



Study Guide  
**OF COMMUNITY AND PREVENTIVE  
DENTISTRY**

**For BDS**



## **MESSAGE FROM THE PRINCIPAL**

### **AVICENNA DENTAL COLLEGE**



**Prof. Dr. Sohail Abbas Khan**

**{MDS, Dip Op (Hons) BDS}**

It is a matter of immense honour and privilege as the first Principal of Avicenna Dental College to welcome you to prospectively one of the finest dental institutes in the private sector of Pakistan. Avicenna Dental College is a private dental college, which aims to provide the finest dental education to dental undergraduate student in accordance with the latest trends in Medical Education, and to develop them to practice dentistry in the 21<sup>st</sup> century.

While educating dental students to become licensed, empathetic and competent professionals, Avicenna Dental College endeavours to educate students in a supportive environment in which they provide dental care for a diverse populace. In the times to come, we wish to transform our graduates into unfeigned teachers, researchers and consultants by starting post-graduation programs as well.

Avicenna Dental College aims to achieve an enterprising curriculum integrating the basic sciences with clinical experience while utilizing modern technological modalities.

In addition to the production of outstanding oral health professionals, we at Avicenna Dental College recognize our responsibility as a private dental institution to the citizens of the country in making the provision of oral the provision of oral health care available to those who are deprived of ready access.

I feel proud to lead this dental establishment such an inspiring time and hope all of you at Avicenna Dental College will share this pride and play your respective roles in materializing the dream of making this institution the premier dental educator in Pakistan.

**MESSAGE FROM HOD, COMMUNITY AND PREVENTIVE DENTISTRY**

**AVICENNA DENTAL COLLEGE**



**DR.M.BILAL ARSHAD**

**B.D.S.,M.S.c.(DENTAL PUBLIC HEALTH)**

**ASSISTANT PROFESSOR/H.O.D.**

Community /Preventive Dentistry is dynamic field of dentistry which, provides knowledge to individuals or group of people about dental health. Our department aims to produce dentists who can educate the masses about dental health practices, prevention of oral diseases and are able to inculcate knowledge among people on the prevention of dental diseases. The Department of Community dentistry also has a dedicated lab for research purposes which helps to enhance practical and research of our students.

**Curriculum For BDS 2<sup>nd</sup> year**  
**Department of community and preventive Dentistry**  
**Avicenna Medical and Dental College**

**A. Section1: Public Health**

<b>Contents/ topics</b>	<b>Outcomes/ knowledge</b>
1. Health, Disease and Infection	<p>Should be able to describe</p> <p>Definition of Health</p> <p>biomedical concept, dimensions of health, determinants of health</p> <p>Definition of Disease</p> <p>Natural history of disease, disease spectrum, web of causation, disease eradication and elimination.</p> <p>Iceberg phenomena of disease and multifactorial causation, and</p> <p>Definition of infection</p> <p>stages and transmission via different routes</p> <p>should be able to narrate</p> <p>concepts of different defenses like immunity and its types</p> <p>Screening of diseases, aims and objectives and criteria for screening, uses of screening</p>
2. The Practice of Public Health	<p>Definition of public health</p> <p>History of public health,</p> <p>Different Changing concepts in public health, Characteristics of PH, Characteristics of PH Techniques</p>

