**HOURS**

- | | |
|---|----|
| 1. Introduction, Dental Anthropology & Comparative Dental Anatomy | |
| 2. Function of teeth. | 3 |
| 3. Nomenclature. | |
| 4. Tooth numbering systems (Different system) (Dental formula). | |
| 5. Chronology of deciduous and permanent teeth. (First evidence of calcification, crown completion, eruption and root completion). | 2 |
| 6. Deciduous teeth - a) Nomenclature. b) Importance of deciduous teeth. c) Form & function, comparative dental anatomy, fundamental curvature | 4 |
| 7. Gross morphology of deciduous teeth. | 5 |
| 8. General differences between deciduous and permanent teeth. | 1 |
| 9. Morphology of permanent teeth. Chronology, measurements, description of individual surface and variations of each tooth. | 12 |
| 10. Morphological differences between incisors, premolars and molars of same arch. | 1 |
| 11. Morphological differences between maxillary and mandibular incisors, canines, premolars and molars of the opposite arch | 1 |
| 12. Internal Anatomy of Pulp. | 1 |
| 13. Occlusion: a. Development of occlusion. b. Dental arch form. c. Compensating curves of dental arches. d. Angulations of individual teeth in relation to various planes. e. Functional form of the teeth at their incisal and occlusal thirds. f. Facial relations of each tooth in one arch to its antagonist or antagonists in the opposing arch in centric occlusion. g. Occlusal contact and interscusp relations of all the teeth | |

of one arch with those in the opposing arch in centric occlusion. h. Occlusal contact and intercuspal relations of all the teeth during the various functional mandibular movements. i. Neurobehavioral aspect of occlusion

14. Temporomandibular Joint (T.M.J.): Gross Anatomy and articulation. Muscles (Muscles of mastication). Mandibular position and movements. Histology. Clinical considerations with special emphasis on Myofascial Pain Dysfunction Syndrome (MPDS) - (Desirable to Know) **2**

ORAL PHYSIOLOGY

1. Theories of calcification **1**
 2. Mastication and deglutition **1**
- Oral Embryology, Anatomy and Histology:
1. Development and growth of face and jaws. **1**
 2. Development of tooth. **3**
 3. Cranial nerves with more emphasis on V, VII and IX. **1**
 4. Blood supply, nerve supply and lymphatic drainage of teeth and surrounding structures **1**
 5. Cell - structure and function **1**
 6. Maxillary sinus - Structure, Variations, Histology function and clinical considerations
 7. Salivary Glands - Classification, structure, function, Histology, Clinical Considerations and age changes. **4**
 8. Oral Mucous membrane: Definitions, General consideration. Functions and classifications. Structure and microscopic appearance of gingiva, palate, lips, alveolar mucosa, tongue, floor of mouth. Gingival sulcus and dentogingival junction. **8**
- Clinical considerations and age changes.
9. ENAMEL: Physical characteristics, chemical properties structure. Development - Life cycle of ameloblasts, Amelogenesis and Mineralisation. Clinical considerations. Age changes. **8**
 10. DENTIN: Physical characteristics, chemical properties, structure. Types of dentin. Dentin innervation and hypersensitivity. Development - Dentinogenesis and mineralisation. Clinical considerations. Age Changes. **6**

11. PULP:Anatomy, structural features, functions, pulp organs. Developments. Clinical consideration Age changes. **6**
12. CEMENTIUM:Physical characteristics, chemical properties, structure. Cementogenesis. Clinical consideration Age changes. **4**
13. PERIODONTAL LIGAMENT:Cells and fibers, Functions, Development, Clinical Considerations., Age Changes **5**
14. ALVEOLAR BONE:Physical characteristics, chemical properties structure. Structure, Development., Internal reconstruction, Clinical consideration. **5**
- Tissue processing & Histochemistry **4**
- THEORIES OF ERUPTION AND SHEDDING.** **4**
(Physiological tooth movement)

ii. Practical: 250 Hours

DENTAL ANATOMY: Carving on wax blocks:-a. Individual tooth
- Only permanent teeth of both arches.- Central, Incisors, Lateral, Canines, Premolars and 1st and 2nd molars

HISTOLOGY:List of Histology slides:**Development of tooth:**

1. Bud stage of tooth development.
2. Cap stage of tooth development.
3. Early bell stage of tooth development.
4. Late Bell stage of tooth development.
5. Root formation.

ENAMEL:

1. Enamel rod.
2. Hunter-Schreger Bands
3. Tufts, Lamellae, Spindles.
4. Incremental lines of Retzius.
5. Neonatal line.
6. Gnarled Enamel.

