



BAHRIA UNIVERSITY DENTAL COLLEGE BUHSC-(K)



**Second Year BDS
Batch XII
STUDY GUIDE**

FROM THE DESK OF PRINCIPAL



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Principal,

BUDC

Bahria University was established in the year 2000 with the vision to become knowledge-based and creativity-driven international center of learning. The Dental College, established in 2012 has continued to uphold this mantle, and has emerged as a preferred destination for students to study Dental Medicine. Consistent with BU's mission, the Dental School is committed to provide quality education with emphasis on research at the undergraduate level.

In line with BU's core values, the Dental College has a strong focus on integrity, diversity, tolerance, and humility. At the Dental College, we strive to inculcate these attributes in our students, so that when they graduate, they are able to contribute towards society as caring oral physicians, educators and leaders of tomorrow.

Dear students, I and my team, extend a very warm welcome to you. I am sure that the time you spend here will be most productive, fulfilling, and memorable.

MESSAGE FROM THE DESK OF VICE PRINCIPAL

Prof. Dr. Farzeen Tanwir

Post Doctorate (Canada), Post Doc &

PhD (Sweden), C-Ortho (USA), BDS

Professor & HOD Department of Periodontology

Vice Principal BUDC



Dear students, the evolutionary fields of Medicine and Dentistry call for continuous learning and persistence on behalf of the clinician. My goal as Vice Principal is to provide the leadership that will facilitate Dental College to provide the best possible academic guidance to meet the needs of students and patients to the best of our ability. Through a close partnership with faculty members and parents, I am confident we can make our college a place where our students can continue to grow academically and socially for life in the 21st Century. We, at Bahria University Dental College, are committed to transforming our students into dental surgeons who are life-long learners, who can lead fearlessly and selflessly, and are compassionate and impregnated with a deep sense of commitment towards humanity. We meet international standards of professional education by installing the system of integrated curriculum, interdisciplinary and thematic teaching of basic and clinical sciences. We advocate interactive sessions to improve comprehension of students as well as training them with skills of communication and self-expression. We provide our students with a stimulating environment for undertaking research projects in their undergraduate years to build a strong basis for their future career, professional growth and stand unmatched with students at other colleges, both local and international. With a state-of-the-art campus, experienced faculty, an up-to-date digital library, transport and hostel facilities, I assure you that your decision to study at BUDC will surely be a wise one, your experience here will be profoundly enriching, and you will become a valuable asset to the nation.

ABBREVIATIONS

ASSIG/AS	Assignment
BCQS	Best Choice Questions
CBL	Case Based Learning
CDC	Curriculum Development Committee
CME	Continuous Medical Education
CP	Class Presentation
CQ	Class Quiz
CR/CW	Clinical Rotation/Clinical Work in OPD
CS	Clinical Session
DOPS	Direct Observational Procedural Skills
HEC	Higher Education Commission
HO	House Officers
HOD	Head of the Department
IL	Interactive Lecture
MIT	Modes of Information Transfer
MOD	Modular
Mini-CEX	Mini Clinical Evaluation Exercise
OMFS	Oral And Maxillofacial Surgery
OPD	Outpatient Department
OSCE	Objective Structured Clinical Evaluation
OSPE	Objective Structured Practical Evaluation
PBL	Problem Based Learning
PMC	Pakistan Medical & Dental Council
PPT	Power Point Presentation
PW	Practical work
QEC	Quality Enhancement Cell
SC	Short case
SAQS	Short Answer Questions
SGD/S	Small Group Discussion/Session
SGIS	Small Group Interactive Session
Skill Lab	Phantom Lab
SS	Self –Study
Viva	Viva
VD	Visual Display



CONTENTS	
VISION	7
MISSION STATEMENT	7
PROGRAM LEARNING OUTCOMES	7
SECTION 1: POLICIES & COMMITTEES	8
I. STUDENT'S CODE OF CONDUCT.....	8
II. ACADEMIC MISCONDUCT & DISCIPLINARY COMMITTEE.....	17
III. POLICY ON SEXUAL HARASSMENT	23
IV. STUDENTS GRIEVANCES OVERSIGHT COMMITTEE	26
V. ATTENDANCE POLICY FOR STUDENTS.....	27
VI. ELIGIBILITY CRITERIA FOR APPEARING IN ANNUAL PROFESSIONAL EXAMINATIONS	28
VII. POLICY FOR MATERIAL USED	29
VIII. ASSESSMENT POLICY FOR MODULES	30
IX. STUDENTS AWARD POLICY	31
X. POLICY FOR ELECTIVES	34
XI. STUDENT COURSE AND TEACHER FEEDBACK POLICY	35
XII. CO-CURRICULAR ACTIVITIES POLICY	37
XIII. POLICY FOR FAIR AND FORMAL PROCESS OF STUDENTS' ACADEMIC COMPLAINTS	38
XIV. POLITICAL ACTIVITY POLICY.....	40
XV. STUDENT AFFAIRS COMMITTEE	41
XVI. EQUIVALENCE COMMITTEE	41
SECTION 2: INTRODUCTION.....	42
I. Objectives of Study Guide.....	42
II. Curriculum	42
III. Mode of Information Transfer.....	43
IV. Self-Directed Study	43
SECTION 3: PROGRAM STRUCTURE AND OVERVIEW	44
I. THE MODULAR SYSTEM	44
II. LEARNING STRATEGIES.....	45
III. COMPETENCIES AND LEARNING OUTCOMES OF DENTAL UNDER-GRADUATES.....	46
XVII. MENTORING AND COUNSELING.....	50
SECTION 4:DEPARTMENTS & ACADEMIC SCHEDULES	51
I. DEPARTMENT OF DENTAL EDUCATION	51
II. INTRODUCTION TO DEPARTMENTS	52

III.	MODULE IV	59
IV.	MODULE V.....	81
V.	MODULE VI	101
VI.	LEARNING RESOURCES	121
VII.	ACADEMIC SCHEDULE.....	124

VISION

To become a knowledge and creativity driven international university that contributes towards development of society.

MISSION STATEMENT

To produce competent and skilled dental professionals and researchers by ensuring excellence in dental education, applied research and practices in a collegiate environment supported through national and international linkages, to exhibit highest principles of professional humanism towards community and society.

Program Learning Outcomes

- Correlate the theoretical knowledge with clinical practices to provide best possible treatment option for patient.
- Perform basic dental treatment and minor dental surgeries on patients independently.
- Guide community and society towards prevention of oral disease.
- Demonstrate professionalism and ethics in patient care.
- Conduct simple research independently.
- Demonstrate leadership qualities while working in a team.

SECTION 1: POLICIES AND COMMITTEES

This section summarizes some key aspects of policies in vogue at Bahria University. The student is advised to read the detail in the latest edition of Bahria University's Student Handbook

STUDENT'S CODE OF CONDUCT

Every student shall observe the following code of conduct in the University premises, in the University administered hostels (on and off-campus) and places of other activities being held under the auspices of the University:

- ✚ Loyalty to Pakistan and refraining from doing anything which is repugnant to its honor and prestige in any way.
- ✚ Respect for convictions and traditions of others in matters of religion, conscience and customs while observing own religious duties/customs.
- ✚ Truthfulness and honesty in dealing with other people.
- ✚ Respect for elders and politeness to all, especially to women, children, elders, the weak and the helpless.
- ✚ Special respect for teachers and others in authority in the CUs and BU.
- ✚ Cleanliness of body, mind, speech and habits.
- ✚ Helpfulness to fellow beings.
- ✚ Devotion to studies and prescribed co-curricular activities.
- ✚ Observance of thrift and protection of public property.
- ✚ Observance of the rules and regulations of the CU in force from time to time.

Prohibited Acts & Misconduct/ill-Discipline

The following acts shall be unacceptable, and their commission shall be construed as misconduct or ill-discipline:

- ✚ Breach of the Code of Conduct.
- ✚ Smoking in the areas prohibited by the University.
- ✚ Consumption or possession of alcoholic drinks or other intoxicating drugs within the CU/ vicinity or while attending off-site instructions, sports, cultural tours or survey camps.

- ✚ Organizing or taking part in any function inside the campus, or organizing any club or society of students, except were permitted and in accordance with the prescribed rules and regulations.
- ✚ Collecting donations or receiving funds or pecuniary assistance for or on behalf of the CU except with the written permission of the Head of the CU or any other person authorized in this behalf.
- ✚ Staging, inciting or participating in or abetting any walk-out, strike or other form of agitation against BU, its CUs or students, teachers, officers or authorities; inciting others to violence; disruption of the peaceful atmosphere in any way; making inflammatory speeches or gestures which may cause resentment; issuing of pamphlets or cartoons which cast aspersions on the students, teachers, staff or University authorities/bodies; doing anything in a way likely to promote rift and hatred amongst the students; issuing statements in the press; making false accusations against or lowering the prestige of BU or its students, teachers, administrators, staff or bodies.
- ✚ Disobeys the lawful orders of a teacher or other person in authority.
- ✚ Habitually neglects work or absents from the classroom without valid reason.
- ✚ Willfully damages public property or the property of fellow students or any teacher or employees of BU and its CUs.
- ✚ Does not pay the fees, fines, or other dues payable under the laid down rules and regulations; uses indecent language; wears immodest dress; makes indecent remarks; gestures; behaves in a disorderly manner; commits any criminal, immoral or dishonorable act (whether committed within the CU or outside) or any act which is prejudicial to the interests of BU and its CUs; and/or
- ✚ Commits an act of sexual harassment, as defined in the HEC's document 'Policy Guideline against Sexual Harassment in Institutions of Higher Learning'.

Action against Misconduct

Every member of the faculty shall have the power to check any disorder or improper conduct, or any breach of the rules, by students in any part of the campus or outside when the visit is sponsored or organized by it. Misconduct in a classroom when a student is under the charge of a teacher shall not be allowed and a punitive action such as a fine, removal from the classroom or a punishment of greater magnitude may be imposed as decided by the authority so empowered. The Student Advisor,

the Admin Officer or any other employee authorized by the Head of the CU shall be responsible for the maintenance of good behavior and law and order amongst the students on the premises of the CU.

Penalties:

A student guilty of an act of indiscipline shall be liable to the penalties specified below or promulgated through written orders/notifications:

Penalty Code	Penalty	Awarding Authority	Appellate Authority
1	Removal from classroom, laboratory, or field work, for a maximum period of two contact hours	Teacher In-Charge	HOD
2	Expulsion from games or field work for not more than one week	Games/ Field Work In-Charge	Director
3	Expulsion from educational visits and sports tours	DD (Admin & Coord) or an officer authorized by the Head of the CU	Director
4	Suspension from classes for a period not exceeding two weeks	Director/ Principal	Head of the CU
5	Fine not exceeding Rs 10,000	Director/ Principal	Head of the CU
6	Removal from a position of authority on the advice of the Student Advisor / HOD	Director/ Principal	Head of the CU
7	Expulsion from the hostel	Head of the CU	Next Higher 42 Authority

8	Cancellation of remission of fees/assistantship/scholarship etc.	Head of the CU	Next Higher 42 Authority
9	Rustication for one or more semester	Head of the CU with concurrence of BUHO	Rector
10	Expulsion from the CU	Head of the CU with concurrence of BUHO	Rector

Procedure in Case of Breach of Discipline:

A teacher, a staff member or a BU Officer in whose presence or in relation to whom an act of indiscipline has been committed or who gets to know of such act, may deal with the case him/herself, or if in his/her view the case is one which can be more appropriately dealt by another authority or which warrants a penalty of greater magnitude than they are competent to impose, shall refer the case to the Student Advisor or Deputy Director (Admin & Coord) or the higher authority as the case maybe.

All cases of serious breach of discipline shall be referred to the Disciplinary Committee for investigation which, after due process of investigation, will either impose the penalties if within its powers or recommend them to the Campus Head/Head of the CU/Rector, as the case may be.

When a case against a student is referred to the Disciplinary Committee, it may, if it deems fit, suspend the student from the classes till the finalization of the case, with the approval of the Head of the CU.

Rustication

Rustication may be awarded up to a maximum of 3 years. The penalty when imposed on a student shall always mean a minimum loss of one semester as far as his/her appearance in the examinations is concerned. The actual period of absence from the CU will, however, depend upon the time of the academic year when the penalty is imposed. Period of rustication shall have no effect on the maximum duration of the program. No student shall be rusticated from the CU unless he/she has been allowed a reasonable chance of defense against the accusations.

No fee shall be charged from a rusticated student for the time period during which his/her name remained struck off the rolls. However, the previously deposited fee shall not be refunded.

A student under rustication shall have the right of readmission after the period of suspension and subject to availability of the missed courses in the normal semester list of courses being offered.

Expulsion

The Head of the CU shall report the name of the student who has been found guilty of an offence warranting expulsion to the Rector stating the reasons for the proposed action, who will then have the authority to sanction expulsion after allowing reasonable chance to the student to defend him/herself against the expulsion.

The name of the expelled student shall immediately be removed from the CU rolls, and fee for remaining month(s) of the semester shall not be refunded.

A student expelled from the CU shall not be readmitted to any of the University's Constituent or Affiliated Units.

Cases of expulsion shall be registered in BU records and notified to all the CUs.

Appeals

An appeal against the penalty may be filed by the student with the Appellate Authority within 30 days of announcement of the punishment. No appeal by a student shall be entertained unless it is presented within 30 days from the date of communication of the decision, provided that the Rector may, for valid reasons, extend this period.

No appeal shall lie against the decision of an authority imposing a penalty other than rustication or expulsion except on the grounds that such authority imposed a penalty which it was not competent to impose.

An appeal on the grounds that an authority imposed a penalty which it was not competent to impose, shall lie with the body or person of higher authority than the one who imposed the 44 penalty.

Compensation for Loss

The Head of the CU, or any teacher or officer to whom he may delegate the powers, may instruct a student to pay compensation for any loss or damage to property belonging to the CU/University, public authority, a fellow student or an employee of the CU/University, caused by a willful act or

gross negligence of the student. If the student does not pay such compensation within a specified period, the Head of the CU will proceed against the student in the manner as prescribed in these rules.

Offences during Examination

Cases of indiscipline in or around the Examination Hall, and use of unfair means, shall be dealt with by the Examination Committee.