<p>3. Environment and Health</p>	<p>Should be able to describe</p> <p>Creating and maintaining ecological conditions which promotes health and prevent disease.</p> <p>Definition of pure water ,</p> <p>Pure water sources and its different methods of purification</p> <p>describe different types of pollution e.g water air, noise etc and how we can do the different preventive methods and control over it.</p> <p>Understands the Waste disposal methods for a healthy environment</p> <p>Able to define Occupational hazards</p> <p>Able to describe types of hazards</p>
<p>4. Nutrition in Health and Disease</p>	<p>Able to define nutrition, nutrient and its types</p> <p>Able to define the proper balanced diet its components</p> <p>Sources, functions, daily requirements and deficiencies of micro and macronutrients</p> <p>Different Nutritional Problem in Public health Oral manifestations associated with malnutrition</p>
<p>5. Health Education</p>	<p>Students should be able to define health education and health promotion</p> <p>differentiate between health education and health promotion</p> <p>objectives of health education,</p> <p>Principles and sites for health education, communication, aids and methods in health education, mass media approach.</p> <p>Planning of a dental health education program</p>
<p>6. Health care delivery systems</p>	<p>able to define Primary Health care,</p> <p>narrate components and principles of PHC</p> <p>Health care Delivery system in Pakistan</p>

## **B. SECTION 2: EPIDEMIOLOGY**

<b>Contents</b>	<b>Outcomes/ knowledge</b> (the students should be able to describe)
1. Epidemiological Methods	define epidemiology, Uses of epidemiology, its aims and objectives. Measurement of morbidity and mortality Narrate different types of epidemiology descriptive analytical experimental and their steps. students can differentiate between different types of studies definition of different terminologies like epidemic, endemic, pandemic, sporadic, communicable diseases
2. Epidemiology of Oral Diseases	Definition of dental caries Types of dental caries acc. to its location and severity GV blacks classification, Epidemiological triad of dental caries Definition of periodontal disease Epidemiological triad of periodontal disease Distribution of oral cancer Epidemiological triad of oral cancer Classification of malocclusions Epidemiological triad of maxillofacial injuries and Malocclusions

## **C. SECTION 3. Infection Control**

<b>Contents/topics</b>	<b>Outcomes / knowledge</b> (the students should be able to describe)
1. Infection Control and sterilization	Definition of cross infection Factors that influence the development of infection Definition of sterilization Different methods of sterilization different methods of infection spread proper hand washing methods so that spread of infection is minimized Barriers for Patient and Clinician

#### **D. SECTION 4. Dental Public Health**

<b>Contents/ topics</b>	<b>Outcomes/ knowledge</b> (the students should be able to narrate)
1. Introduction to Dental Public Health	Definition of dental Public health differentiate between dental Personal and Community Health Care
2. Examination Procedures	Describe basic examination instruments used in dentistry Mouth mirror its parts, purpose and uses Probe, its parts, purpose and uses Explorers, parts, purpose and uses
3. Indices for Oral Diseases	Definition of an index ideal properties of an index Classification of oral disease indices Plaque Index (purpose, procedure, criteria ,scoring) Patient Hygiene Performance Index ( purpose, procedure, criteria ,scoring) Simplified Oral Hygiene Index( purpose, procedure, criteria ,scoring)

	<p>Sulcus Bleeding Index (purpose, procedure, criteria ,scoring)</p> <p>Gingival Index (purpose, procedure, criteria ,scoring)</p> <p>Periodontal Index ( purpose, procedure, criteria ,scoring)</p> <p>Periodontal Disease Index purpose, procedure, criteria ,scoring)</p> <p>Community Periodontal Index of Treatment Needs ( purpose, procedure, criteria ,scoring)</p> <p>DMFT index ( purpose, procedure, criteria ,scoring)</p> <p>surface index(dmfs) (purpose, procedure, criteria ,scoring)</p> <p>Dean’s fluorosis index (purpose, procedure, criteria ,scoring)</p> <p>Community fluorosis index(CFI) (purpose, procedure, criteria ,scoring)</p>
4. planning, survey and Evaluation	<p>Definition of planning</p> <p>Purpose of planning</p> <p>Steps in planning process(planning cycle)</p> <p>Definition of evaluation</p> <p>Purpose of evaluation</p> <p>Types of evaluation</p> <p>Basics steps involved in evaluation</p> <p>Definition of survey</p> <p>Advantages and objectives of survey</p> <p>Types of survey</p> <p>Importance of index age group in survey</p>
5. dental Auxiliaries	<p>Definition of dental auxiliaries</p> <p>Classification of dental auxillaries</p> <p>Concept of four handed dentistry</p> <p>Duties and functions of non-operatingauxillaries</p> <p>Duties and functions of operating auxillaries</p>
6.Paymentfor Dental Care	<p>Describe the mechanism of Payment for Dental Care.</p>