DENTIN:

1. Dentino - Enamel junction.
2. Dentinal Tubules.
3. Incremental lines of Von Ebner.
4. Contour lines of Owen.
5. Neonatal line.
6. Tomes granular layer.
7. Interglobular Dentin.
8. Secondary Dentin.
9. Intratubular Dentin.
10. Intertubular Dentin.

CEMENTUM:

1. Cellular cementum.
2. Acellular cementum.
3. Cemento enamel junction
 - Type 1 - 60% type - Overlapping.
 - Type 2 - 30% type - Butt
 - Type 3 - 10% type - Cementum & Enamel do not meet.
4. Sharpey's fibers.
5. Hypercementosis.

PULP:

1. Zones of Pulp.
2. Pulp stones.

PERIODONTAL LIGAMENT:

01. Principle fibers of Periodontal ligament
 - Apical, Horizontal, Oblique, Alveolar crest, Interradicular, Transeptal

ALVEOLAR BONE:

1. Haversian system.
2. Trabeculated bone.
3. Mature and immature bone.

SALIVARY GLANDS:

1. Mucous gland.
2. Serous gland.
3. Mixed gland.

MAXILLARY SINUS:

Sinus lining (Pseudostratified ciliated columnar) (Desirable to know)

ORAL MUCOUS MEMBRANE:

1. Parakeratinised epithelium.
2. Orthokeratinised epithelium.
3. Palate - Anterolateral zone.
4. Palate - Posterolateral zone.
5. Alveolar mucosa.
6. Vermilion border of lip.
7. Tongue - Circumvallate Papillae.
- Fungiform Papillae
- Filiform Papillae

Preparation of Ground sections, haematoxylin & Eosin sections & decalcified section

iii. Lecture demonstration:

Identification of Individual teeth

- (1) Deciduous
- (2) Permanent
- (3) Mixed dentition using study models
- (4) Demonstration of preparation of ground section, Decalcification, Paraffin section and H & E Staining.

e) SCHEME OF EXAMINATION

Distribution of Topics and Type of Questions for University written examination

Contents	Type of Questions and Marks	Marks
<p>Dental anatomy - one question - 10 marks Detailed morphology of Permanent teeth, Differences between Primary & Permanent teeth, Occlusion and Arrangement of teeth.</p>	<p>Structured Essays 2x 10marks</p>	20 marks
<p>B. Oral histology - one question - 10 marks Development of tooth, Enamel-structure & development, Dentin-structure & development, Cementum, Dental pulp - structure & histology,</p>	<p>Short notes 4 x 5marks Brief Notes</p>	20 marks

Periodontal ligament, Alveolar bone -structure & histology, Oral mucosa-structure & histology, Eruption of teeth

A. Oral histology - two questions - 10 marks		Short Notes 4x5 marks 20marks
B. Dental anatomy - one question - 5 marks		
C. Oral physiology - one question - 5 marks		

A. Oral histology - five questions - 15 marks		Brief notes 10x3marks 30marks Total 70 marks
B. Dental anatomy - three questions - 9 marks		
C. Oral embryology - two questions - 6 marks		

i. Theory

University written Examination:	70Marks
University Viva:	20Marks
Internal Assessment:	10 Marks

ii. Practicals:

Internal Assessment:	20 Marks
University Practicals:	80Marks
Grand Total	200 Marks

Mark Distribution for University Practical Examination:

Tooth Carving:(Time allotted 75 Minutes)	25 Marks
Spotters: (15X3 marks)	45 Marks
Practical work Record:	10 marks

Type of Spotters:

8 Histology and Ground Section slides
5 Tooth identification
2 Casts for identification of teeth, numbering system and age assessment

2.3. No. of hours per subject

I. BDS

Sl. No.	Subjects	Lecture (hrs)	Practical (hrs)	Clinical (hrs)	Total (hrs)
1.	General Human Anatomy including Embryology and Histology	100	175	—	275
2.	General Human Physiology	120	60	—	180
3.	Biochemistry, Nutrition and Dietetics	70	60	—	130
4.	Dental Anatomy, Embryology and Oral histology	105	250	—	355
5.	Dental Materials	20	40	—	60
6.	Pre clinical <u>Prosthodontics</u> and Crown & Bridge	—	100	—	100
7.	Pre clinical <u>Conservative Dentistry</u>	—	100	—	100
	Total	415	785	—	1200

I. EXAMINATIONS**3.1 Eligibility to appear for University examinations a) Preface:**

- i. Evaluation is a continuous process, which is based upon criteria developed by with certain objectives to assess the performance of the learner. This also indirectly helps in the measurement of effectiveness and quality of the concerned B.D.S. programme.
- ii. Evaluation is achieved by two processes

1) Formative or internal assessment

2) Summative or university examinations.

Formative evaluation is done through a series of tests and examinations conducted periodically by the institution.