Dress code:

Male students:

1. Dress/Casual Trousers
2. Jeans (Plain blue) without an image, graphics, and write ups
3. Casual Shirts (Half/ Full sleeves)
4. T Shirts without any messages, images, graphics, and write ups
5. Dress/Casual shoes or Joggers with socks (no sandals)
6. Shalwar Kameez with shoes (only on Friday)
7. Suit/ Combination
8. Coat/ Pullovers/ Sweaters/ Jackets in winter

Female students:

1. Shalwar Qameez (no sleeveless)
2. Hijab, Abaya, Chaddar etc
3. Full length Jeans(no tights) with long shirt/ kurta (knee length)
4. Light jewelry and light makeup
5. Shoes, Sandals and Joggers
6. Dupatta/ Scarf is compulsory with all dresses

NOTE: BUDC students are expected to wear white coat during classes, hospital rotations and other wise.

Student Card:

Students shall be issued ID Cards. The students shall be required to wear their ID Cards in the campus and show them to the authorized persons on demand.

Loss of ID Card:

In case ID Card is lost, it should be immediately reported to the Office of the Dy Director (Academics) who will make arrangements for re-issue of a new card by the University after payment of fine.

Personal behavior.

The University expects that all students should sustain professional manner when interacting with colleagues and others. The University recognizes that personalities, characters, and management styles may differ but, notwithstanding these differences, as a minimum standard, all are expected to:

- Work co-operatively with each other to achieve objectives and establish good working relationships.
- All should behave and speak professionally, respectfully, and courteously at all times.
- Tidiness and cleanliness must be always adhered to within the BUDC premises which will help us maintain a safe, clean, and professional learning environment.
- Use the college's property, facilities, supplies, and other resources in the most effective and efficient manner.
- Unacceptable behavior such as aggressive or abusive behavior, shouting or personal insults or spreading rumors or gossip, or insulting someone is to be avoided at all costs. All these matters, if experienced, should be reported to the vice principal or your mentor or a senior faculty member.

Punctuality:

Students are expected to arrive in class well in time. All cell phones, smartphones, and other electronic devices (e.g., pagers, iPods) must be turned off and hidden from view during class time. Talking and other disruptive behaviors are not permitted while classes are in session. If the students miss a class, they are themselves responsible for the missed part of the course. It is the student's responsibility to contact a classmate or teacher to determine and cover what was missed.

At BUDC classes start immediately after holidays. There is no lag period after leave. There will be no relaxation for students who are absent. **Please inform your parents of this and make your travel arrangements accordingly.** Avoid taking leave for personal reasons like weddings during the academic year.

Conduct in hospital:

While working in hospital and when dealing with patients, treat those whom you serve, with whom you work, and the public with same degree of respect you would wish them to show you.

Treat patients and colleagues with kindness, gentleness, and dignity. Respect the privacy and modesty of patients. Do not share the medical or personal details of a patient with anyone except those health care professionals who are integrals to the well-being of the patient or within the context of an educational endeavor. Lastly students are required to strictly follow the college dress code during and outside the college hours inside the campus & at hospital.

Conduct in Library:

The University campuses have well stocked libraries, and time spent by the students there will meet your research requirements in a calm place. The libraries also provide electronic access through the internet to databases throughout the world.

Library also provides plagiarism detection services

While using the library, Mobile Phones/ iPods/ laptops should be kept on silent mode. Sleeping, listening/ watching drama and music etc, while staying at library is prohibited.

RULES FOR BORROWING BOOKS

1. Students are permitted to borrow 3 books at a time for a maximum period of 14 days. Books borrowed may be re-issued on completion of the time period.
2. A valid University card is must for borrowing the Book(s) and other material
3. Textbooks will be issued for 7 working days only but may be reissued the next day of the due date
4. For the Book(s) returned after the due date, a fine of Rs.10/- per day would be charged.
5. Book Bank books will be issued for a period of whole/ one semester.
6. Writing, underling or marking any book is strictly prohibited. Library books are carefully examined on return and the borrower will be held responsible for any damage
7. Following library material will not be issued and must be consulted in the library:
 - a. Reference Material.
 - b. Thesis/ Project Reports.
 - c. Audio/ Video cassettes/ CDs/ DVD's.
 - d. Magazines and periodicals.

e. Newspapers.

LIBRARY TIMINGS

➤ DAY	➤ TIMINGS
➤ WEEKDAYS: MON- FRI	➤ 8:30 AM to 8:30 PM
➤ WEEKENDS	➤ 9:00 AM to 8:30 Pm

CONDUCT IN CAFETERIA AND COMMON ROOMS

Campus has a cafeterias with a variety of food items and snacks available at reasonable rates

Students are expected to show care, courtesy towards the cafeteria staff as well as to others.

Place garbage and recyclables in the appropriate containers.

This behavior will maintain a clean and enjoyable environment for all.

ACADEMIC MISCONDUCT AND DISCIPLINARY COMMITTEE

The Discipline Committee is responsible for maintaining discipline (both academic as well as conduct), and deals with all cases of indiscipline on the part of students.

It recommends award of penalties/ punishments and renders advice to the Director on administrative matters needed to maintain a peaceful environment on the campus. Intimation will be sent to BUHO for all penalties awarded to a student.

MEMBERS OF THE COMMITTEE

Chairperson	Brig (Retd) Prof. Syed Pervez Ashgar, BUMC
Secretary	Dr. Jaweria Zeeshan, BUMC
Members	Prof. Dr. Khalid Aziz, Principal, BUCPT Prof. Dr. Ahmed Omer, BUDC Prof. Dr. Yasmeen Mehar, BUMC Associate Prof. Abida Razzaq, VP PNNC
Co-opted member	Varies according to the case

STUDENTS ARE TO AVOID THE FOLLOWING:

- Unauthorized use of University's name or logo which is property of university.
- Harassment, sexual or otherwise, or intimidation of any member of university.
- Coming late for classes. The student may be considered absent and marked accordingly.
- Improper/inappropriate dress
- Loud and aggressive behavior in Cafeteria or Common rooms or within the premises of BUHS or PNS Shifa.
- Non clearance of bills/dues. Non-clearance of dues may prevent student from appearing in the professional examination. The student may also be refused permission to attend classes.

USE OF MOBILE PHONE

- a) Use of mobile phone for photography at cafeteria is restricted.
- b) Library is 'NO Mobile Zone' area.
- c) Use of mobile in class room is prohibited.
- d) Students are not allowed to use mobile phone for photography/ video capturing during farewell parties.
- e) Making videos, images, Vlogs etc are monitored through CCTV cameras installed inside and outside building.

SMOKING

Student guilty of an act of smoking in the premises of Bahria University/ Constituent Unit or while entering/ attending offsite instructions like sports, cultural tours or survey campus shall be liable to the penalties asunder:

Occasion

1st occasion of offence on act of smoking.

2nd or onward occasion of offense(s).

Penalties

Fine of Rs.5000/- along with warning letter with copy to parents from Director Campus

Fine of Rs.10,000/- along with warning letter (s) with copy to parents from DG Campus on each offence.

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Student guilty of an act of possession/ consumption/ usage/ supplying of intoxication drugs/ Alcoholic drinks in premises of CU and or entering CU or events of BU being intoxicated and or during official/ informal offsite events of the University shall be liable to expulsion from the CU.

CRIMINAL CONVICTION

- a) Applicants are required to inform BU of any criminal conviction. Full details are to be provided.
- b) The University reserves the right to refuse admission to any applicant with a criminal conviction that may jeopardize the reputation of the University.

- c) Failure to declare any criminal conviction by a student already enrolled in BU shall result in immediate cancellation of his/her admission.
- d) Where admission to the program is denied on the basis of the criminal conviction, the applicant will be notified of the decision in writing by respective Campuses/CUs

ACADEMIC MISCONDUCT

Following acts shall constitute academic misconduct:

- a. Cheating.
- b. Fabrication.
- c. Misuse.
- d. Forgery.
- e. Plagiarism.
- f. Facilitating academic misconduct.
- g. Academic Dishonesty.

The student is advised to refer to their Student Handbook to become fully cognizant of these terms.

PENALTIES FOR ACADEMIC MISCONDUCT

TYPE OF MISCONDUCT	PENALTY
Attempt (Successful/ unsuccessful) to know contents of question papers through unfair means prior to examination	<p><i>Minor punishment</i></p> <ul style="list-style-type: none"> a Warning letter (Copy to parents) b. Fine of Rs.2,000. <p><i>Major punishment</i></p> <ul style="list-style-type: none"> a. Expulsion from the University b. Fine Rs. 5000/00.

	c. Letter to parents
<p>Possession of written material, relevant to the subject/paper concerned.</p> <ul style="list-style-type: none"> • Writing on palm, arm or anywhere on the candidate's body or clothes whether the written material is relevant or irrelevant to the concerned paper. • Possession of Mobile phones, Smartwatches, PDAs and other electronics devices, whether or not carrying any relevant or irrelevant material in the memory. 	<p>a. Grade 'F' in the subject.</p> <p>b. Fine Rs 5,000.</p> <p>c. Warning, copy to parents.</p> <p>d. Mobile phones/electronic devices to be confiscated. (will be returned after investigation)</p>
<p>Giving/receiving assistance or allowing any other candidate to copy from his/her answer books.</p>	<p><i>Minor Punishment</i></p> <p>a. Cancellation of the relevant paper.</p> <p>b. Fine Rs 2,000/-.</p> <p>c. Letter of Warning.</p> <p><i>Major Punishment</i></p> <p>a. Grade 'F' in the subject.(for students involved)</p> <p>b. Fine Rs 5,000/-</p> <p>c. Letter of Warning.</p>
<p>Removing a leaf from answer book.</p> <p>Taking the whole or a part of an answer book or a continuation sheet into or out of examination hall.</p>	<p>a. Grade "F" in the subject. (for students involved)</p> <p>b. Fine Rs. 5,000.</p> <p>c. Letter of warning</p>

Substituting the whole or a part of an answer book or a continuation sheet not duly issued to him for the examination;	<p>a. Grade 'F' in the subject. (For students involved)</p> <p>b. Fine Rs 5,000.</p> <p>c. Letter of Warning.</p>
Forging, mutilating, altering, erasing or otherwise tampering with marked answer scripts	<p>a. Grade "F" in the subject. (for students involved)</p> <p>b. Fine Rs 5,000.</p> <p>c. Letter of Warning</p>
Impersonation	<p>a. Grade "F" in all subjects of relevant semester studied at BU (including the impersonator/facilitator, if a student of BU).</p> <p>b. Expulsion from the university (including the impersonator/ facilitator, if a student of BU).</p> <p>c. In case the impersonator/facilitator is an ex-student of BU or not a BU student, an FIR may be lodged for the offence, as per law of the land.</p>
Using abusive or obscene language in answer book	<p>a. Grade 'F' in the relevant course.</p> <p>b. Fine Rs 5,000.</p> <p>c. Letter of Warning.</p>
Refusing to obey the Invigilator or Head Invigilator in the Examination Hall and misbehaving, resorting to misconduct, or creating any kind of disturbance in or around	<p><i>Minor Punishment</i></p> <p>a. Grade 'F' in the course.</p> <p>b. Fine Rs 5,000.</p>

the Examination Hall	<p>c. Letter of Warning.</p> <p><i>Major Punishment</i></p> <p>a. Rustication for one Semester.</p> <p>b. Grade 'F' in the course.</p> <p>c. Fine Rs5,000/</p> <p>d. Letter of Warning.</p>
Communicating or attempting to communicate with Examiners with the intention of influencing them in the award of marks.	<p>a. Cancellation of relevant paper.</p> <p>b. Fine Rs 5,000.</p> <p>c. Letter of Warning.</p>
Possession of firearms, knives etc. inside and in the close vicinity of Examination Hall	<p>a. Expulsion from the University.</p> <p>b. Fine Rs 5,000.</p> <p>c. Letter of Warning.</p>

SEXUAL HARASSMENT

All students are required to educate and familiarize themselves about the act/actions categorized as "Sexual Harassment" may it be physical, verbal or while utilizing electronic media and refrain from it being a punishable offence.

Higher Education Commission has issued very strict policy guideline against "Sexual Harassment in Higher Education Institutions (HEI)".

All such policies are strictly applicable and followed in Bahria University.

All students are therefore required to go through the entire policy's contents which are available with campus (concerned HODs) and University/ HEC website.

- The Protection against Harassment of Women at Workplace Act, 2010
- The Protection against Harassment of Women at Workplace (Amndt) Ac& 2022.
- HEC Policy on Protection against Sexual Harassment in HEIs effective 01 July 2020

COMMITTEE FOR PROTECTION AGAINST SEXUAL HARASSMENT IN BUHSCK

FOCAL PERSONS	
Prof. Dr. Khalid Mustafa Vice Principal (Medical)	Cell 0300-21 30868 Phone: 021-35319491-9, ext: 1038 & 1070 Email: khalid.bumdc@bahria.edu.pk drkhaiidmm@yahoo.com
Prof. Dr. Shazia Shakoor HOD, Physiology	Phone: 021-35319491-9 Ext: 1056 Email: shazia.bumdc@bahria.edu.pk shazia2304@hotmail.com
INQUIRY COMMITTEE	
Prof. Shama Asghar, Chairperson Vice Principal, Dental	Cell 0334-3078082 Phone: 021-35319491-9 ext: 1121

Professor of Operative Dentistry	Email: sham.burndc@bahria.edu.pk sham.asqhar24@gmail.com
Prof. Dr. Nasim Karim Principal, BUHS-PGI HOD Pharmacology Member	Cell m51774 Phone: 021-35319491-9, ext: 1057 & 1072 Email: nasimkarim.bumdc@bahria.edu.pk
Dr Aini Samreer Associate Professor, Gyn & Obs Member	He 0333-3763592 Phone: 021-35319491-9 ext: 1064 Email aini.bumdc@bahria.edu.pk drsam222@yahoo. Com
APPELLATE BODY	
Capt (R) Noaman Imam PN Director Campus Chairman	Cell 0336-9369222 Phone: 021-35319491-9 Ext: 1001 Email: dac.burndc@bahria.edu.pk
Dr. Farzeen Tanwir HOD Periodontology Member	Cell 0336-1802464 Phone: 021-35319491-9 Ext: 1104 Email: farzeentanwir21@ gmail.com
Dr. Saifullah Shaikh Assistant Professor, Physiology Member	Cell 0333-2279425 Phone: 021-35319491-9 Ext: 1066 Email: dr.saif74@yahoo.com

CODE OF CONDUCT FOR PROTECTION AGAINST HARASSMENT OF WOMAN AT THE WORK PLACE

1. An informal approach to resolve a complaint of harassment may be through mediation between the parties involved and by providing advice and counseling on a strictly confidential basis.
2. A complainant or a staff member designated by the complainant for the purpose may report an incident of harassment informally to her supervisor, or a member of the Inquiry committee, in which case the supervisor or the committee member may address the issue at her discretion in the spirit of this Code. The request may be made orally or in writing.
3. If the incident or the case reported does constitute harassment of a higher degree and the officer or a member reviewing the case feels that it needs to be formalized, the case can be taken as a formal complaint.
4. A complainant does not necessarily have to take a complaint of harassment through the informal channel. She can launch a formal complaint at any time.
5. The harassment usually occurs between colleagues when they are alone, therefore usually, it is difficult to produce evidence. It is strongly recommended that staff should report offensive behavior immediately to someone they trust, even if they do not wish to make a formal complaint at the time.