	Mechanism of payment in private and government sectors with advantages and disadvantages
7. Ethical issues	<p>Definition of dental ethics</p> <p>describe the principles of dental professions that deals with the moral conduct and judgement.</p> <p>Duties and obligations of dentists towards patient, public and their colleagues.</p> <p>Recognize the legal vulnerability in dental practice</p>

**E. SECTION 5: Preventive Dentistry:**

<b>Contents</b>	<b>Outcomes/Knowledge</b> (The student should be able to)
1. Prevention of Oral Diseases	<p>Define prevention</p> <p>Narrate Different levels of prevention (Primary, secondary and tertiary levels ).</p> <p>Preventive services(modes of intervention )</p> <p>Narrate Prevention of dental caries according to different levels of prevention</p> <p>Prevention of periodontal diseases</p> <p>Prevention of oral cancers</p> <p>Prevention of maxillofacial injuries and malocclusions</p>
2. Primary preventive services	<p>Able to describe</p> <p>Plaque control programs</p> <p>Disclosing agents</p> <p>Caries activity tests and its importance in dentistry</p> <p>Definition of Pit &amp; Fissure Sealants.</p> <p>Importance and indications and contraindications of pit and fissure sealants</p> <p>Procedure of application of pit and fissure sealants</p> <p>Overview of carries vaccine.</p>

3. Flourides in Caries Prevention	<p>natural occurrence of Fluoride</p> <p>sources of fluoride</p> <p>Historical Background of fluoride</p> <p>Optimum level of fluoride</p> <p>Delivery methods of fluoride</p> <p>Water fluoridation, its requirements, advantages and disadvantages.</p> <p>the Mechanism and action of Fluorides</p> <p>Topical Fluoride ,its methods of application</p> <p>fluoride toxicity and management</p> <p>describe Defluoridation methods</p>
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**F. SECTION 6. Social Sciences**

<b>Contents</b>	<b>Outcomes/Knowledge</b> (The student should be able to define )
1.Behaviourial Sciences& MANAGEMENT	<p>Describe sociology</p> <p>Social psychology</p> <p>Social anthropology</p> <p>Outline of behavior management</p> <p>Behavior Modification/Shaping</p> <p>Behavior Management Ingredients</p>
2. Atraumatic Restorative Treatment	<p>Definition of ART</p> <p>Principles of ART, its indications and contraindications</p> <p>Instruments Used in ART</p> <p>Steps involved in performing ART</p> <p>Advantages of ART</p>

**G. SECTION 7. Health Statistics**

<b>Contents</b>	<b>Outcomes/Knowledge</b> (The student should be able to)
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1.Basic In Statistics	Define biostatistics, data, variables Describe Types of data Types of variables Measures of central tendency Measures of dispersion Normal distribution curve and its characteristics Test of significance Definition of sampling Different sampling technique  Biostatistics :- Introduction , collection of data , presentation of data , measures of central tendency, measures of dispersion, tests of significance , sampling and sampling techniques-
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**I. Syllabi &TABLE OF SPECIFICATIONS (TOS):**

According to the syllabus& TOS of UHS, LHR, are as follows:

**BDS 2<sup>nd</sup> PROFESSIONAL TABLE OF SPECIFICATIONS (TOS)**

Contents	MCQs (45)	Percentage	SEQs (15)	Percentage	Total %
Balanced Diet (Nutrition in health & disease)	2	4.4	1	6.67	5.53%
Dental Auxiliaries	1	2.2	1	6.67	4.435%
Indices of Oral Diseases	4	8.8	2	13.33	11.06%
Dental Public Health	7	15.5	1	6.67	11.08%
Fluorides and Dental Caries	5	11.1	2	13.33	12.15%
Epidemiology of Oral Diseases	-	0	1	6.67	6.67%
Biostatistics	4	8.8	2	13.33	11.06%
Atraumatic Restorative Treatment	-	0	1	6.67	6.67%
Oral Cancers	1	2.2	1	6.67	4.43%
Epidemiology	5	11.1	1	6.67	8.88%

<b>Behaviour Sciences</b>	<b>2</b>	<b>4.4</b>	<b>-</b>	<b>0</b>	<b>4.4%</b>
<b>Prevention of Periodontal Oral Diseases</b>	<b>8</b>	<b>17.7</b>	<b>1</b>	<b>6.67</b>	<b>12.18%</b>
<b>Health Education</b>	<b>2</b>	<b>4.4</b>	<b>1</b>	<b>6.67</b>	<b>5.53%</b>
<b>Survey, Planning and Evaluation</b>	<b>1</b>	<b>2.2</b>	<b>-</b>	<b>0</b>	<b>2.2%</b>
<b>Prevention of Dental Caries</b>	<b>2</b>	<b>4.4</b>	<b>-</b>	<b>0</b>	<b>4.4%</b>
<b>Level of Prevention</b>	<b>1</b>	<b>2.2</b>	<b>-</b>	<b>0</b>	<b>2.2%</b>
<b>TOTAL</b>	<b>45</b>	<b>100</b>	<b>15</b>	<b>100</b>	<b>100%</b>

## **SOURCE OF KNOWLEDGE**

### **1) RECOMMENDED BOOKS:**

- Cynthia M.Pine , community Oral Health
- John,O.Forest , Preventive Dentistry
- Soben Peter, Essentials of Preventive and Community Dentistry
- Joseph Johns, Text Book of Preventive & Community Dentistry

### **1) ONLINE SOURCES:**

- Face book page
- Whatsapp group

# INNOVATIVE LEARNING METHODOLOGY

09:49

BDS Class of 2021...

From notifications

**Syed Muhammad Nabeel Asghar**  
New member • 25 minutes ago

Notice Community Dentistry ;  
Complete your log books and subkit by  
Monday 1st July 2019.

Arishba Faysal Sheikh and 6 others Seen by +5

Like Comment

**MrsZenab S Yaasir**  
New member • 7 hours ago

Dental Materials Assignment  
Topic:  
"Amalgam Vs Composite"  
Compare the properties ,applications and pros  
and cons of both materials.  
Deadline:  
8-7-2019