Summative evaluation is done by the university through examination conducted at the end of the specified course.

b) Methods of evaluation:

Evaluation may be achieved by the following tested methods:

- i. Written test
- ii. Practical examination

iii. Clinical examination

iv. Viva voce

c) Eligibility criteria:

For a candidate to be eligible to write the university examination of an year of study for the first time he/she should have minimum 80% attendance in all the subjects in which examination is being held for the year of study and a minimum of 70% in Lectures and Practical/ Clinical separately in all the non-exam subjects for the year (Refer Section 1.8). However candidates with such 80% attendance in all the subjects of study for which university examination is held for a particular year will be eligible to attempt the university examination only in those subjects in which he/she has secured the minimum requirement of 40% of internal assessment marks. A candidate can reappear for university examination in the failed subjects provided he/she has secured minimum 70% attendance (theory & practical separately) and have scored minimum 40% marks in internal assessment conducted for the subject during the supplementary period.

Schedule of regular/Supplementary examinations

The University examination for a subject shall be conducted twice in a year as per the schedule approved by the Board of Examinations at an interval of not less than four to six months as notified by the university from time to time.

Scheme of examination Showing Maximum and Minimum Marks

The scheme of examination for B.D.S. Course shall be divided into 1st B.D.S. examination at the end of the first, 2nd B.D.S. examination at the end of second, 3rd B.D.S. examination at the end of third and Final BDS Part I examination at the end of fourth academic year. The Final B.D.S part II examination will be held on completing six months of the fifth academic year. The examination shall be open to a candidate who satisfies the requirements of attendance, progress and other rules governing the institution and The University.

I. Distribution of Marks

i. For each paper in which written examination is held: Theory

University written examination	70
University Viva Voce	20
Internal assessment	10
Total	100

Practical/ clinical

University Practical/ Clinical examination	80
Internal assessment	20
Total	100

Aggregate marks for each paper	200
ii. For Preclinical Examination in Prosthodontics/Conservative Dentistry & Orthodontics	
University Practical examination	60
Viva voce	20
Internal assessment Practical	20
Total	100

preclinical examination in each subject is to be conducted separately.

Details of theory examination (written)

1. The written examination in each paper will be of three hours duration and shall have maximum marks of 70. Type of Questions and Distribution of marks for written examination should be as given in table I given below.
2. The paper of Physiology & Biochemistry will be divided into two Sections, Section A (Gen. Physiology) and Section B (Biochemistry) of equal marks. Type of Questions and Distribution of marks for written examination should be as given in table II below.
3. The paper of Pathology & Microbiology will be divided into two Sections, Section A (Gen. Pathology) and Section B (Microbiology) of equal marks. Type of Questions and Distribution of marks for written examination should be as given in table III below.
4. The paper of Dental Materials will be divided into two Sections, Section A (Prosthodontics) and Section B (Conservative Dentistry) of equal marks. Type of Questions and Distribution of marks for written examination should be as given in table IV below.
5. The question paper should contain different types of questions like essay, short note and brief note.
6. The nature of questions should be aimed to evaluate students of different standards ranging from average to excellent.
7. The questions should cover as broad an area of content of the course as possible. The essay questions should be properly structured and the marks specifically allotted.

Table I.

Type of Question	No. of Question	Marks / Question	Total Marks
Structured Essay	2	10	20
Short note	4	5	20
Brief note	10	3	30
Grand Total			70

Table II.

Physiology and Biochemistry

Subject	Type of Questions	No. of Questions	Marks of Questions	Total Marks
Section A <i>Physiology</i>	<i>Structured Essay</i>	1	10	10
	<i>Short note</i>	2	5	10
	<i>Brief note</i>	5	3	15
GrandTotal				35

Rules & Regulations

GENERAL RULES OF PUSHPAGIRI COLLEGE OF DENTAL SCIENCES

General Behaviour

- a) All students are expected to conduct themselves with decorum and discipline at all times and in all places. Each one should maintain the highest moral standard always and refrain from using foul language.
- b) Students should report for classes punctually at 8 am. They should not loiter around during class hours and should refrain from noisy unruly behavior in the college and class rooms.
- c) Students are not permitted to use mobile phones at all in the college campus.
- d) Students are not allowed to bring any vehicles into the college campus or the hostels.
- e) All assignments and other works given by teachers should be regularly done and submitted in time.
- f) Students are expected to be polite and courteous in their behavior at all times.
- g) Students should not deface or dirty the walls, benches or other furniture. Classrooms and surroundings should be kept tidy and clean. Litter should be put in the waste bins only.
- h) For irregular attendance, disobedience, malpractice at exams or any action not conducive to the moral tone and discipline of the institution, a student may incur punishment including suspension or dismissal.
- i) Hostels are out of bounds to the day scholars.
- j) Students are responsible for any valuables/ cash carried by them and the institution will not be responsible for any loss sustained. However this may be reported to the Principal's office.
- k) Any damage done to the college property should be paid for.
- l) Any serious breach of discipline including discourtesy and disrespect to the staff/management/wardens in any way will be taken seriously.
- m) Parents staying abroad should give the contact details of a responsible guardian who can take the entire responsibility of the ward, in the absence of the parent.
- n) Gambling, smoking, consumption of alcoholic drinks, reading/ browsing of pornographic material, keeping or using of dangerous drugs is prohibited.
- o) Ragging in ANY FORM is STRICTLY prohibited and any indulgence in such activity will result in IMMEDIATE EXPULSION. Ragging,