HEC POLICY ON PROTECTION AGAINST SEXUAL HARASSMENT IN HIGHER EDUCATION INSTITUTIONS

1. Higher Education Institutions ("HEIs") are highly consequential institutions in society that are dedicated to the pursuit and dissemination of knowledge. Members of the HEI community have several important rights and privileges, central among which is the right to pursue inquiry and search for knowledge without hindrance from unlawful or otherwise unacceptable constraints. The HEC, takes very seriously the freedom of teachers, researchers, scholars, students to live and work in a safe environment in which their dignity is protected.
2. Protection against sexual harassment is important not only because it threatens the freedom and conduciveness of the environment and the institutions of higher learning. At a more fundamental level, such conduct is unacceptable because it violates personal dignity and shall not be tolerated at HEIs in Pakistan under any circumstance.

3. All administrators, deans, managers, faculty, department chairs, directors of schools or program and others in supervisory or leadership positions have an obligation to be familiar with and to uphold this policy and its procedures along with informing members of their staff about its existence.
4. In order to ensure protection of women against harassment complaint may be lodge by any person who has experienced sexual harassment with either the focal person or with any member of the Sexual Harassment Inquiry Committee.

STUDENTS GRIEVANCES OVERSIGHT COMMITTEE

There shall be a Student Grievances Oversight Committee (SGOC), at CU level for each department, to address grievances of students against any teacher, instructor, or administrative staff, with respect to matters of code of conduct, grades, or any administrative matter. The committee shall comprise:

- a) Head of CU.
- b) HOD.
- c) CU Exam-In-charge.
- d) Two (2) seniors-most FMs of the department.

If grievance is about the award of a grade, the procedure shall be as follows:

- a) The student must submit the grievance, in writing, within seven working days of the receipt of the grade, to the HOD who shall forward it to the SGOC
- b) The SGOC shall hear both sides and will give its decision, which shall be final and binding on all parties, within five working days or before the start of registration for the new semester, whichever is earlier.

ATTENDANCE POLICY FOR STUDENTS

1. It shall be mandatory for students to attend at least 75% of the Total Contact Hours in a Subject/Course of Study, failing which they will not be allowed to sit in the final examination. The 25% relaxation in attendance is to cater for unforeseen situations like sickness, bereavement in the family, law and order situation, untoward incident etc. On no account, any shortfall in attendance shall be condoned. Attendance once marked shall not be changed.
2. Where class attendance clashes with a sports event or any other extra-curricular activity, prior approval of the BUHO shall be sought for participation in the sports event or the extra-curricular activity. If BUHO approves such participation, tutorials shall be arranged to make up for the loss of academic activity. Only after the tutorials for the missed classes have been held that attendance for the missed classes shall be marked and credited to the student's attendance record

RESEARCH

BU has a strong emphasis on research and students are not only taught research methodology as part of their curriculum, but also actively engage in research work, under the supervisor of faculty members.

BUHSC has a Research Advisory Committee that has been specifically formulated to guide students in every aspect of their research, from synopsis writing through to publications in peer reviewed journals.

ELIGIBILITY CRITERIA FOR APPEARING IN ANNUAL PROFESSIONAL EXAMINATIONS

A student will be eligible to appear in the annual professional examination if he/she fulfills the following criteria:

- a. 75% attendance.
- b. Have cleared all financial dues.
- c. Must appear in all three end-of-module examinations.
- d. Must have scored passing marks in at least two of end of module examinations.
- e. No breach of discipline should have occurred for which the Disciplinary Committee has advocated a punishment.
- f. A student who has failed 2 end-of-module tests will be permitted a “re-sit” at the end of the academic year.
- g. Students who did not appear in end of module tests will not be allowed in the “re-sit”.
- h. No student can appear in one subject in an annual professional examination but must appear in all the subjects for that year.
- i. Subjects may be designated for the supplementary exams or for students repeating a year.
- j. There will be no remedial or extra classes in any subject for making good the shortfall in attendance.
- k. Departments may offer revision classes, but these will not be considered formal classes and will not be entered in the regular attendance.

**POLICY FOR MATERIAL USED DURING TRAINING AND STUDENTSHIP
NOT CHARGED BY STUDENTS**

- a. Pre-clinical Students posted in skill lab works on simulations, all of the training material is provided by the institute.
- b. Student during their clinical rotation in dental OPD, perform clinical procedures after undergoing relevant training in different clinical departments. No cost will be charged to students whilst they undergo training for various clinical procedures and the dental materials used whilst performing procedures.

ASSESSMENT POLICY FOR MODULES

There is a policy of ongoing or formative assessment of all students and summative assessment at the end of the module.

Formative or ongoing assessment:

- Formative assessment will be done on:
 - CBL/PBL/WPBAs sessions
 - Logbooks
 - Presentations assignments
 - End of OPD rotation examinations, quizzes and tests held in a department.

Summative Assessment:

- The end-of-module test comprises:
 - OSCE or OSPE examination
 - Viva voce exam.
 - Written theory examination
 - The written examination has 2 parts an MCQ and a short answer or short essay type examination.

Generation of internal evaluation marks from each module.

- 20% MARKS will be calculated from each end of module exam and will be counted in the final examinations.

STUDENTS AWARD POLICY

1. **Baseline Eligibility Criteria for Academic Honors & Awards:**

1. Student has completed the program within the Regular program duration (i.e. 5 x Professional years for MBBS and 4 x Professional years for BDS).
2. Student has taken full annual load for the entire degree program (as per applicable academic roadmap) without having supplementary exam in any subject prescribed for any Professional year.
3. Student has Scored minimum 75% aggregate marks in combined results of all the subjects during the MBBS/ BDS program.
4. Student does not have any Migration (excluding transfer from one CU of BU to another). This condition will not be applicable to migrated students for award of Merit and Distinction Certificates. Student has never been penalized in any disciplinary case at the University. (See Disciplinary Policy)***.

2. **Conditions for Award of Medals:**

The MBBS and BDS graduates shall be awarded Gold and Silver medals as enunciated below

1. **Gold Medal** will be awarded to the graduate scoring highest overall percentage based on aggregate percentage of all Professional Examinations. The graduate getting second highest aggregate marks will be awarded **Silver Medal**.
2. Where two or more graduates have the same highest aggregate percentage, then all the graduates will be awarded Gold Medals. In such a case, no Silver Medal will be awarded.
3. In a tie situation for Silver medal between two or more graduates, all the graduates will be awarded the Silver Medal.

4. **Condition for Award of Certificates of Merit:**

1. The students who score highest marks in a particular subject in their respective batch shall be awarded “Certificate of Merit” in that subject.
2. In case where two or more students score exactly same highest marks in their respective batch, then all the students will be awarded “Certificate of Merit” in that subject.

3. Students who have migrated from other Medical / Dental colleges shall be eligible for award of “Certificate of Merit” in MBBS / BDS subject(s) for which examinations were held at a CU/AU of BU and after meeting all the conditions given above.

5. **Conditions for award of Certificates of Distinction:**

1. Students of MBBS/ BDS programs obtaining 85% or above marks in a particular subject shall be awarded “Certificate of Distinction” in that subject after meeting the following conditions.
2. The student must have qualified all the subjects in the first attempt i.e. annual exams of the respective MBBS/ BDS exam of that Professional year.
3. Subjects qualified in supplementary examinations with 85% or above marks shall NOT be counted for award of Certificate of Distinction.
4. Certificates of Distinction shall be finalized on yearly basis after declaration of the results of preceding academic MBBS / BDS Professional Examination by Exams Dte, BUHO.
5. Students who have migrated to or from other Medical / Dental colleges shall be eligible for award of “Certificate of Distinction” in MBBS / BDS subject(s) for which examinations were held at a CU/AU of BU and meet the conditions given above.

6. **Rector’s Honors List.**

- (1) After each professional year, MBBS/ BDS students achieving 80% or above overall percentage on cumulative basis combined for all Professional years completed so far will be included in the Rector’s Honors List of that academic year.
- (2) The names of students placed on the Rector’s Honours List will be displayed on BU / CU web page and Campus Notice Boards. 9.3.5.3 Rector’s Honours List will be prepared and promulgated by the Examinations Dte, BUHO after declaration of results of each Professional year.

1. **SCHOLARSHIP POLICY:**

For BDS programs, merit scholarships shall be awarded on the basis of the result of annual examination except the final professional examination. The award shall be a lump sum amount for the year following the annual examination, as follows:

For BDS Students

Batch Positions	Scholarship Amount
1 st Position Holder	Rs. 100,000/-
2 nd Position Holder	Rs. 75,000/-

Criteria:

- a. 1st, 2nd, and 3rd position holder from each professional examination for MBBS.
- b. 1st and 2nd Position holder from each professional examination for BDS
- c. Highest marks in the class not less than 70%
- d. Eligible students must have appeared and passed in all modular exams of the same year.

POLICY FOR ELECTIVES

- a. Electives are not mandatory nor are they a part of the curriculum. Electives are considered an add on extra-curricular activity, with benefits of selection for jobs or postgraduate training after BDS.
- b. The Electives Rotation will be of 2-4 weeks duration.
- c. It will be planned at least three months in advance during the 3rd or 4th Year.
- d. The Elective will be planned during the **SUMMER HOLIDAYS** preferably.
- e. The institution or department will be of the student's choice.
- f. During the elective, the student will not get credit for attendance at BUDC.
- g. It is the student's responsibility to ensure that his/her overall attendance record is not affected adversely by the elective.
- h. The student will not proceed on an elective without informing the Dean/Principal.
- i. The student will sign a waiver to the effect that any shortfall in attendance is his /her own responsibility and will be dealt with as per rules of Bahria University Health Sciences.
- j. The adequacy of education during the elective is the student's own responsibility.
- k. Permission to attend an elective is given by the Dean/Principal at BUDC, This simply implies that the college authorities are aware that the student is away for this period so that admission is not cancelled.
- l. The student will ensure that the Elective Supervisor completes an evaluation report at the end of the elective.
- m. BUDC will not provide any financial assistance for the elective.
- n. Opportunities for electives will be disclosed on notice boards & whatsapp groups of students.

Student Course and Teacher Feedback Policy

Policy outlining mechanisms for monitoring and considering student feedback received in formal settings and through student surveys.

Purpose	To monitor and improve the quality of the student learning experience through the collection, use and reporting of student feedback about teaching and the learning environment.
Responsible Officer	Vice Principal (Dental)
Approving authority	Principal
Next scheduled review	To be reviewed on a periodic basis, with allowance for minor annual updates of roles and responsibilities by Educational Quality Committee, as required.

Feedback from students is essential to inform the development of the University's programs and to help shape all aspects of their current and future learning and broader experience. The University actively seeks and encourages students to share their views. Our approach aims to create openness, responsiveness and a sense of partnership.

Definitions:

Feedback

Feedback is a process in which the effect or impact of an action or interaction is communicated back (feedback) to modify or improve the next action or interaction.

Course Evaluation

A course evaluation is a process of collecting opinions of students on a paper or electronic questionnaire which requires a written or selected response answer to a series of questions in order to evaluate the relevance, contents, assessment and instruction of a given course.

Unit

A unit (also called subject) is a branch of knowledge studied or taught in a school, college or university that forms a part of a degree program or course.

Teaching Evaluation

Teaching evaluation refers to the formal vetting process of teachers that an educational institution uses to review and rate teachers' performance and effectiveness in the classroom in order to maintain its teaching standards.

POLICY

- A. It is policy that the Institute will survey students to collect feedback on:
 - 1. Courses and units;
 - 2. Quality of teaching; and
 - 3. Experience with the Institute.
- B. Feedback processes will be anonymous, systematic, rigorous and respectful of the rights of students and staff and incorporate strategies to maximize student participation. Full privacy and confidentiality will be ensured at all stages of the process.
- C. For every course/Unit, and teacher a HEC proforma will be administered annually.
- D. All students will be provided with the opportunity to provide feedback in full confidence of anonymity.
- E. Student Feedback will be used:
 - 1. To improve the quality of courses and units through the development of annual improvement plans.
 - 2. To inform the professional development needs of academic staff.
 - 3. To enhance course and unit design.
 - 4. To improve the provision of learning resources, facilities, equipment and services through the development of annual improvement plans; and
 - 5. To compare and benchmark the Institute's performance against the sector or other providers.

Co-curricular Activities Policy

In the Bahria University Dental College, (BUHS), the co-curricular program is integral to the educational opportunities provided for students. The co-curricular program offers additional opportunities for students to achieve the goals through a broad offering of purposeful learning experiences, some of which are conducted outside, but in concert with, the approved curriculum.

Co-curricular programs shall encourage the development of the physical, intellectual, interpersonal skills, social and emotional development of students.