Arishba Faysal Sheikh and 4 others Seen by +20

Like Comment

10:15

CD/DM BDS 2nd  
Year

Created by +92 331 6068898, 1/8/19

Add group description

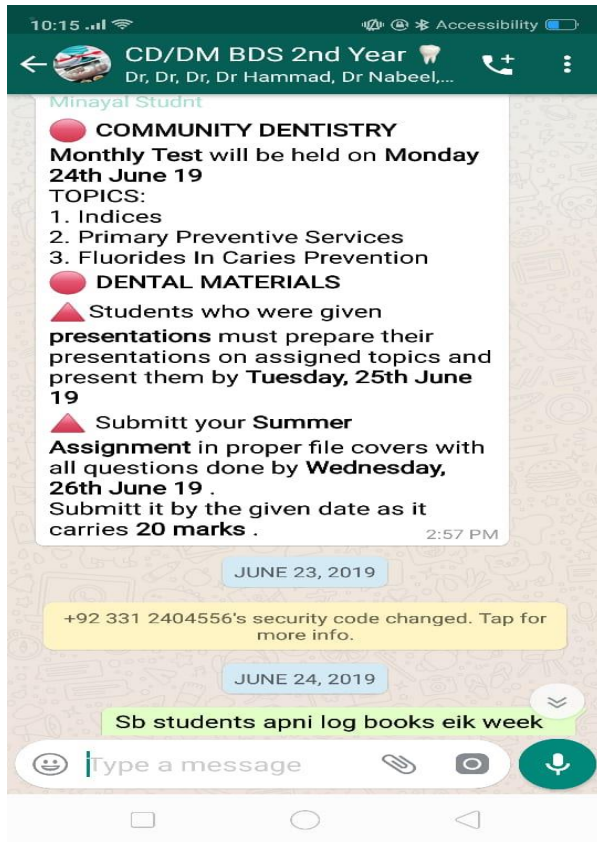
Media 28 >

Mute notifications  
Until 1/10/20

Custom notifications

Media visibility

Encryption  
Messages to this group are secured with



## TIME TABLE

19-Aug	FRI	<b>VISION &amp; MISSION</b> CHAIRMAN SHAIKH ABDUL WAHEED	<b>FIRE FIGHTING</b>	<b>PATIENTS SAFETY &amp; INFECTION CONTROL</b> DR. YASMEEN SAJAD	<b>BREAK</b>	<b>DENTAL STUDENT QUESTIONNAIRES</b>	<b>EVACUATION PLANNING TRAINING</b>	<b>STUDENTS ORIENTATION GUIDE</b>	
20-Aug	TUE	LECTURE BIOCHEMISTRY PROTEIN METABOLISM I DR. MUZAMIL LECTURE HALL MEDICAL COLLEGE (NEW BUILDING)	LECTURE GROSS. ANATOMY EAR-2 DR. MEMOONA LECTURE HALL BMSc (50) MEDICAL COLLEGE (NEW BUILDING)	PRACTICAL PHYSIOLOGY CRANIAL NERVES DR. FAHAD	<b>B R E A K</b>	11:30-12:00	LECTURE PHYSIOLOGY FUNCTION OF KIDNEY DR. HASEEB PHYSIO LAB	LECTURE ORAL BIOLOGY DEV OF TEETH & ANOMALIES DR. RAHEELA LECTURE HALL 2	
21-Aug	WED	8:00-10:00		10:00-11:30		GRAND TEST PHYSIOLOGY Respiration EXAMINATION HALL	Viva + Key Discussion	PRACTICAL ORAL BIOLOGY CEMENTUM DR. MARYAM ORAL BIO LAB DENTAL BUILDING	LECTURE PHYSIOLOGY GLOMERULUS FILTRATION DR. ILAL LECTURE HALL BMSc (50)
22-Aug	THU	LECTURE EMBRYOLOGY FETAL PERIOD-I PROF REHANA LECTURE HALL BMSc (50) MEDICAL COLLEGE	LECTURE ORAL BIOLOGY DEV OF TEETH & ANOMALIES DR. RAHEELA LECTURE HALL 2	GROSS. LECTURE AND DH/ PROSECTON NOSE+PARANASAL SINUSES DR. MEMOONA LECTURE HALL BMSc (50) MEDICAL COLLEGE (NEW BUILDING)		PRACTICAL HISTOLOGY SKIN-2 DR. FOUZIA ORAL BIO LAB DENTAL BUILDING	LECTURE BIOCHEMISTRY PROTEIN METABOLISM II DR. MUZAMIL (NEW BUILDING)		
23-Aug	FRI	8:00-10:00		10:00-11:30		GRAND TEST ANATOMY 4th Substages: Pharynx, Ear, 8,9,10,11 Nerves, Larynx, Oral Cavity, Nose+ paranasal air sinus EXAMINATION HALL	Viva + Key Discussion	LECTURE PHYSIOLOGY TUBULAR SECRETION + REABSORPTION DR. ILAL LECTURE HALL BMSc (50)	
24-Aug	SAT	LECTURE PHYSIOLOGY TUBULAR SECRETION + ABSORPTION DR. HASEEB LECTURE HALL BMSc (50)	LECTURE BIOCHEMISTRY UREA CYCLE DR. MUZAMIL LECTURE HALL BMSc (50) MEDICAL COLLEGE (NEW BUILDING)	GROSS. LECTURE AND DH/ PROSECTON REVISION DR. ISHRAT LECTURE HALL BMSc (50) MEDICAL COLLEGE (NEW BUILDING)		12:00-1:00	LECTURE ISLAMIYAT DR. BUSHRA NOSHEEN LECTURE HALL 2	1:00-1:45 LECTURE HISTOLOGY SKIN-3 DR. FOUZIA LECTURE HALL BMSc MEDICAL COLLEGE	1:45-2:30 LECTURE BIOCHEMISTRY HEME PROTEIN PROF. ZUBAIR LECTURE HALL BMSc MEDICAL COLLEGE