whether physical or psychological, is a criminal offence before the Indian Law, as detailed in 'The Kerala Prohibition of Ragging Act-1998', Act 10 of 1998 published in Kerala Gazette Extra No.1007 dated 24/6/1998. The Principal will notify the offence to the police if deemed necessary, after consultation with the management.

- p) Students are prohibited in getting engaged in political agitations, strikes or demonstrations of any kind. They should not put up or circulate notices, hold meetings or collect subscriptions of any sort, under any circumstances, anywhere in the college or hostel premises, without prior permission from the Principal.

Dress Code

Students should wear clean, neat and presentable Uniform clothing. Boys should be clean shaved.

Dress Code for Boys

- Uniform
- Shoes and Socks
- Clean white apron with name tag

Dress Code for Girls

- Uniform
- Closed foot wear
- Hair (beyond shoulder length) to be tied up
- Clean white apron with nametag

In case of violation of the dress code, the student concerned will be asked to leave the academic session.

Fees structure

Tuition Fee

All students should remit the tuition fees for the academic year within the stipulated time period. Late payment would result in fine.

College Caution Deposit

A onetime refundable caution deposit should be paid at the time of admission.

Hostel Fee

Hostel fees should be paid for one full year at the time of admission. Late payment would result in fine.

Hostel Caution Deposit

A onetime refundable caution deposit should be paid at the time of admission. This shall be refunded once the student vacates the hostel.

Hostel Mess Fee

Hostel provides both vegetarian and non-vegetarian food for students. Students should pay the mess fee for 6 months in advance to the Mess Contractor. Students can avail reduction of mess fees if they are not in hostel for a minimum of 5 days.

Transportation Fee

Transportation is available for the students from Dental College to Medical College.

Mode of payment

Fees can be remitted as online transfer to the Pushpagiri College of Dental Sciences account or in the form of Demand Draft drawn in favour of Pushpagiri College of Dental Sciences payable at Thiruvalla.

Account No: 024804176659190018

Branch: Railway station road, Chilanka Junction, Thiruvalla

IFSC Code: CSBK0000248

Details for DD

In favour of Pushpagiri College of Dental Sciences

Payable at Thiruvalla

Academics

The medium of instruction is English. All students must be in possession of the identity cards provided by the college. Any loss should be promptly reported to the Principal. The cards must not be mutilated, defaced or rendered ineffective for identification. The card must be returned at the termination of course/withdrawal from the institute.

Students would be assigned assignments, project works, seminars, practical exercises during their academic curriculum. **Students should have a minimum of 80% attendance and 40% of internal assessment marks which is mandatory for appearing in the University examination. Internal assessment marks for a student in a subject will be calculated as the average of the marks obtained in the model examination(compulsory) and the highest among all other internal examinations in the subject. Any student who fails to achieve the required criteria would be ineligible for University examinations.**

Regular PTA meeting would be arranged for the interaction of the parent with the teachers to discuss the performance of their ward. Parents are requested to attend the scheduled PTA meetings without fail.

Students are advised to make full use of the central library available which has a large collection of books and latest journals. The library also has internet facility. Students are responsible for any textbooks, library books, or any equipment loaned to or used by them. If misused or damaged, students will be responsible for charges to repair or replace. Students should maintain perfect silence in the library.

Interfering or tampering any of the office records of college/ university is a serious offence and will result in suspension/ rustication.

Students can avail leave on special grounds only with prior permission of the HODs concerned.

Any student involved in or encouraging the involvement of another student in fighting will be suspended. Persistent involvement will result in expulsion from the college.

Ragging

Ragging within or outside the institution is prohibited. Students who directly or indirectly commits, participates in, abets or instigates ragging inside or outside the institution shall be suspended, expelled or rusticated from the institution. The punishment includes rigorous imprisonment, cancellation of admission, suspension from attending classes, withholding/ withdrawing fellowship/scholarship and other financial benefits.