Objectives of Co-curricular programs:

1. Provide purposeful learning experiences which promote the development of knowledge and skill in the affective, psychomotor and cognitive domains.
2. Provide activities which promote participation as well as competition.
3. Create a positive learning environment which enhances university climate.
4. Provide for individual enjoyment as well as the development of citizenship skills within the context of group activity.
5. Provide opportunities for the transfer of skills and knowledge gained through academic activities to career and life goals.

Selection of Co-Curricular Content

The selection of the content of co-curricular activities shall be the responsibility of the person(s) responsible for the activity. Prior to the use of any content for an activity the person(s) responsible for the activity shall evaluate the content under consideration with respect to the following criteria:

- a. Content adheres to the co-curricular philosophy of the subject.
- b. Content enables the attainment of the goals of the specific co-curricular activity.
- c. Language appropriateness. Literary value. Ability appropriateness with respect to content.
- d. Availability of facilities and equipment.

Prior to the implementation of any co-curricular activity, the person(s) responsible for the activity shall convey the content of the activity to the principal in writing. If the principal has any concerns with respect to the content adhering to the criteria for co-curricular activities the principal shall meet with the person(s) responsible for the activity.

Policy for fair & formal process of students' Academic complaints

Purpose

The goal of this procedure is to provide a simple and fair process that allows for both informal and formal resolution of conflicts.

Scope

This procedure applies to "student academic complaints," which are complaints brought by students regarding the University's provision of education and academic services affecting their role as students.

Process for Resolving Student Academic Complaints

1. Informal Resolution

The first step of any resolution should be at the lowest unit level, between the parties involved or the parties and an appropriate third party (e.g., other faculty, department chair, director of graduate studies, administrator). If no informal resolution is reached at the lowest unit level, a student may seek informal resolution at the collegiate level with the other party and higher level administrators. If the issue is not resolved informally, the student may seek formal resolution as outlined below.

2. Formal Resolution of Student Academic Complaints

If no informal resolution has been reached, colleges and administrative units will provide a review process appropriate to the issue raised by the student academic complaint, as described below.

Within Colleges

The Student Files a Complaint.

A student must file a written student academic complaint to the Dean's/Principal Office in the college where the incident is alleged to have occurred. The complaint must be filed within 15 calendar days from the occurrence or notice of the action being challenged.

The nominated faculty member will receive and review the complaint. The faculty member will meet as needed with the student and the respondent or other individuals involved to try again to reach a satisfactory, mutually acceptable informal resolution.

If the faculty member determines that a complaint or any portion of it is not a "student academic complaint" subject to this procedure, the FM will notify the student of that decision in writing.

The student may appeal that decision to the senior academic administrator.

A hearing panel will be established to hear the complaint. Members of the hearing panel will be drawn from faculty and academic staff. The hearing panel will have a minimum of three and a

maximum of five members. Parties must be notified of the hearing panel membership and given an opportunity to object to members who they allege have a bias or unfair interest in the case. Disputes about the membership of the panel will be decided by the dean.

The Hearing Panel Hears the Complaint and Issues Recommendations. The hearing panel will provide a fair opportunity for the student and the respondent(s) to present their views and information. The hearing panel will review the complaint and the response, and will review information and hear testimony where appropriate.

The panel will prepare a written report, recommending findings and a resolution of the matter. The panel must submit its report within 07 calendar days of the close of the hearing, unless there are compelling reasons for delay. The chair will send the report to the dean of the college, who will distribute the report to the parties.

Decision by the Dean

The dean will review the panel's report and may review any other parts of the hearing record. The dean has full discretion to accept, modify, or reject the panel recommendations. Within 07 calendar days of receipt of the panel report, the dean will issue a decision to the parties, unless there are compelling reasons for delay. The dean must inform the student of the right to appeal an adverse decision.

Appeal

If any party is not satisfied with the dean's decision, the party may appeal to the appropriate senior academic administrator within 07 calendar days. The party must explain the basis for the appeal. The senior academic administrator has the discretion to decide how to process the appeal. The appeal may be handled by written submissions or oral presentations to the senior academic administrator or delegate, or the senior academic administrator may set up an appellate hearing panel to hear the appeal and provide a recommendation before making a decision. In any case, the senior academic administrator will provide a written decision to the parties. The senior academic administrator will issue a decision within 15 calendar days of the filing of the appeal, unless there are compelling reasons for delay. The decision of the senior academic administrator is final and cannot be appealed further within the University.

Political Activity Policy

Policy Purpose

The purpose of this policy is to specify permitted use and restrictions of University facilities and resources for politically-related activity on campus by students and employees.

To Whom the Policy Applies

This policy applies to Bahria University Health Sciences faculty, staff, and students.

Policy Statement

As a non-profit, private institution of higher education, The University is prohibited from participating in political campaigns for Candidates, political parties and political organizations or ballot initiatives, and is restricted in conducting Lobbying activities. This prohibition extends to faculty, staff and students.

Students, Faculty, and staff may take part in partisan political activities freely on their own time, but they must not do so in the course of their regular classes, work and responsibilities for the University. Faculty, and staff who hold public office are prohibited from using University funds, logos/marks, services, supplies, vehicles, inter-office mail, or a bahria.edu email account when conducting political activities.

Responsibilities

All individuals to whom this policy applies are responsible for becoming familiar with and following this policy. University supervisors are responsible for promoting the understanding of this policy and for taking appropriate steps to help ensure compliance with it.

Consequences for Violating this Policy

Failure to comply with this and related policies is subject to disciplinary action, up to and including suspension without pay, or termination of employment or association with the University, in accordance with applicable (e.g., staff, faculty, student) disciplinary procedures.

STUDENT AFFAIRS COMMITTEE

The Student Affairs Committee studies the needs and problems of the students and conveys its recommendations on the subject to the Director. It conveys to the students (through their representatives) University policies on various administrative matters and also obtains and conveys the views of the students to the Director with its recommendations.

THE EQUIVALENCE COMMITTEE

The Equivalence Committee examines the cases of admission of candidate to the university from other Universities, Colleges, Institutes, etc. whose examinations are recognized as equivalent to the corresponding examinations of the university recognized by the Higher Education Commission and makes recommendations to Bahria University through the Campus Director for final approval. The Committee also scrutinizes all applications for transfer of credits and determines the equivalent status.

SECTION 2: INTRODUCTION To STUDY GUIDE

When a dental student enters dental college, a new era of academic life begins. This study guide has been designed to help students sail smoothly during their transitional phase. The very first week is spent in familiarizing the students with the environment of Bahria University Dental College.

1- Objectives of Study Guide

The purpose of this study guide is to:

- Inform students what they are expected to learn during their study period.
- Guide students on how the student-learning program has been organized, and how it would be implemented.
- Help students organize and manage their studies throughout the year.
- Inform students about the code of conduct at Bahria University Dental College
- Inform on organization and management of the team at BUDC. This will help you contact the right individual in case you have any difficulty.
- Describe the course content which will be taught and what the students are expected to learn.
- Impart the information on learning methods that you will experience during the course. The methods include tutorials, lectures, practical skills, experiments, dissection, field visits and research. These learning methods should help you to achieve the course objectives.
- Guides you about the available learning resources for the terms. These include books, computer-assisted learning programs, videos, and other aids
- Makes you aware about the contribution of internal evaluation and term examinations, on student's overall performance.
- Passes the information on the methods of assessment.
- Inform regarding the examination policy, rules and regulations.

2- Curriculum:

You will be taught an integrated/hybrid modular curriculum followed by annual professional examination in every year of BDS program.

Term Schedule:

Academic calendar is given at the end of the document.

Course Objectives:

The learning objectives in terms of what students are expected to achieve on completion of each lecture (Module), including learning methods and assessment strategies, have been mentioned in this document

3- Mode of Information Transfer

The following teaching / learning methods / strategies are used to promote better understanding:

- Lectures
- Guest Lectures
- Case based learning (CBL)
- Problem Based Learning
- Team Based Learning
- Flipped Class Room
- Tutorials
- Assignments
- Practical's/Clinical Teaching
- Mini-CEX/DOPS
- Research projects
- Library sessions

4- Self-Directed Learning:

Self-directed learning is a learning model adopted by students from a more teacher-directed learning to a more student-centered pedagogy. Self-directed learning is a process in which individuals take the initiative, with or without the help of others, in identifying their learning needs, formulating learning goals, identifying human and material resources for learning, choosing, and implementing appropriate learning strategies, and evaluating their learning experiences.

P.S: Please refer to Students Handbook 4-November 2021 for all applicable policies and is available on BU website

SECTION 3: PROGRAM STRUCTURE AND OVERVIEW

THE MODULAR SYSTEM

Organization of modular curriculum and teaching

- a. Each Academic Year is divided into 3 Modules of 3 months' duration each

•	First Year	-	Modules	-	1,2,3
•	Second Year	-	Modules	-	4,5,6
•	Third Year	-	Modules	-	7,8,9
•	Final Year	-	Modules	-	10,11,12

- b. Learning objectives for each module are written down in the study guide issued at the beginning of each academic year to each student. Curriculum for each module can be provided on request.
- c. A schedule is issued for each module re-enforced by a weekly schedule issued 2 weeks in advance of the teaching dates.
- d. This includes lecture, CBL, Practical's, Demonstrations, Ward Clinics, and Classes in Skills Lab, Self-Study, and Library period.
- e. The assessment schedules i.e., end of modules tests as well as period of preparation leave and timing of OSCE/ OSPE is given in the above schedule.
- f. The assessment result is displayed on departmental notice boards and recorded in the Examinations Department BUDC.

LEARNING STRATEGIES

Interactive Lectures

The traditional lecture system is used to introduce a subject and discuss the broad concepts in that specific field of study. Interactive lectures to smaller groups remain an effective and essential way of teaching. More recent methods of learning and teaching, such as case-based learning and small group-based problem-solving sessions are also employed.

Small Group Based Learning

Small group and tutorial sessions are regularly held to enable students to discuss the details of a lecture topic. Students are expected to prepare presentations on applied topics and discuss their implications with their fellow students. The lecturer acts as a facilitator. By participating in these group discussions, students can interact and learn from one another such as PBL, CBL and TBL etc.

Hands on Training

Being in final year students will deal daily with patients in OPD, to gain, enhance and polish their clinical knowledge and skills. Lectures and tutorials will regularly be held for providing clinical orientation on the subjects.

Mini-CEX (Mini Clinical Evaluation Exercise) and DOPS (Direct Observational Procedural Skills):

These are work place based assessment tools (WPBAs) used in clinical settings by supervisors. In Mini-CEX, the trainee is evaluated regarding history taking, physical examination skills, communication skills, clinical judgment, professionalism, organization/efficiency, and overall clinical care. In DOPS, the **focus lies on procedural skills** followed by feedback.

Community-based Learning

BUDC is committed to provide the environment and training that would enable professionals to successfully contribute to the improvement of the health sector, particularly in less privileged communities under the Community-Oriented Medical Education Program.

The university involves its students in research-developing work in these designated communities. Students are encouraged to participate in the preventive and curative care and management of patients and their families in Primary Health Care field settings.

Problem Based Learning (PBL)

PBL promotes active learning and critical thinking in small collaborative groups. In PBL, problem introduces a real patient or as hypothetical case. Students identify the key elements of the case, develop and test hypothesis based on pathophysiological mechanisms, decide on diagnosis, and discuss principles of management. Content of PBL reflects horizontal integration of curriculum. The development of PBL cases is a challenging process, as each case must reflect a defined set of learning objectives, have face validity, suit the student's stage of maturity, and fit with restraints of time and resources. A typical PBL tutorial consists of usually 8 to 10 students and a tutor, who facilitates the session with minimum interference. The PBL tutorials comprised of three sessions of two hours and the time is scheduled in timetable approximately two weeks before.

The PBL comprised of seven-jumps (Maastricht) such as clarifying terms, defining problem(s), brainstorming, structuring and hypothesis, learning objectives, independent study, and synthesis/presentation.

Case-Based Learning (CBL)

Case-based learning (CBL) is an adaptation of the PBL process and more generally used in clinical context to develop clinical reasoning and judgment. Written case studies, prepared by tutors and students are required to work together to identify clinical problems, prepare differential diagnoses and suggest potential investigations and treatment. Students set their own learning objectives and identify the learning resources required to confirm or refute their diagnostic possibilities. The CBL format is flexible. CBLs are overseen by facilitators who guide the students in case they are not on the right track as unlike PBLs, the CBL session must be completed in one day.

Team Based Learning

Team Based Learning provides students with resource effective, authentic experience of working in teams to solve real life clinical problems.

COMPETENCIES AND LEARNING OUTCOMES OF DENTAL UNDER-GRADUATES

COMPETENCIES

1. Skillful
2. Knowledgeable
3. Community health promoter
4. Critical thinker
5. Professional
6. Researcher
7. Leader

i. Skillful:

Under Graduates must be competent to:

- 1.1 Apply appropriate interpersonal and communication skills.
- 1.2 Apply psycho-social and behavioral principles in patient-centered health care.
- 1.3 Communicate effectively with individuals from diverse populations.
- 1.4 Apply basic dental morphology and application of dental materials on patients.

ii. Knowledgeable

A. Assessment, Diagnosis, and Treatment Planning

Under Graduates must be competent to:

- 2.1 Manage the oral health care of infant, child, adolescent, and adult, as well as unique needs of women, geriatric, and special needs patients.
- 2.2 Identify, prevent, and manage trauma, oral diseases, and other disorders.
- 2.3 Obtain, and interpret patient / medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage patients.
- 2.4 Select, obtain, and interpret diagnostic images for the individual patient.
- 2.5 Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care.
- 2.6 Formulate a comprehensive diagnosis, treatment, and/or referral plan.