## COMMUNITY AND PREVENTIVE DENTISTRY

Role of the preventive dentistry in community health

Fluorides and water fluoridation, pure water, drinking water,

Nutrition, care of the teeth of the child during all stages of growth right from infancy.

Role of dental health education in preventive dentistry, elaborate discussion covering all aspects

Administration of dental Services, indices, epidemiological surveys clinical trials.

### **Primary health care approach:**

Concepts of primary health, oral health in PHC principles, implications

### **Society and oral health:**

Sociological perspective, social classes and society, family socialization and health, research methods in social sciences.

Health needs assessment: impairment, disability and handicap, development of socio-dental indicators, use of health needs assessment to plan oral health care.

### **Basic principles and methods of oral epidemiology:**

Diagnostic testing, measures of disease frequency, variable and bias, type of studies.

### **Public health aspect of oral disease and disorders:**

Dental caries, periodontal disease, oral cancer, dental trauma, developmental enamel defects, dentofacial irregularities.

### **Community based strategies for preventing dental caries:**

Fluoride tooth paste, water fluoridation, fluoridated salts, dietary fluoride, fluoride mouth washes, fluoride varnishes, pit and fissure sealant.

### **Trends in oral health:**

The primary dentition, the permanent dentition, international comparison, root caries, changes associated with caries diagnosis.

### **Principles in community oral health:**

Introduction, design of study and calculation of sample size determination, analysis, issues, common statistic methods.

### **Principles of health economics:**

Type of economic evaluation, stages of economic analysis, assessing the quality of economic evaluation and limitations.

### **Principles of Oral Health Promotion :**

Principles of oral health behavior and health education : conceptualization health, health behavior and health education and health psychology perspective, determination of health education and health behavior models, theory to practice.

### **Nutritional dietary guideline and food policy in oral health:**

Effect of nutrition and diets and value of teeth in nutrition, guideline for nutrition, sugar consumption.

### **Fluoridation :**

History, legal framework and decision making about fluoridation, the ethics of water fluoridation, fluoridation case studies.

### **Approaches in oral health promotion :**

Planning, development skill required in oral health promotion, identification of sources.

### **Principles of organization and models of delivery of oral health care:**

The oral health care delivery system, policies and objectives, organization and potential for changes evaluation of opportunities.

### **Recommended Books**

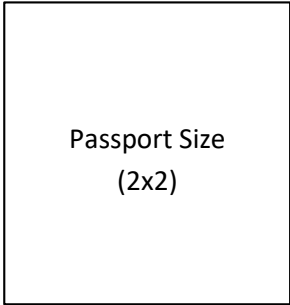
Cynthia M.Pine, community oral health

John O. Forrest, preventive dentistry.