Ragging includes display of noisy, disorderly conduct, teasing, rough or rude treatment, indulging in rowdy, undisciplined and obscene activities which cause or are likely to cause annoyance, undue hardship, physical

or psychological harm or mental trauma or raise apprehension or fear in a fresher or other students, or forcing a student to do any act which such a student is not willing to do or which causes him/ her shame or embarrassment or danger to his/her life or indulging in eve teasing. The students are reminded that ragging in educational institutions in the state of Kerala is a crime and punishable by imprisonment upto 2 years and a fine upto Rs 10000/- according to the Kerala Prohibition of Ragging Act 1998(Act 10 of 1998) the offending students also invite expulsion from the college and are banned from admission to any college for a period of 3 years.

All students should file an online affidavit through the website www.antiragging.in or www.amanmovement.org. The online affidavit should be signed by the student and parent and submitted to the college office at the time of admission.

Information for Students

1. To become a good professional, the student should be very clear in his/her ambition and set appropriate goals for themselves.
2. The priorities for the day should be clear in the mind.
3. Proper time management is very essential (with proper time management a student can easily have 3 hours of relaxation per day and read for 5 hours per day).
4. Mind and body should be kept active. Priorities and ambition may be forgotten if relaxation is overdone.
5. Attendance and internal assessment are two valuable tools to monitor the academic progress of a student. To avoid anxiety and tension before exam one should maintain a good record of attendance and internal assessment. Though 100% attendance is essential, 20% absenteeism is permitted to cover ill health and family commitments.
6. It is advisable that students stay only in hostels. When in hostels, they are expected to abide by the hostel rules and regulations. It is mandatory for students to keep the warden informed of their visits to a friend or relative or if he or she is going to be away from the hostel for more than a day. Students should not keep costly and valuable items in the room.
7. The behaviour of the student in and around the campus should befit the noble profession they have opted for. Lab coats (apron) should be worn only inside the campus.
8. During clinical postings, should behave appropriately when dealing with patients.
9. Students are expected to strictly observe the dress code of the institution.

10. Indiscipline will be dealt with as per rules and the nature of punishment can vary from suspension to dismissal from the institution.
11. In case of ill health, students should report to the casualty at Pushpagiri Medical College Hospital.
12. Any student involved in criminal offences in the campus and any indiscipline outside the campus will be handled by the concerned authorities.
13. The following are banned and severely dealt with:
 - Drugs, drinking (liquor) and smoking
 - Ragging & eve teasing
 - Cheating, stealing, provocation, coercion, threats, pressure tactics & fights
14. Appropriate stringent action has been taken to prevent ragging. Anti-ragging Committee, Anti-ragging Squad, are the committees which will oversee and take appropriate steps to prevent ragging.
15. **Students are not permitted to use mobile handsets with camera in the college. The equipment shall be confiscated if the student is found to possess it.**

Mandatory Vaccination for all students

- **Hepatitis 'B' Vaccine:** 3 doses
- 0, 1, 6 months (Intra muscular)

Optional Vaccination for students

- **Chickenpox Vaccine:** 2 doses
- 0, 6 Weeks (Subcutaneous)
- **Typhoid Vaccine:** Single dose (Intramuscular)
3 years immunity following vaccination
- **Hepatitis A Vaccine:** 2 doses 0, 6 months

LEAVE RULES FOR BDS STUDENTS

1. Application for leave **up to three days** need be submitted only to the concerned departments and approval must be obtained prior to availing the leave.
2. Other than for special circumstances, leave for **four days or more** shall be granted only on medical grounds.
3. The student availing medical leave should, as soon as possible, inform the class representative by telephone. The class representative should inform the concerned departments and the college office regarding the same.
4. Leave on medical grounds should be submitted to the college office on the day of rejoining along with the medical certificate.

5. Student staying in the hostel need to submit separate leave application approved by the Vice Principal to the Hostel Warden.
6. Separate application forms are available in the college office for:-
 - a. Leave up to 3 days.
 - b. Leave for 4 days or more.
 - c. Leave from hostel

HOSTEL FACILITIES AVAILABLE

St. Thomas Hostel for Men

St. Alphonsa Hostel for Women

General information about hostels

Separate hostel accommodation is provided for men and women. All BDS students should stay in the hostel, except for those residing within a radius of three kilometers from the college campus.

Administration

The Principal will be in charge of the overall administration of the students' hostels. The day to day administration of the hostels will be done by the Warden in charge of the hostel. Wardens and assistant wardens will be appointed by the Chief Executive Officer as and when required with due information to the Principal.

The wardens shall be in contact with the Director- Medicity, who is also in charge of student welfare in all the hostels. He shall render spiritual and moral assistance to the students through personal counselling and guidance. He will be available in his office during fixed times and on appointment.