B. Establishment and Maintenance of Oral Health

Under Graduates must be competent to:

- 2.7 Follow universal infection control guidelines for all clinical procedures.
- 2.8 Manage pain and anxiety in the dental patient.
- 2.9 Diagnose temporo-mandibular joint disorders.
- 2.10 Manage periodontal diseases.
- 2.11 Develop and implement strategies for the clinical assessment and management of caries
- 2.12 Manage restorative procedures that preserve tooth structure, replace missing or defective tooth structure, maintain function, are esthetic, and promote soft and hard tissue health.
- 2.13 Manage developmental or acquired occlusal abnormalities.
- 2.14 Manage the replacement of teeth for the partially or completely edentulous patient.
- 2.15 Manage pulpal and peri-radicular diseases.
- 2.16 Manage oral surgical treatment needs.
- 2.17 Manage medical and dental emergencies.
- 2.18 Manage patient abuse and/or neglect.
- 2.19 Manage substance abuse.
- 2.20 Evaluate outcomes of comprehensive dental care.
- 2.21 Manage oral mucosal and osseous diseases.

iii. Community Health Promoter

Under Graduates must be able to:

- 3.1 Demonstrate skill in providing prevention, intervention, and educational strategies.
- 3.2 Demonstrate competency in promoting health and managing various oro-facial diseases while working in a team.
- 3.3 Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.

2. Critical Thinker

Under Graduates must be competent to:

- 4.1 Evaluate and integrate emerging trends in health care as appropriate.
- 4.2 Apply critical thinking and problem-solving skills while dealing with patients.
- 4.3 Evaluate and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.

3. Professional

Under Graduates must be competent to:

- 5.1 Apply ethical and legal standards in the provision of dental care.
- 5.2 Practice within one's scope of competence and consult with or refer to professional colleagues when indicated.

4. Researcher

Under Graduates must be competent to:

- 6.1 Apply the current research for innovations in treatment, keeping at par with international standards
- 6.2 Conduct independent research based on the community requirements

5. Leader

Under Graduates must be able to:

- 7.1 Manage self, taking responsibility and utilizing the time to the best of his/her ability.
- 7.2 Demonstrate leadership skills effectively while working in a group or in a team.
- 7.3 Recognize and comply with the working system of any Institute.

COUNSELING AND MENTORING

MENTORS

1. Dr. Umeed Javaid
2. Dr. Saad Maroof
3. Dr. M Rameez
4. Dr. M Maaz
5. Dr.

PROGRAM INCHARGE

PROF DR AHMED OMER

Who to contact?

The class is divided into equal groups of students and each group has a designated teacher, who works as their mentor. The students will meet their mentor once a month i.e Thursday of every third week, in their office to discuss the academic, social, and other problems with them and seek their advice and guidance.

The mentor will report to the head mentor monthly, in case any problem is not resolved even at that level, then the head mentor can refer the case to Vice Principal and then Principal accordingly.

SECTION 4: DEPARTMENTS & ACADEMIC SCHEDULES

DEPARTMENT OF DENTAL EDUCATION

High-quality medical /dental education is a vital prerequisite for high-quality patient care. Dental education's aim is to supply society with a knowledgeable, skilled, and up-to-date cadre of professionals who put patient care above self-interest, along with developing their expertise over the course of a lifelong career.

The department of Dental Education has expanded beyond the classroom all around the world and quality patient care is learned by the bedside teaching and with the practical introduction of clinical cases in preclinical years. The Dental Education department ensures that the educational content synchronizes with the learning strategies, the assessment tools and provides effective feedback to enhance the learning process. The department of Dental Education at Bahria University Dental College is interested in raising the standards of the teaching by continuously developing a pool of trained faculty members. For this purpose, interactive sessions and hands-on workshops are constantly designed, focusing on current and effective modes of evidence-based teaching and assessment tools. It fosters flexible and a learner-centered approach during teaching. Self-reflection and critique of teaching techniques are also vital in propelling an institute towards excellence. Our Dental Education department aims to achieve that and more.

Faculty:

HOD	Dr. Akbar Abbas	Assistant Professor
Members:	Dr. Farzana	Senior Lecturer
	Dr. Kulsoom Zahir	Lecturer

INTRODUCTION TO DEPARTMENTS

Department of Community & Preventive Dentistry

Department of Science of Dental Materials

Department of Pre-clinics (Prosthodontics and Operative Dentistry)

Department of Pharmacology

Department of Pathology

DEPARTMENT OF COMMUNITY & PREVENTIVE DENTISTRY

Community & Preventive Dentistry is the dynamic field of dentistry which provides basic & advanced health knowledge to an individual and group of people, prevention of oral/dental diseases & awareness of oral hygiene in population. Community & Preventive Dentistry is a basic science subject taught in the second professional year BDS. The main purpose of the subject is to achieve good oral hygiene & health awareness in public through organized community efforts.

This course aims to stimulate interest and encourage a questioning approach to community dental health issues and their relationship to clinical practice. The curriculum provides the student with broad knowledge and practical experience in the philosophy and basis of the dental public health, primary health care approach, and an introduction to epidemiology of oral diseases as it relates to dental research, behavioral sciences, biostatistics and oral health services.

The subject is essential to the practice of dentistry as it promotes understanding of sociology of oral health, oral health promotion and provision of oral health care and puts it in the context within society and seeks to answer questions at a population level.

HOD

Dr. Maria Moin

Assistant Professor

Facilitator

Prof Dr. Kulsoom Fatima Rizvi

Professor

Dr. Rabbia Imtiaz Ahmad

Lecturer

DEPARTMENT OF SCIENCE OF DENTAL MATERIAL

The Science of Dental Materials is an applied basic science discipline dealing with the physical, chemical and biological properties of the materials used in clinical dentistry and their interaction with the oral tissues. An understanding of these properties as well as their handling is critical to the selection and various applications of dental materials in the field of dentistry.

The Department of Dental Material includes a team of experienced and dedicated teachers. It also has a well-equipped laboratory where students can develop basic practical skills and get acquainted with commonly used dental materials.

To meet the challenges of present day educational standards and to facilitate scientific knowledge at a professional level, the department acquires various teaching schemes such as interactive lectures, hands-on preclinical procedures, video demonstration, tutorials, practical, guest speaker sessions & routine assessment tests.

HOD

Prof. Dr. Syed Ahmed Omer

Professor

Facilitators

Dr. Muhammad Arqam Najmi

Assistant Professor

Dr. Mansoor Akhter Dar

Assistant Professor

Dr. Israa Ahmed

Senior Lecturer

DEPARTMENT OF PROSTHDONTICS

Preclinical Prosthodontics encompasses basic training of prosthetic dentistry using clinical simulation models. It also deals with laboratory procedures pertaining to different dental prosthesis.

It is imperative for the student to have knowledge regarding instruments, handling of the patient, laboratory procedures and some knowledge regarding clinical techniques before working in the actual clinical environment. It will prepare the students to work on real patients confidently and with basic knowledge in the coming academic years of B.D.S. By performing and observing laboratory techniques they will be able to apply and make appropriate chair side adjustments on real patients.

Students will be given academic and clinical training experience of prosthetic laboratory procedures and clinical principles and techniques on simulated dental models in phantom heads laboratory.

HOD	Prof. Dr. Saman Hakeem	Professor
Facilitator	Dr. Anum Baqar	Senior Registrar
Co-facilitator:	Dr Farnaz Ilyas	Associate Professor
	Dr Asim Monpuri	Senior Registrar
	Dr Farah Javaid	Senior Registrar
	Dr Rameez	Registrar

DEPARTMENT OF OPERATIVE DENTISTRY

It is the branch of dentistry concerned with the development of disease and damage to the dental hard tissues. The etiology, pathogenesis and diagnostics of injuries are studied, as are disease activity, prognoses, prevention work and reparative treatment.

The objective of this course is to give foundation knowledge of operative instrumentation, dental terminology, principles of cavity preparations, and basics of tooth restorations. The skills with a hand piece are mainly accomplished through the use of patients' simulation approaches. The restorations for teeth are taught in a dental operative phantom head laboratory. The development and practice of these skills using a hand piece (dental drill) begins at orientation and continues throughout the academic year.

Faculty:

HOD	Prof. Dr. Shama Asghar	Professor
Facilitator	Dr. Faisal Bhangar	Professor
Facilitator	Dr. Ayesha Zafar	Assistant Professor
Facilitator	Dr. Meisha	Assistant Professor
Facilitator	Dr. Maliha	Senior Registrar (Pedo)
Facilitator	Dr. Syed Adeel Ahmed	Lecturer
Facilitator	Dr. Umeed Jawaaid	Lecturer
Facilitator	Dr. Imtiaz ul Haq	Lecturer
Facilitator	Dr. Saad Lakhani	Lecturer (Pedo)

DEPARTMENT OF PHARMACOLOGY

Pharmacology is the branch of Basic Health Sciences that deals with the drugs (medicines) and their use in a rational manner. It is the study of the effects of chemical substances on the functions of living system. As a science it was born in the mid-19th century based on the principles of experimentation. The knowledge of pharmacology is essential as modern medicine relies heavily on drugs as the main tool of therapeutics to prevent, diagnose and treat diseases. It involves the understanding of why to give, when to give, how to give a drug and how the given drug is going to solve the problem at molecular level.

Subject information will be transferred to the students through a combination of large group and small group sessions of lecture -based learning, case- based learning and experimental learning in the laboratory with an aim to keep our students in pace with the outside world. To enhance students' participation as active learners and to develop their skills, continuous medical education (CME), updates on pharmacological news, small projects, pharmacology exhibition, quiz competition and presentations are organized every year. Students are awarded with scores and certificates in each session for participating in such activities.

Head of Department	Prof. Dr. Nasim Karim	Professor
Facilitators	Prof. Dr. Khalid Mustafa	Professor
	Prof. Dr. Ijaz Hussain Zaidi	Professor
	Prof. Dr. Talea Hoor	Professor
	Dr. Ayesha Khan	Assistant Professor
	Dr. Mehr Fatima	Assistant Professor
	Dr. M. Kamran Yusuf	Assistant Professor
	Dr. Mehwish Mansoor	Assistant Professor
	Dr. Ghazal Raza	Senior Lecturer
	Dr.Afsheen Nazar	Senior Lecturer
	Dr.Arasala Zahid	Lecturer
	Dr. Shiza Khan	Pharmacist

DEPARTMENT OF PATHOLOGY

A dynamic and rapidly evolving field, **Pathology** is the study of disease, or more generally, the study of the biological response to adverse conditions. As an intellectual discipline, pathology bridges the basic and clinical sciences. Basic research into the causes and mechanisms of disease (experimental pathology) goes hand in glove with identifying the morphologic and biochemical manifestations of disease in human patients (anatomic and clinical pathology, respectively). All of these aspects of pathology have important diagnostic and therapeutic implications for patient care. Teaching of this body of knowledge at various pre- and post-doctoral medical and scientific levels of interest and understanding provides a unifying component to laboratory and clinic.

The Department of Pathology at Bahria University is a large multi-disciplinary department having two wings: Basic, located in the premises of Bahria University Medical & Dental College, Karachi and Clinical, functioning at PNS Shifa, Karachi. It is one of the seven basic science departments at BUM & DC. Our diverse faculty teaches in different phases of MBBS and BDS undergraduate programs as well as engaged in post-graduate fellowship training in various specialties of pathology.

Our mission is to provide a research-based academic environment that allows our faculty, students, fellows and staff not only to succeed, but to excel. Our goal is to advance our fundamental understanding of the pathology and the patho-physiologic mechanisms of disease, and to bring this knowledge to others through teaching and publication.

Head of Department	Dr. Yasmeen Taj (Micro)
Professor	Dr. Summayya Shawana (Histo-path)
Professor	Dr. Naveed Faraz (Microbiology)

Associate Professors:	Dr. Hina Wasti
Associate Professors:	Dr. Shaista Khurram
Associate Professors:	Dr. Santosh Kumar
Associate Professors:	Dr. Daud Ahmed (Shifa)
Assistant Professor:	Dr. Hadia khursheed
Assistant Professor:	Dr. Akhter Bajwa (Shifa)
Assistant Professor:	Dr. Saeed Akhter (Shifa)
Assistant Professor:	Dr. Ghulam Murtaza (Shifa)

Lecturer:

Dr. Khawar Abbas	Dr. Usman Tayab
Dr. Maria Ali	Dr. Hira faisal
Dr. Kiran Saleem	Dr. Umer Shujaat (Shifa)
Dr. Erum Khaliq	Dr. Kiran Jabbar
Dr. zara Akram	

MODULE IV

(Community & Preventive Dentistry, Dental Materials, Prosthodontics, Pharmacology, Pathology)

At the end of the module, student should be able to:

	COMMUNITY & PREVENTIVE DENTISTRY	Teaching Method	Online	Assessment Mode
1.	Define dental public health and its significance	IL, SGD	✓	SAQs,Viva
2.	Compare relevance of public health to clinical practice	IL, SGD	✓	SAQs
3.	Discuss criteria for public health problem	IL, SGD, PBL	✓	BCQs, SAQs, PBL, Viva,
4.	Justify dental caries, periodontal disease and oral cancer as a public health problem	IL, SGD, PBL, FV	✓	BCQs, SAQs, PBL, Viva
5.	Explain features of biomedical model of health	IL, SGD	✓	SAQS
6.	Discuss Alma Ata Declaration along with its features	IL, SGD, FV	✓	BCQs, SAQs, OSPE,Viva,
7.	Explain the salient features of Ottawa Charter	IL, SGD, PBL, FV	✓	BCQs, SAQs, OSPE,Viva,PBL
8.	Describe core themes of dental public health	SGD	✓	SAQs,Viva,
9.	Explain the implications of dental public health	SGD	✓	SAQs, , Viva
10.	Describe the limitations of life style approach	SGD	✓	BCQs, SAQs, Viva,
11.	Describe determinants of oral health	IL, SGD, PBL,	✓	BCQs, SAQs, OSPE, PBL, Viva,
12.	Discuss the basic package of oral care (BPOC) with its examples	IL, SGD, PBL, FV, VD,labskills	✓	BCQs, SAQs, OSPE, PBL,Viva,
13.	Define health, disease, disability, illness & ill health	IL,	✓	SAQs, Viva,
14.	Compare health with disease & illness	SGD	✓	SAQs
15.	Discuss dimensions of health	IL, SGD	✓	BCQs, SAQs, Viva,
16.	Understand different concepts and taxonomy of need	IL, SGD	✓	BCQs,SAQs,Viva
17.	Define inequalities in oral health	IL	✓	BCQs, Viva
18.	Illustrate conceptual model of oral health	SGD	✓	SAQs, OSPE
19.	Define risk	SGD	✓	BCQs, Viva
20.	Describe principles of strategy design	IL, SGD	✓	SAQs, Viva,