# STUDENT INTERNAL ASSESSMENT REPORT

1. Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_
2. Father's Name: \_\_\_\_\_
3. Session: \_\_\_\_\_
4. Academic Performance:
5. Subject of COMMUNITY DENTISTRY Attendance:
  - i. Theory: \_\_\_\_\_
  - ii. Practical's: \_\_\_\_\_
  - iii. Tutorial: \_\_\_\_\_
6. Send up Examination
7. Internal Assessment Score
8. General Conduct



## Attendance Record Form

	Total	Attendance	Percentage
Lectures			
Tutorials			
Practicals			

Remarks: \_\_\_\_\_

## Academic Record Form

	Total Marks	Marks Obtained	Percentage	Remarks
<b>Class Tests</b> 1. 2. 3. 4. 5.				
<b>Monthly Assessment</b> 1. 2. 3. 4. 5.				
<b>Term Tests</b> 1 <sup>st</sup> Term 2 <sup>nd</sup> Term 3 <sup>rd</sup> Term				

<b>POWERPOINT PRESENTATION by STUDENTS</b>				
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## **POLICY OF INTERNAL ASSESSMENT OF COMMUNITY DENTISTRY**

- 1) Continuous internal assessment consists of appropriate evaluation at the end of each assignment, term, major/monthly test or course of the curriculum. Proper records of internal evaluations should be maintained and the scores obtained in these tests should contribute 10% to the final total score of the candidates; that 10% may include class tests, monthly test, assignments, presentations and send-up examination.
- 2) Final university examination of each subject should contribute 90% to the total score, and the students should secure passing marks on the aggregate of the total marks.
- 3) 10% marks of internal evaluation will be added in theory of semester exam. Students should know what is expected of them. They should be able to identify the characteristics of a satisfactory answer and understand the relative importance of those characteristics. This can be achieved in many ways; you can provide feedback on assignments, describe your expectations in class, or post model solutions.
- 4) No grace marks should be allowed in any examination.
- 5) Written examinations consist of MCQ's, short structured essays, (according to curriculum) questions.
- 6) During the course, students will be assessed to determine achievement of course objectives. The test will be scheduled on completion of each chapter. The method of examination comprises of theory exam which includes SEQs, MCQS, practical (Objective Structured Practical Examination) and Viva voce.

**NUMBERS OF MARKS ALLOCATED FOR UNIVERSITY**

**EXAMINATION AND INTERNAL ASSESSMENT**

<b>UNIVERSITY EXAMINATION Marks (UHS)</b>	<b>INTERNAL EVALUATION (Class tests + Term tests + Log book)</b>	<b>TOTAL Theory</b>
<b>90%</b>	<b>10%</b>	<b>100%</b>

## **DISTRIBUTION OF MARKS FOR 2<sup>nd</sup> Prof BDS EXAMS**

### **EVALUATION**

The method of examination and distribution of **200**marks shall be as follows:

#### **A-WRITTEN EXAMINATION: Total Marks – 90**

One paper of **45**marks comprising of an MCQ section of mark **(45 MCQs** of 1 mark each)

SEQ section of **45**marks (**15SEQs** of marks each) and **10** marks Of internal assessment

#### **B-PRACTICAL EXAMINATION: VIVA VOCE+OSPE MARKS – 90**

The viva voce shall only carry 60 marks (30 with internal and 30 with external examiners). 30 marks will be dedicated to OSPE as per following formula:

INDICES (CPITN & DMFT)	10 Marks
Charting	10 Marks
Instrument Handling including Brushing	05 Marks
Instruments & material Identification	05 Marks

The marks will be equally divided between internal and external examiners

### **COURSE REQUIRMENTS:**

Each student is expected to

1. Achieve a pass mark (50%) in the internal evaluation
2. It is compulsory for each student to obtain a minimum of 50% marks in both written and oral/practical examination to be declared pass.
3. Achieve a minimum of 75% attendance

**\* Internal Assessment will be calculated and given out of 20 marks from both theory and practical and added to the Annual Result**

## Community and Preventive Dentistry

### INTERNAL ASSESSMENT OF BDS 2<sup>ND</sup> YEAR

CRITERIA	MARKS DISTRIBUTION
MONTHLY TEST	12
TERM TEST	4
LOG BOOK	3
GENERAL CONDUCT	1
TOTAL	20