The Holy Mass is being celebrated in the Chapel every day at 6.00 am. All Christian students are expected to attend the Holy Mass and other prayer facilities available in the Chapel.

IMPORTANT CONTACT NUMBERS

Hostels:

St.Thomas Hostel (Boys)	-	0469 2623326
Warden - Mr Varghese	-	9495726214
Alphonsa Hostel (Girls)	-	0469 - 2645183
Chief Warden		0469 - 2645123
St. Theresitt F.D.S.H.J	-	9048700079

HOSTEL RULES AND REGULATIONS

1. It is mandatory for students to staying in the hostels to be a member of the mess of the hostel.
2. The Chief Warden reserves the right to break open rooms in case of any violation of hostel rules, suspected unlawful activities or on the basis of security risk perceived.
3. Students are requested to avoid shouting, playing loud music or making all types of noises which are likely to distract the attention of those who may be studying in their rooms.
4. Pets of all kinds are prohibited inside the hostel. Feeding stray dogs or cats in the hostel premises is not permitted.
5. All visitors including parents/ guardians must be entertained only in the visitors lounge and during visiting hours only. A visitors pass will be obtained from the office of the chief warden, well in advance by concerned student.
6. Cooking in hostel rooms is not permitted.
7. All instructions/ notices displayed on notice boards will be deemed to have been read by all residents and excuses for non-compliance of such instructions and notices will not be accepted. Residents are advised to look at the notice board everyday to acquaint themselves with latest information/orders.
8. Students must switch off all lights and fans, and electrical appliances if any before leaving their rooms. This is necessary to avoid an inadvertent fire.
9. In case of Fire: Residents must raise an alarm and call the hostel Warden. They should also alert the Security.
10. The Chief Warden/ Warden or his representative may enter any room for verification at any time of the day or night.
11. The management reserves the right to break open the rooms in case of violations of hostel rules, suspected unlawful activities and security risk cases or where the student is absent from his room for a long period without prior information or any valid reason. This will, however, be carried out by the security person in the presence of the hostel Warden. On such occasions, the items in the room will be listed by these officials and kept in the store room. A verbal report, followed by a written report will be sent to the higher authorities.
12. Proxy or dummy room-mates are forbidden. Strict action will be taken if accommodation is held as proxy. They are liable to be removed from the hostel. Residents are not permitted to allow their rooms to be used by others. All visitors and non-

residents including students from other hostels must leave the hostel/ other students rooms during nights. All residents are advised to extend their fullest co-operation to see that no unauthorised persons enter or stay in the hostel premises. If they happen to find any such person, they should demand the permit/ Identity Card and if it is not forthcoming, the matter should be brought to the notice of the Warden for further action.

13. RAGGING IN ANY FORM IS BANNED INSIDE AND OUTSIDE THE CAMPUS. STRICT ACTION WILL BE TAKEN AGAINST THE DEFAULTERS. NO LENIENCY WILL BE SHOWN TO THE OFFENDERS. SUSPENSION AND OR WITHDRAWAL FROM THE HOSTEL/ COLLEGE IS ONE OF THE ACTIONS TAKEN PROMPTLY. SUPREME COURT HAS ALSO DEFINED RAGGING AS A CRIMINAL OFFENCE.
14. All hostel inmates must report any disciplinary matter or problems concerning them or their room-mate/ neighbour(s) coming to their notice to the Warden/ Chief Warden. In case their room-mate is absent from the room or is sick / admitted in the hospital or is in any kind of physical/mental trouble or is indulging in any bad practices the same must be immediately brought to the notice of the Warden or the Chief Warden.
15. No televisions are permitted to be kept in the hostel rooms by the students. Students have to watch TV in the common TV room provided in the hostels.
16. Security of ATM/Debit cards: All residents must take care of their ATM/ Debit cards. They must not disclose their PIN to anybody-even to their best friends.
17. Water is an essential but scarce commodity. All residents are requested to use water judiciously and preserve it. Leakage etc. in the bathrooms should be immediately reported to the Warden.
18. All complaints regarding repairs/maintenance in the Hostels must be entered personally by the students in Complaint Registers maintained in all the Hostels. All complaints are also monitored regularly by the Warden/Chief Warden.
19. Residents of the hostels are not permitted to convene meetings of any sort in the Hostel premises without the prior permission of the Warden/Chief Warden. Disobedience of this rule will be severely dealt with.
20. There are Suggestion Boxes kept in all the hostels for suggestions if any from the residents. Residents may drop their suggestions and complaints if any, duly signed with their names and roll numbers in these Suggestion Boxes which are opened periodically. Appropriate action will be taken on all suggestions/ complaints and a feedback given to the student(s). No cognizance of anonymous suggestions/ complaints will be taken.