21.	Explain different strategy approaches with examples	IL, SGD,PBL,	✓	BCQs,SAQs,Viva
22.	Define and classify epidemiological studies	IL, SGD	✓	BCQs,SAQs,Viva
23.	Describe the scope of epidemiology	SGD	✓	SAQs, Viva,
24.	Define epidemiological triad and discuss its factors	IL, SGD	✓	BCQs, SAQs, Viva,
25.	Compare different types of epidemiological studies in detail	IL,	✓	BCQs, SAQs, OSPE, Viva,
26.	Discuss descriptive studies	IL,	✓	BCQs, SAQs, VIVA,
27.	Discuss analytical studies	IL,	✓	BCQs, SAQs, VIVA,
28.	Discuss and calculate different measures applied in epidemiology surveys	SGD, Practical	✓	BCQs, SAQs, OSPE, Viva,
29.	Define screening and its aims	IL	✓	BCQs,SAQs,Viva
30.	Describe the principles and its type of test	IL	✓	BCQs, SAQs, Viva,
31.	Define causation and association	SGD	✓	SAQs, Viva,
32.	Explain Bradford Hill's Criteria	IL,	✓	BCQs, SAQs, Viva,
33.	Describe etiology , natural history & epidemiology of dental caries and early childhood caries	IL, SGD, PBL, Practical, VD, OPD, FV	✓	BCQs, SAQs, OSPE, PBL,Viva,
34.	Recognize etiology, natural history & epidemiology of periodontal disease	IL, SGD, PBL, Practical, VD, OPD, FV	✓	BCQs, SAQs, OSPE, PBL,Viva,
35.	Discuss etiology, natural history & epidemiology of oral cancer	IL, SGD, PBL, Practical, VD, OPD, FV	✓	BCQs, SAQs, OSPE, PBL,Viva,
36.	Explain etiology, natural history & epidemiology of dental fluorosis	IL, SGD, PBL, Practical, VD, OPD, FV	✓	BCQs, SAQs, OSPE, PBL,Viva,
37.	Discuss different types of Traumatic Dental Injuries	IL,SGD	✓	BCQs, SAQs
38.	Discuss different types of non-carious lesions	IL,SGD	✓	BCQs, SAQs
39.	Define index and its objective	IL,	✓	SAQs, Viva
40.	State the properties of an ideal index	IL,	✓	SAQs, Viva
41.	Describe the purpose and uses of an index	IL,	✓	SAQs, Viva
42.	Enumerate and discuss different dental indices for oral diseases (PI, GI, OHI, CPITN)	SGD,	✓	BCQs, SAQs, Viva,
43.	Discuss limitations of existing indices	IL,	✓	SAQs, Viva,

	Behavioral Science			
44.	Define sociology	IL,	✓	BCQs, SAQs, Viva,
45.	Discuss structural & functional aspects of society	IL,	✓	BCQs, SAQs, Viva,
46.	Explain role of social sciences	IL,	✓	BCQs, SAQs, Viva,
47.	Identify determinants of health behavior	IL,	✓	BCQs, SAQs, Viva,
48.	Identify different tooth notation systems	SGD, Practical	✓	OSPE,
49.	Predict age on clinical pictures and study models	SGD, Practical	×	OSPE
50.	Demonstrate ergonomics in clinical practice	SGD, Practical	✓	OSPE,
51.	Perform exercises on patients in the out patients department	SGD, OPD	×	OSPE
52.	Execute examination of institutionalized population like school children	FV,	✓	OSPE
53.	Calculate different measures of oral diseases used in epidemiology	Practical	✓	OSPE
54.	Calculate DMFT measurement	SGD, Practical, FV	✓	OSPE
55.	Describe dental caries indices such as ICDAS & PUFA	SGD	✓	Viva
56.	Calculate CPITN and other periodontal measurements (PI, GI, OHI, CPITN)	SGD, Practical, FV	✓	OSPE
57.	Identify the different types of dental fluorosis	SGD, Practical, FV	✓	OSPE
	Research Methodology			
58.	Identify a research topic	SGD, Practical	✓	Assign
59.	Formulate research hypothesis using PICO	SGD, Practical	✓	Assign
60.	Review the existing literature on selected topic	SGD, Practical	✓	Assign
61.	Draft the research synopsis	SGD, Practical	✓	Assign, CP
	SCIENCE OF DENTAL MATERIALS			
62.	Understand the structure of tooth and supporting tissues	IL	✓	BCQs, SAQs, Viva
63.	Enlist tooth numbering systems	IL	✓	BCQs, SAQs.
64.	Enlist different groups of dental materials and their nomenclature	IL	✓	BCQs

65.	Define 'the science of dental materials'	IL	✓	Viva
66.	Identify the role of ADA specification concerning dental materials	IL	✓	BCQs, Assign
67.	Explain the selection criteria of dental materials	IL	✓	BCQs, Viva, Assign
68.	Identify different dental appliances, prosthesis and restorations	PBL, SD	✓	OSPE, PBL, Viva.
69.	Enlist the properties of dental materials during storage, mixing, manipulation and setting	IL	✓	BCQs, SAQs, Assign, Viva
70.	Differentiate between mixing time, working time and setting time	IL	✓	BCQs, SAQs, OSPE
71.	Enlist the mechanical properties of dental materials	PBL	✓	BCQs, SAQs, OSPE, Assign, PBL, Viva.
72.	Define the following terms: stress, strain, yield stress, proportional limit, modulus of elasticity, resilience, toughness, ductility, malleability, impact strength, fatigue, hardness, creep , flow	IL, SD	✓	BCQs, SAQs, OSPE, PBL, Viva, Assign
73.	Relate stress and strain through graph	IL	✓	SAQs, Assign
74.	Differentiate between abrasive wear ,erosion and solubility	IL	✓	BCQs, SAQs, Viva.
75.	Differentiate between elasticity and viscoelasticity	IL	✓	BCQs, SAQs, Viva.
76.	Differentiate between creep and flow	IL	✓	BCQs, SAQs, Viva
77.	Define vicker's hardness number	IL	✓	BCQs, SAQs
78.	Define rheology	IL	✓	BCQs, SAQs
79.	Discuss the relationship of shear rate with flow index	IL	✓	SAQs
80.	Enlist the thermal properties characterizing dental materials	IL	✓	BCQs, SAQs, Viva, Assign.
81.	Define adhesion , adherend and adhesive	IL	✓	BCQs, SAQs, Viva
82.	Explain bonding of restorative materials through macromechanical retention, micromechanical retention and chemical adhesion	IL	✓	BCQs, SAQs, OSPE, Viva, Assign,
83.	Correlate contact angle, wetting and surface tension	IL	✓	BCQs, SAQs, OSPE
84.	Enlist factors which affect dimensional stability of dental materials	IL	✓	SAQs, Assign, CQ
85.	Define hue, chroma and value	IL	✓	BCQs, SAQs, OSPE, Assign, CQ
86.	Discuss corrosion and tarnish	IL	✓	BCQs, SAQs, Viva,

87.	Discuss biological properties and health hazards of various materials	IL	✓	SAQs, CQ
88.	Discuss chemical properties related to the chemical stability of materials	IL	✓	BCQs, SAQs, CQ
89.	Enlist the types of dental gypsum products as identified by the ISO standard	IL	✓	BCQs, SAQs, OSPE, Viva, Ppt, CQ. competition
90.	Discuss the ideal requirements for dental cast materials	IL	✓	BCQs, SAQs, Viva,
91.	Differentiate between model and die	IL, SD	✓	BCQs, SAQs, OSPE,
92.	Discuss the composition and formation of dental plaster and stone	IL	✓	BCQs, SAQs, OSPE, Assign, Viva, PW
93.	Differentiate between the properties of dental plaster and stone	IL, SD	✓	BCQs, SAQs, OSPE, , Viva, PW
94.	Enlist the types of dental gypsum products as identified by the ISO standard	IL	✓	BCQs, SAQs, OSPE, Assign, Viva
95.	Discuss and demonstrate the manipulation of dental plaster and stone	IL, SD, VD	✓	BCQs, Assign, Viva, PW
96.	Explain the setting reaction of dental gypsum products	IL	✓	BCQs, SAQs, Assign, Viva, PW
97.	Enumerate the factors which affect setting time of dental plaster and stone	IL	✓	BCQs, SAQs, Viva
98.	Discuss the advantages and disadvantages of gypsum to be used in making die and models	IL	✓	BCQs, SAQs, Viva
99.	Enlist alternate materials for making dental casts	IL	✓	SAQs, OSPE, Viva
100.	Discuss faults in casts	IL	✓	BCQs, SAQs, Viva, Assign
101.	Highlight methods for disinfection of casts	IL	✓	BCQs, SAQs ,OSPE
102.	handling of dental plaster and stone through video demonstration	VD	✓	PW
103.	Demonstrate manipulation of dental plaster and stone in laboratory	SD		PW
104.	Fabricate a ¾ plaster slab in laboratory	SD		PW
105.	Effect of temperature of water on the setting reaction of gypsum	IL, SD	✓	SAQs, Viva, PW
106.	Classify and identify the different types of dental waxes and discuss their clinical applications.	IL	✓	BCQs, SAQs ,OSPE
107.	Discuss the composition of dental waxes	IL	✓	BCQs, SAQs, Viva
108.	Discuss the general properties of dental waxes	IL	✓	BCQs, SAQs, Viva
109.	Discuss the specific types, properties and uses of denture modeling wax	IL	✓	BCQs, SAQs ,OSPE, Viva

110.	Discuss the specific types, properties and uses of inlay wax	IL,VD	✓	BCQs, SAQs ,OSPE,
111.	Demonstrate manipulation of modeling wax in laboratory	SD		PW
112.	Outline the steps in making a cast restoration	PBL	✓	BCQs, SAQs ,OSPE, PBL
113.	Discuss the procedure of investment for casting alloys	IL,VD	✓	BCQs, SAQs ,OSPE, Assign,
114.	Discuss the requirements of investments for alloy casting procedures	IL	✓	SAQs , Assign, Viva
115.	Enlist the three main groups of investment material	IL	✓	SAQs,OSPE
116.	Discuss their composition, types, setting reaction, properties and uses	IL	✓	BCQs, SAQs,Viva
117.	Discuss in detail the compensating expansion taking place in each of the investment materials and relate it to their clinical use	IL	✓	BCQs, SAQs,OSPE
118.	Compare the properties of investment materials	IL	✓	BCQs, SAQs
119.	State the types of polymerization reactions	IL	✓	BCQs, SAQs,OSPE, Viva
120.	Discuss the steps taking place in each type of polymerization reaction	IL	✓	SAQs,OSPE, Viva,
121.	Correlate the molecular weight and degree of chain branching with properties of the resulting polymer	IL	✓	BCQs, SAQs, Viva, Assign
122.	Give examples of dental materials for each type of polymerisation	IL	✓	SAQs,OSPE, Viva, Assign
123.	Discuss the physical changes occurring during polymerisation including the changes in phase ,temperature and dimension	IL	✓	BCQs, SAQs,OSPE, Viva
124.	State and explain the factors which control the structure and properties of polymers	IL	✓	BCQs, SAQs, Viva,
125.	Define glass transition temperature	IL	✓	BCQs, Viva,
126.	Discuss the methods of fabricating polymers	IL	✓	SAQs, Assign
127.	State the materials available for construction of denture base	IL	✓	SAQs,OSPE, Viva
128.	Discuss the ideal requirements for denture base polymers	IL	✓	SAQs , Viva, Assign
129.	Classify acrylic denture base materials according to the ISO standard	IL	✓	SAQs, Viva
130.	Discuss the composition of acrylic denture base materials	IL	✓	SAQs,OSPE,

131.	Discuss the manipulation/mixing of heat cure acrylic resin	IL, SD	✓	PW
132.	Identify the transitional stages which occur after mixing heat cured acrylic resin	IL, SD	✓	SAQs, OSPE, PW,
133.	Discuss dough moulding technique for making denture base	IL	✓	BCQs, SAQs, Viva
134.	Differentiate between doughing time and working time	IL	✓	SAQs, CQ
135.	Discuss the curing cycles for heat cured acrylic resin	IL, SD	✓	BCQs, SAQs, OSPE, Viva, PW
136.	State the possible reasons for warpage and its solution	IL	✓	SAQs, Viva
137.	Give reasons for crazing in acrylic resin	IL	✓	BCQs, SAQs, OSPE, Viva
138.	Discuss the different types of porosities which may occur in set acrylic resin and suggest ways to avoid their formation	IL	✓	BCQs, SAQs, OSPE, Viva
139.	Differentiate between injection moulding and dough moulding/compression moulding technique	IL	✓	SAQs, CQ, Assign
140.	Discuss the uses of different types of acrylic resin	IL, SD	✓	SAQs, Viva
141.	Enlist and explain the properties of acrylic resin	IL	✓	SAQs, OSPE, Viva, Assign
142.	Discuss the advantages of modified acrylic resins	IL	✓	SAQs, CQ, Assign
143.	State methods for disinfection of acrylic prosthesis	IL	✓	SAQs, Viva
144.	Demonstrate the manipulation of heat cured acrylic resin	IL, VD		PW
145.	Fabricate heat-cured acrylic partial dentures	SD		PW
146.	Classify denture lining materials	IL	✓	SAQs
147.	Discuss the types and composition of hard reline materials	IL	✓	BCQs, SAQs, OSPE,
148.	Discuss the advantages and disadvantages of hard reline materials	IL	✓	SAQs, Viva, Assign
149.	State the composition and requirements of tissue conditioners	IL	✓	SAQs, OSPE
150.	Explain the manipulation of tissue conditioners	IL	✓	SAQs, OSPE, Viva
151.	Correlate the properties of tissue conditioners with their use	PBL	✓	PBL, SAQs

152.	State the criteria for using temporary soft lining materials	IL	✓	SAQs, Assign
153.	Discuss the requirements for long term soft lining materials	IL	✓	SAQs,Assign
154.	Enlist and compare the materials available as permanent soft liners	IL	✓	SAQs,OSPE
155.	Discuss the harmful use of self-administered relining materials	IL	✓	SAQs
156.	Discuss the requirements of artificial teeth	IL	✓	CQ, Viva
157.	Enlist the materials available for making artificial teeth	IL	✓	SAQs, Viva, Assign
158.	Discuss the properties of these materials	IL	✓	SAQs,OSPE, CQ, Viva
159.	Discuss the advantages and disadvantages of acrylic and porcelain teeth	IL	✓	BCQs, SAQs,OSPE, Quiz, Ppt, Viva
	PROFESSIONALISM/ PRINCIPLES OF ETHICS			
160.	Explain the selection criteria of dental materials	IL	✓	Group Presentation
	PATIENT SAFETY			
161.	Discuss biological properties and health hazards of various materials	IL	✓	SAQs, CQ
162.	Discuss chemical properties related to the chemical stability of materials	IL	✓	BCQs, SAQs, CQ
	COMMUNICATION SKILLS			
163.	Identify different dental appliances, prosthesis and restorations	PBL, SD		OSPE, PBL, Viva.
164.	Communicate with peers & their facilitator during poster and presentation competitions.	Group Activity		Ppt
	PHARMACOLOGY			
165.	Discuss the scope of pharmacology, drug discovery, pre-clinical & clinical trials as well as rational use of drugs	IL	✓	BCQs
166.	Explain ADME processes of pharmacokinetics, including routes of drug administration	IL, SGD	✓	BCQs, SAQs, Viva
167.	Discuss pharmacodynamics, plot the given values on graph paper and calculate therapeutic index and therapeutic window from it	IL, SGD	✓	BCQs, SAQs, Viva
168.	Describe various types of adverse drug reactions and drug – drug interactions	IL, SGD	✓	BCQs, SAQs, Viva
169.	Explain the pharmacological actions, uses and adverse effects of autacoids	IL	✓	BCQs, SAQ, Viva
170.	Narrate the pharmacokinetics and pharmacodynamics of glucocorticoids (steroid analgesics)	IL	✓	BCQs, SAQs, Assign, Viva
171.	Relate the pharmacokinetics and dynamics of NSAIDS	IL, SGD	✓	BCQs, SAQs, Viva

172.	Describe the pharmacology of opioid analgesic drugs and their antagonists	IL, SGD	✓	BCQs, SAQs, Viva
173.	Discuss the drug treatment of migraine	IL	✓	BCQs, SAQs, Viva
174.	Explain the drug treatment of rheumatoid arthritis	IL, SGD	✓	BCQs, SAQs, Viva
175.	Highlight the treatment of acute gout and chronic gout	IL, SGD	✓	BCQs, SAQs, Viva
176.	Describe the mechanism of action, clinical uses, contraindications, adverse effects and toxicity of cholinergic blocking drugs	IL, SGD	✓	BCQs, SAQs, Assignment, Viva
177.	Describe the pharmacokinetics, clinical uses, contraindications, adverse effects and toxicity of adrenoceptor activators	IL, SGD	✓	BCQs, SAQs, Assignment, Viva
178.	Describe the pharmacokinetics, clinical uses, contraindications, adverse effects and toxicity of adrenoceptor activators	IL, SGD	✓	BCQs, SAQs, Assignment, Viva
179.	Compare the pharmacological details of anti-asthmatic and anti-tussive drugs	IL, SGD	✓	BCQs, SAQs, Viva
180.	Explain the pharmacokinetics and pharmacodynamics of adrenoceptor blocking drugs	IL, SGD	✓	BCQs, SAQs, Assignment, Viva
181.	Develop basic knowledge of adrenergic neuron blocking and ganglion blocking drugs	SGD	✓	BCQs, SAQs, Viva
182.	Identify the sources of drugs	Lab Skills	✓	OSPE, Viva
183.	Define the basic pharmacological terminologies	Lab Skills	✓	OSPE, JV
184.	Identify the pharmaceutical preparations. (Part-1)	Lab Skills	✓	OSPE, JV
185.	Identify the pharmaceutical preparations. (Part-2) (a) Identify the units of weights and measures belonging to different systems (b) Interconvert the units of weights & measures	Lab Skills	✓	OSPE, JV
186.	Identify the different routes (I/V, I/M, S/C, I/P, I/D, topical) of drug administration in laboratory animals (mice, rat, rabbit, frog), and manikin (Skill Lab)	Lab Skills	✓	OSPE, JV
187.	(a) Prepare one percent stock solution of KMnO_4 (b) Find out the ingredients needed to prepare 100 ml of 0.01 % solution of MnO_4 from a stock solution of 1% strength	Lab Skills	✓	OSPE, JV
188.	Calculate the drip rate in adults and children	Lab Skills	✓	OSPE, JV
189.	Find out the amount of the ingredients needed to prepare 60ml of 5% dextrose in normal saline solution	Lab Skills	✓	OSPE, JV
190.	Calculate the dose of drugs in adults & children	Lab Skills	✓	OSPE, JV
191.	Study the given case-1 and discuss it in small group session	SGD (Lab)	✓	BCQs, SAQs, Viva
192.	Study the given case-2 and discuss it in small group session	SGD (Lab)	✓	BCQs, SAQs, Viva
193.	Application of statistics in biological experiments	SGD (Lab)	✓	OSPE, JV

	PATHOLOGY			
194.	Define: cell injury atrophy, hypertrophy, hyperplasia and metaplasia. Describe the pathogenesis and clinical significance of these adaptative responses.	IL	✓	BCQ/SAQ
195.	Describe the following mechanisms of cell injury: hypoxic, ischemic/reperfusion, chemical and free-radical cell injury.	IL	✓	BCQ
196.	Differentiate between reversible and irreversible cell injury on the basis of biochemical and structural changes.	IL	✓	BCQ/SAQ
197.	Describe the mechanisms and morphological types of necrosis	SGDD	✓	SAQ/BCQ
198.	Describe the mechanisms and significance of apoptosis	SGDD	✓	BCQ
199.	Describe the etiology, pathogenesis and morphology of intracellular accumulations, lipids, proteins, glycogen and pigments	IL	✓	SAQ/BCQ
200.	Describe the pathogenesis and clinical significance of pathologic calcifications: dystrophic and metastatic calcifications	IL	✓	BCQ
201.	Define acute inflammation and give examples of diseases resulting from acute inflammation	IL	✓	BCQ
202.	Describe the mechanisms of vascular changes in acute inflammation	IL	✓	SAQ/BCQ
203.	Describe the following cellular events in acute inflammation: margination, pavementing, adhesion, diapedesis, chemotaxis, recognition, opsonization, phagocytosis and degranulation.	SGDD	✓	BCQ
204.	Discuss the role of local and systemic chemical mediators in inflammation.	SGDD	✓	BCQ
205.	Describe the different morphological patterns and outcomes of acute inflammation.	IL	✓	BCQ/SAQ
206.	Describe chronic inflammation, its causes and morphological features.	IL	✓	BCQ
207.	Describe the role of different cells in chronic inflammation.	IL	✓	BCQ
208.	Discuss the pathogenesis and morphology of chronic granulomatous inflammation.	IL/PBL	✓	BCQ
209.	Describe the systemic effects of inflammation	IL	✓	SAQ/BCQ
210.	Discuss the mechanisms of wound healing by primary and secondary intention.	IL	✓	SAQ/BCQ
211.	Discuss the local and systemic factors influencing wound healing.	IL	✓	BCQ

212.	Discuss the overview of general bacteriology.	ILD	✓	SAQ/BCQ
213.	Discuss the significance of medically important bacteria on basis of their classification.	IL	✓	BCQ
214.	Describe the structure of bacterial cell wall.	IL	✓	BCQ
215.	Correlate the bacterial genes to cause antibiotic resistance.	IL	✓	BCQ
216.	Explain the normal flora as permanent resistant of certain body sites.	SGDD	✓	SAQ/BCQ
217.	Use different staining technique and biochemical test to classify medically important bacteria	IL/PBL	✓	BCQ
218.	Discuss the effectiveness of bacterial vaccine.	IL	✓	SAQ/BCQ
219.	Describe the growth cycle of bacteria and their response to antibiotic during growth cycle	SGDD	✓	BCQ/SAQ
220.	Describe the types and principles of sterilization and disinfection.		✓	BCQ/SAQ
221.	Describe the pathogenesis, clinical presentation, diagnosis of staphylococcus.	SGDD	✓	SAQ/BCQ
222.	Describe the pathogenesis, clinical presentation, and diagnosis of streptococcus.	AS		BCQ
223.	Describe the pathogenesis, clinical presentation and diagnosis of Gram negative cocci.	IL		BCQ
224.	Describe the pathogenesis, clinical presentation and diagnosis of Gram positive spore forming rods.	IL		BCQ
225.	Discuss the pathogenesis, clinical presentation and lab diagnosis of non spore forming Gram positive rods.	IL	✓	BCQ
226.	Identify gross morphological features of hyperplasia of prostate	IL		BCQ
227.	Identify gross morphological features of atrophy of uterus and kidney	AS/SGDD		BCQ
228.	Identify gross morphological features of left ventricular hypertrophy	LAB SKILLS		OSCE/VIVA
229.	Identify gross morphological features of bowel infarction	LAB SKILLS		OSCE/VIVA
230.	Identify gross morphological features of caseating necrosis of lymph node	LAB SKILLS		OSCE/VIVA
231.	Identify gross morphological features of gangrene (intestine)	LAB SKILLS		OSCE/VIVA
232.	Identify gross morphological features of calcification of uterus	LAB SKILLS	✓	OSCE/VIVA

233.	Identify gross morphological features of acute appendicitis	LAB SKILLS		OSCE/VIVA
234.	Identify gross morphological features of chronic cholecystitis	LAB SKILLS		OSCE/VIVA
235.	Identify histopathological features of prostate	LAB SKILLS		OSCE/VIVA
236.	Identify histopathological features of endometrium	LAB SKILLS		OSCE/VIVA
237.	Identify histopathological features of hypertrophy (heart)	LAB SKILLS		OSCE/VIVA
238.	Identify histopathological features of metaplasia (oesophagus)	LAB SKILLS		OSCE/VIVA
239.	Identify histopathological features of coagulative necrosis (kidney)	LAB SKILLS		OSCE/VIVA
240.	Identify histopathological features of liquefactive necrosis (brain)	LAB SKILLS		OSCE/VIVA
241.	Identify histopathological features of caseation necrosis (lymph node)	LAB SKILLS		OSCE/VIVA
242.	Identify histopathological features of fatty change in liver	LAB SKILLS		OSCE/VIVA
243.	Identify histopathological features of hemosiderosis in liver	LAB SKILLS		OSCE/VIVA
244.	Identify histopathological features of metastatic and dystrophic calcifications	LAB SKILLS		OSCE/VIVA
245.	Identify histopathological features of acute inflammation (appendix)	LAB SKILLS		OSCE/VIVA
246.	Identify histopathological features of chronic inflammation (gall bladder)	LAB SKILLS		OSCE/VIVA
247.	Identify histopathological features of chronic granulomatous inflammation in lymph node	LAB SKILLS		OSCE/VIVA
248.	Identify histopathological features of chronic granulomatous inflammation in intestine.	LAB SKILLS		OSCE/VIVA
249.	Identify different parts of a compound microscope and their functions	LAB SKILLS		OSCE/VIVA
250.	Perform the procedure of simple staining	LAB SKILLS		OSCE/VIVA
251.	Perform the procedure of gram staining	LAB SKILLS		OSCE/VIVA
252.	Discuss various types of culture media	LAB SKILLS		OSCE/VIVA
253.	Perform various biochemical reactions and their interpretation	LAB SKILLS		OSCE/VIVA
254.	Perform antimicrobial drug sensitivity and resistance test	LAB SKILLS		OSCE/VIVA
	PRECLINICS-PROSTHODONTICS			
255.	Define Prosthodontics.	SGD	✓	SAQ/BCQ

256.	Enumerate its various specialties.	SGD	✓	SAQ/BCQ
257.	Define its various specialties.	SGD	✓	SAQ/BCQ
258.	Define appliance, prosthesis, restoration, denture, support, stability, retention, partial edentulism, edentulous, temporary prosthesis, abutment, undercut, guide planes, angle of cervical convergence, residual ridge, and denture foundation.	SGD	✓	SAQ/BCQ
259.	Enlist consequences of being an edentulous mouth.	SGD	✓	SAQ/BCQ
260.	Discuss the need of prosthesis.	SGD	✓	SAQ
261.	Delineate the phases of treatment planning of a prosthodontics patient.	SGD	✓	SAQ
262.	Choose appropriate treatment modality (prosthesis) according to number of missing teeth with justification.	SGD	✓	SAQ/BCQ/OSP E
263.	Select appropriate instrument for a given procedure.	SGD	✓	OSPE
264.	Identify materials used in prosthodontics with its use.	SGD	✓	OSPE
265.	Select appropriate instrument for a given procedure	SGD	✓	OSPE
266.	Produce properly contoured edentulous casts using silicone molds.	PW	✓	OSPE
267.	Identify the surfaces of the cast.	SGD	✓	OSPE
268.	Define complete denture.	SGD	✓	SAQ/BCQ
269.	Enlist its various objectives.	SGD	✓	SAQ/BCQ
270.	Identify the different types of complete denture.	SGD	✓	SAQ/BCQ
271.	Recognize the different surfaces of complete denture.	SGD	✓	SAQ/BCQ/OSP E
272.	Sequence the steps involved in the fabrication of complete denture.	SGD	✓	BCQ/OSPE
273.	Outline each clinical and laboratory step involved in the fabrication process of complete denture.	SGD	✓	SAQ/BCQ/OSP E
274.	Recognize the anatomical landmarks on the edentulous maxillary arch.	SGD	✓	SAQ/BCQ
275.	Categorize them into supporting, relief and peripheral landmarks.	SGD	✓	SAQ/BCQ
276.	Explain the clinical significance of each of the anatomical landmarks.	SGD	✓	SAQ