21. The Warden and Chief Warden are available round-the-clock on telephone, and may be contacted in case of any emergency.
22. If a resident falls sick, he/ she or room-mate/friend must immediately inform the caretakers/ person on duty who will make arrangements to shift/ evacuate the student to the hospital and look after him/ her. All cases of sickness must be immediately reported to the Medical Officer, at the Out-Patient/Emergency/ Trauma Department of Pushpagiri Medical College for necessary treatment. In case a resident is quite unable to leave the room and go to the Hospital, the matter must be reported to the Warden. Information regarding any resident falling sick or getting admitted in the hospital must be relayed to the hostel/ college authorities on priority.
23. The use of mobile phones in the hostels is permitted only during the stipulated time as informed by the hostel wardens.

Anti – Ragging Committee 2020-2021

The anti – ragging committee of the college for the academic year 2020-2021.

1. Chairman : Dr K. George Varghese
Principal
Mob: 9447021617
2. Civil Administration : Tahasildar, Thiruvalla
Phone: 0469 2601302
3. Police Administration : Circle Inspector of Police, Thiruvalla
Ph: 0469 2738100
4. Local Media : Saji Abraham, Deepika
(Daily) Thiruvalla
Mob: 9447263556
5. Non-Govt. Organisation : Shibu Puthukeril
President, Malankara
Catholic Youth Movement,
Thiruvalla
Mob: 9447059400
6. Representatives of
faculty members : Dr Benley George,
Vice Principal Administration
Mob: 9745015511
: Dr Aby Mathew T, Prof and HOD
Dept. of Prosthodontics
Mob: 9447507164
: Dr Biju Sebastian,
Vice Principal (Academics)
Mob: 9446539062
: Dr Lisa Elizabeth Jacob,
Senior Lecturer,
Mob: 9446644648
7. Representatives of parents : Mr Saji M. Mathew
Mob: 9497744080
: Mr Koshy. P. Koshy
Mob: 9447261495
8. Representatives of students : Ms Kripa Mariyam Kurian
IV BDS Part I
: Mr Ashik Thomas
III BDS
: Mr Abhiram Valiyath Kurup
II BDS
9. Non teaching staff : Fr Aby Vadakkumthala,
Director Institutions
Mob: 9745355517

STUDENT MENTORS 2020-2021

I BDS	:	Dr Sharlene Sara Babu Mob: 9495017067
II BDS	:	Dr Minimol K Johny Mob: 9048820602
III BDS	:	Dr Ravi Rajan Areekkal Mob:9207696406
IV BDS Part I :		Dr Prameetha George Mob: 9495080021
IV BDS Part II	:	Dr Vinesh U Mob: 8281377603

BUS TIMINGS FROM MEDICITY TO MEDICAL COLLEGE AND RETURN

Monday	8.00 a.m	4.00 p.m
Wednesday	8.00 a.m	1.00 p.m
Friday	8.00 a.m	3.30 p.m
Saturday	8.30 p.m	3.00 p.m

I BDS Examination Schedule

1st Internal Assessment Examination - 2nd week of January 2021

2nd Internal Assessment Examination – 3rd week of March 2021

3rd Internal Assessment Examination – 2nd week of June 2021

University Examination – July 2021

FLOOR MAP

LEVEL 1

Office of the Principal
Administrative Office
Dept. of Oral Medicine and Radiology
Store
Medical Records Room
Haematology Lab
Priority Clinic
Chapel
Cafeteria

LEVEL 2

Dept. of Oral and Maxillofacial Surgery
Dept of Oral Implantology
Lecture Hall – 1
Lecture Hall - 2

LEVEL 3

Dept. of Public Health Dentistry
Dept. of Pedodontics
Auditorium
Lecture Hall - 3

LEVEL 4

Dept. of Orthodontics
Dept. of Periodontics
Laser Clinic

LEVEL 5

Dept. of Conservative Dentistry
Dept. of Prosthodontics

LEVEL 6

Dept. of Oral Pathology
Lecture Hall – 4
Preclinical Labs
Conservative Dentistry
Prosthodontics
TMJ Clinic
Orthodontics/Pedodontics

LEVEL 7

Library
Examination Hall – 1
Examination Hall - 2
Common Room – Boys
Common Room - Girls

FACULTY LIST

Designation & Dept. Name	Qualification
Principal Dr. K George Varghese	MDS
Department of Prosthodontics	
Prof & Head Dr. Aby Mathew T	MDS
Professor Dr. Suja Joseph	MDS
Professor Dr. Annie Susan Thomas	MDS
Reader Dr. Haby Mathew Somson	MDS
Senior Lecturer Dr. Rene Kuriakose	MDS
Senior Lecturer Dr. Shibi Mathew V	MDS
Senior Lecturer Dr. Joshy P Abraham	MDS
Department of Conservative Dentistry and Endodontics	
Professor & Head Dr. A. Devadathan	MDS
Professor Dr. Baby James	MDS
Assoc Professor Dr. Jose Jacob	MDS
Reader Dr. Manuja Nair	MDS
Reader Dr. Minimal K Johny	MDS
Senior Lecturer Dr Fathima Amal P	MDS
Senior Lecturer Dr Naiza Elsa Geojan	MDS
Department of Oral Pathology	
Professor & Head Dr. Sunil S	MDS
Associate Professor Dr. Sharlene Sara Babu	MDS
Sr. Lecturer Dr. Arjun Parameswar	MDS
Reader Dr Tibin K Baby	MDS
Department of Oral & Maxillofacial Surgery	
Professor and Head Dr K George Varghese	MDS
Professor Dr. Eapen Thomas	MDS
Reader Dr. Akhilesh Prathap	MDS
Reader Dr. Vinesh U.	MDS
Sr Lecturer Dr Nithin Pratap	MDS
Sr Lecturer Dr Ravi Rajan Areekal	MDS
Department of Periodontics	
Professor & Head Dr Thomas George	MDS
Professor Dr Nebu George Thomas	MDS
Prof. Dr Jacob George	MDS
Prof Dr. Annie Kitty George	MDS
Reader Dr. Soumya John	MDS
Senior Lecturer Dr. Prameetha George	MDS

Department of Orthodontics

Professor & HOD Vice Principal Academics	
Dr Biju Sebastian	MDS
Professor Dr Jacob John	MDS
Reader Dr. Navin Oommen Thomas	MDS
Senior Lecturer Dr. Merin Elsa Abraham	MDS

Department of Pediatric Dentistry

Professor and Head Dr Elizabeth Joseph	MDS
Reader Dr. Subbalekshmi MD!	
Reader Dr. John Philip	MDS
Sr Lecturer Dr. Sherin Sara George	MDS
Sr Lecturer Dr Miranda Ann George	MDS

Department of Oral Medicine

Professor & Head Dr. Omal P.M.	MDS
Assoc Prof Dr. Anuna Laila Mathew	MDS
Senior Lecturer Dr. Lisa Elizabeth Jacob	MDS
Senior Lecturer Dr. Anju Mathew	MDS

Department of Public Health Dentistry

Associate Professor & HOD & Vice Principal (Administration) Dr. Benley George	MDS
Reader Dr. Rino Roopak Soman	MDS

Lecturers

Senior Lecturer	
Dr. Vinod Mathew Mulamoottil	BDS MPH
Dr. Anil Kurian	BDS
Dr. Renjini V R	BDS
Dr. Sherly Sajan Mathews	BDS
Dr. Sheryl Elizabeth Kuriakose	BDS
Dr. Renu Mathew	BDS
Dr. Sunu Alice Cherian	BDS
Dr. Thomas Abraham	BDS
Dr. Ambil Sara Varghese	BDS
Dr. Mahima James	BDS
Dr. Denny Thomas	BDS
Dr. Immanuel Mathew Kurian	BDS

DEPARTMENT OF DENTISTRY - OP – PIMS & RC

Professor & HOD,
Department of Dentistry Dr Jacob George MDS
Dr Terin Boby BDS
Dr Maria Francis BDS

LIST OF HOLIDAYS FROM AUGUST 2020 TO JULY 2021

Independence Day: 15th August (Saturday)
Onam Holidays : 26 August to 03 August
Re-Union Day : 21st September (Monday)
Vijaya Dashami :
Gandhi Jayanti : 2nd October (Friday)
Deepavali : 14th November (Saturday)
Christmas Holidays :
22nd December to 29th December
Republic Day : 26th January (Tuesday)
Holy Week : 31st March to 03rd April
Wednesday to Easter Sunday
Dr. B. R. Ambedkar Jayanthi
: 14th April (Wednesday)
Vishu: 15th April (Thursday)
Eid-ul-fitr : 13th May (Thursday)
St. Thomas day : 3rd July (Saturday)

PARENTS' DECLARATION

I, hereby declare that I have gone through the rules and regulations for the BDS Pushpagiri College of Dental Sciences. I hereby agree that myself and my son/daughter shall abide by all these rules and regulations. In case any Indiscipline / improper conduct occur from his / her side, he/she is liable to be punished. I fully understand such disciplinary actions shall not be revoked under any circumstance.

Date :

Name

Signature

Details of the parent and / or guardian

Details	Parents	Local Guardian
Name	Father : Mother :	
Signature	Father : Mother :	
Permanent Address		
Address for communication		
Land Phone No.		
Mobile Phone No.	Father : Mother :	
E-mail Address	Father : Mother :	

Dr. K. George Varghese
Principal