277.	Recognize the anatomical landmarks on the edentulous mandibular arch.	SGD	✓	SAQ/BCQ
278.	Categorize them into supporting, relief and peripheral landmarks.	SGD	✓	SAQ/BCQ
279.	Explain the clinical significance of each of the anatomical landmarks.	SGD	✓	SAQ
280.	Enlist the six ridge types according to Atwood's classification.	SGD	✓	SAQ/BCQ
281.	Mark denture bearing area on the cast.	PW	✓	OSPE
282.	Mark common relief areas on edentulous maxillary and mandibular casts.	PW	✓	OSPE
283.	Enlist different methods of providing relief.	SGD	✓	SAQ/BCQ
284.	Provide relief before making a baseplate.	PW	✓	OSPE
285.	Recognize anatomic landmarks and denture extensions/borders on the edentulous cast.	PW	✓	OSPE
286.	Enlist different materials used for temporary and permanent baseplates with their properties	SGD	✓	SAQ/BCQ
287.	Fabricate permanent baseplates with heat cure acrylic resin.	PW	✓	OSPE
288.	Produce wax pattern for permanent baseplates with heat cure acrylic resin.	PW	✓	OSPE
289.	Identify the components of the flask.	SGD	✓	OSPE
290.	Invest wax pattern of removable dental prosthesis by soft plaster using open technique in a flask.	PW	✓	OSPE
291.	Enumerate the principles of flasking.	SGD	✓	BCQ/SAQ
292.	Appreciate the use of separating media during investment procedure.	SGD	✓	SAQ
293.	Perform dewaxing of the investment mold completely using curing pots.	PW	✓	OSPE
294.	Apply cold mold seal without pooling of liquid in the investment mold.	PW	✓	OSPE
295.	Identify the stages of heat cure acrylic resin setting.	PW	✓	BCQ/OSPE
296.	Pack the mold with acrylic resin at appropriate setting stage.	PW	✓	OSPE
297.	Perform three trial closures before curing commences using hydraulic and manual press.	PW	✓	OSPE

298.	Enlist the different curing cycles for heat cure acrylic resin.	SGD	✓	BCQ/SAQ
299.	Divest the baseplate without its breakage.	PW	✓	OSPE
300.	Finish and polish the prosthesis.	PW	✓	OSPE
301.	Describe finishing and polishing materials for acrylic prosthesis.	SGD	✓	SAQ
302.	Differentiate between partial and complete edentulous arches.	SGD	✓	OSPE
303.	Enlist various classification systems	SGD	✓	SAQ/BCQ
304.	Classify the various partially edentate arches according to Kennedy's classification.	SGD	✓	BCQ/SAQ/OSP E
305.	Apply Applegate's rule on different partially dentate states.	SGD	✓	BCQ/SAQ/OSP E
306.	Rationalize the importance of taking a comprehensive history of a Prosthodontics patient.	SGD	✓	OSPE
307.	Appreciate the different sections of a Prosthodontics history form.	SGD	✓	OSPE
308.	Record the demographics of a given patient.	SGD	✓	OSPE
309.	Record presenting complaint and history of presenting complaint of a given subject.	SGD	✓	OSPE
310.	Record the medical history of a given subject.	SGD	✓	OSPE
311.	Record dental history of a given subject.	SGD	✓	OSPE
312.	Rationalize the importance of taking a comprehensive examination of a Prosthodontics patient.	SGD	✓	OSPE
313.	Appreciate the different sections of a Prosthodontics examination form.	SGD	✓	OSPE
314.	Demonstrate the general examination of a given subject.	SGD	✓	OSPE
315.	Perform extra-oral examination of a given subject.	SGD	✓	OSPE
316.	Perform intra-oral examination of a given subject.	SGD	✓	OSPE
317.	Construct occlusal rims for tooth setup following proper guidelines	PW	✓	OSPE
318.	Seal upper and lower occlusal rims in orthognathic relation.	PW	✓	OSPE

319.	Define articulation .	SGD	✓	SAQ/BCQ
320.	Enlist functions of articulator.	SGD	✓	SAQ/BCQ
321.	Perform zeroing of a semi-adjustable articulator	PW	✓	OSPE
322.	Articulate the upper and lower cast on a semi-adjustable articulator.	PW	✓	OSPE
323.	Enlist types of artificial teeth.	SGD	✓	SAQ/BCQ
324.	Differentiate between porcelain and acrylic teeth.	SGD	✓	SAQ/BCQ/OSP E
325.	Elucidate the relationship of teeth to the casts with proposed guidelines for tooth setup.	PW	✓	OSPE/SAQ/BC Q
326.	Orient the anterior upper teeth according to five planes in the occlusal rims.	PW	✓	OSPE
327.	Orient the anterior lower teeth according to five planes in occlusal rims.	PW	✓	OSPE
Leadership and Management				
328.	Understand the principles of financial management in a dental setting	SGD	✓	BCQ /SAQ
329.	Develop skills in budgeting, revenue management, and financial decision-making.	SGD	✓	BCQ /SAQ

ACADEMIC SCHEDULE

Department of Community & Preventive Dentistry

Department of Science of Dental Materials

Department of Pre-clinics (Prosthodontics and Operative Dentistry)

Department of Pharmacology

Department of Pathology

Weekly schedule of Module IV Community Dentistry		
Week no.	Lecture 1	Lecture 2
Week – 1	Introduction to Community & Preventive Dentistry	Introduction to principles of dental public health L.O (1-10)
Week – 2	Determinants of health L.O (11)	Implication of DPH (BPOC) L.O (12)
Week – 3	Definition of health L.O (13-17)	Public health approaches to prevention L.O (18-21)
Week – 4	Class assessment test	Types of Studies and research design (Epidemiology I) L.O (22-24)
Week – 5	Epidemiology II L.O (25-28)	Screening L.O (29-30)
Week – 6	Indices – properties L.O (37 - 41)	Epidemiological Study Measures L.O (31-32)
Week –8	Epidemiology of Caries L.O (33)	Epidemiology of Periodontal Diseases L.O (34)
Week -9	COMMUNITY FIELD TRIP	
Week -10	Epidemiology of Fluorosis I L.O (36)	Epidemiology of Traumatic Dental Injuries L.O (37)
Week -11	Epidemiology of oral cancer L.O (35)	Types of non-carious lesions L.O (38)
Week –12	REVISION	REVISION
Week-13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

Weekly schedule of Module IV PHARMACOLOGY			
Week	Lecture-1	Lecture-2	Lecture-3
Week- 1	Scope of pharmacology/ Rational use of drugs (LO = 160)	Pharmacokinetic principles: Drug Absorption & Distribution (LO = 161)	Routes of administration of drugs (LO = 161)
Week- 2	Drug Metabolism & Excretion (LO = 161)	Pharmacodynamics Principles: Mechanism of action of drugs (LO = 162)	Pharmacodynamics Principles: Drug Response (LO = 162)
Week- 3	Pharmacodynamics Principles: Drug Response (LO = 162)	Pharmacodynamic & Pharmacokinetic drug-drug interactions (LO = 163)	Adverse drug reactions (LO = 163)
Week- 4	Pharmacology of Autacoids (LO = 164)	Steroid analgesics (LO = 165)	Nonsteroidal anti- inflammatory drugs (LO = 166)
Week- 5	Nonsteroidal anti- inflammatory drugs (LO = 166)	Opioid analgesic drugs (LO = 167)	Opioid analgesic drugs (LO = 167)
Week- 6	Drug treatment of migraine (LO = 168)	Drug treatment of Rheumatoid arthritis (LO = 169)	Drug treatment of acute and chronic gout (LO = 170)
Week- 7	Cholinoceptor activating drugs-1 (LO = 171)	Cholinoceptor activating drugs-2 (LO = 171)	Cholinoceptor blocking drugs (LO = 172)
Week- 8	Adrenoceptor activating drugs-1 (LO = 173)	Adrenoceptor activating drugs-2 (LO = 173)	Drug treatment of asthma (LO = 174)
Week- 9	Drug treatment of asthma (LO = 174)	Adrenoceptor blocking drugs-1 (LO = 175)	Adrenoceptor blocking drugs-2 (LO = 175)
Week- 10	PBL Session 1	Pre-clinical & clinical trials (LO = 160)	PBL Session 3
Week- 11	Rational use of drugs (LO = 160)	Revision	Revision
Week-12	REVISION	REVISION	REVISION
Week -13	Theory Examination		
Week -14	Viva Examination		

Weekly schedule of Module IV Science of Dental Materials			
Week no.	Lecture 1	Lecture 2	Lecture 3
Week – 1	Introduction to science of dental materials (LO = 57-60)	Introduction to science of dental materials (LO = 61-63)	Properties used to characterize materials (LO = 64-67)
Week – 2	Properties used to characterize materials (LO = 67-69)	Properties used to characterize materials (LO = 70-72)	Properties used to characterize materials (LO = 73- 75)
Week – 3	Properties used to characterize materials (LO = 76-78)	Properties used to characterize materials (LO = 79-83)	TEST (LO = 57- 83)
Week – 4	Gypsum Products (LO = 84-87)	Gypsum Products (LO = 88-91)	Gypsum Products (LO = 92-95)
Week – 5	Gypsum Products (LO = 96-100)	Dental Waxes (LO = 101-103)	Dental Waxes (LO = 104-106)
Week – 6	Investment Materials (LO = 107-110)	Investment Materials (LO = 111-113)	TEST (LO = 84-113)
Week – 7	Synthetic Polymers (LO = 114-115)	Synthetic Polymers (LO = 116-117)	Synthetic Polymer (LO = 118-119)
Week –8	Synthetic Polymers (LO = 120)	Synthetic Polymers (LO = 121)	Denture Base Polymers (LO = 122-125)
Week -9	Denture base polymers (LO = 126-129)	Denture base polymers (LO = 130-134)	Denture base polymers (LO = 135-137)
Week -10	Denture base polymers (LO = 138-140)	Denture lining materials (LO = 141-143)	Denture lining materials (LO = 144-146)
Week -11	Denture lining materials (LO = 147-150)	Artificial Teeth (LO = 151-152)	Artificial Teeth (LO = 153-154)
Week –12	Revision	Revision	Revision
Week-13	THEORY EXAMINATION		
Week 14	VIVA EXAMINATION		

Weekly schedule of Module IV		
DEPARTMENT OF PATHOLOGY		
Week no.	Lecture 1	Lecture 2
Week – 1	Adaptation 1 (LO=185)	Bacteria compared with other microorganisms(LO=191)
Week – 2	Adaptation 2(LO=185)	Structure of Bacteria-I(LO=192)
Week – 3	Mechanism of cell injury (LO=186-188)	Structure of Bacteria-II(LO=192)
Week – 4	Apoptosis 1(LO=190)	Classification of Bacteria(LO=193)
Week – 5	Apoptosis 2(LO=190)	Normal Flora of human body(LO=217)
Week – 6	Acute inflammation 1(LO=199)	Pathogenesis of Bacterial infection-I(LO=196)
Week – 7	Acute inflammation 2(LO=200)	Pathogenesis of Bacterial Infection-II(LO=196)
Week –8	Chemical mediators of inflammation(LO=201)	Laboratory Diagnosis(LO=217)
Week -9	Chronic inflammation(LO=204)	Antimicrobial Drugs(LO=210)
Week -10	Tissue repair and wound healing(LO=208)	Antimicrobial Vaccines(LO=212)
Week -11	Pathological aspects of repair(LO=209)	Sterilization and Disinfection(LO=213-214)
Week –12	REVISION	REVISION
Week-13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

Commencement of Module IV		Prosthodontics Department	
Activity	Week	Laboratory Session	Tutorial Session
Pre- Clinical Academic Session – BDS Second Professional	1.	Identify materials and equipment Mold pouring 254-258	Introduction of Prosthodontics Prosthodontics Terminologies <i>Interactive lecture</i> 246-251
	2.	Introduction, components & steps of CD <i>Pre- reading, Pre-assessment, Lecture ,Post-assessment</i> 259-264	Anatomic Landmarks- Maxilla & Mandible <i>Team-based learning</i> 265-271
	3.	Applied Anatomical Land mark Baseplate wax up – Demonstration 272-279	Baseplate wax up- Practice session
	4.	Baseplate investment – Demonstration 280-283	Baseplate investment – Practice session
	5.	Baseplate Packing and curing- Demonstration 285-289	Baseplate Packing and curing- Practice session
	6.	Baseplate Finishing – Demonstration and practice session 290-292	Classification systems for partially edentate patients <i>Team-based learning</i> 293-296
	7.	Introduction to Prosthodontics -History form <i>Clinical Demonstration/ Patient simulation</i> 297-302	Introduction to Prosthodontics- Examination form <i>Clinical Demonstration/Patient simulation</i> 252,253,303-307
	8.	Fabrication of Occlusal rims – Demonstration 308,309	Occlusal rims – Practice session
	9.	Occlusal rims – Practice session	Programming of semi-adjustable articulator and articulation of casts- Demonstration 310-313
	10.	Upper anterior teeth setup- Demonstration 314-317	Laboratory work
	11.	Lower anterior teeth setup- Demonstration 318	<i>Creative Dental Art Exhibition</i>
	12.	Laboratory work	Revision class
	13.	Modular Examination	
	14.		

MODULE V

At the end of the module, students should be able to:

	COMMUNITY & PREVENTIVE DENTISTRY	Teaching Method	Online Capacity	Assessment Mode
1.	Classify different levels of prevention	IL, SGD,	✓	BCQs, SAQs, Viva
2.	Discuss different strategies for the prevention of oral diseases	IL, SGD, PBL	✓	BCQs, SAQs, OSPE, , PBL, Viva,
3.	Describe the etiology and mechanism of dental caries	IL, SGD	✓	BCQs, SAQs, OSPE, Viva,
4.	Explain the role of different types of sugars along with their cariogenic potential	IL, SGD	✓	BCQs, SAQs, OSPE, Viva,
5.	Describe the significance of caries activity test in prevention of dental caries	IL,	✓	SAQs, Viva
6.	Describe the prevention of dental caries through vaccine	IL,	✓	, SAQs
7.	Specify the role of fluoride in prevention of dental caries	IL, SGD,	✓	SAQs, OSPE, Viva,
8.	Integrate the role of diet & plaque control in prevention of dental diseases	IL,	✓	BCQs, SAQs, Viva,
9.	Explain the role of fissure sealants and its application	SGD, VD, PBL, Practical, Skill Lab, OPD	✓	BCQs, SAQs, OSPE, PBL
10.	State the indication and contraindication of fissure sealants	IL, SGD, PBL,	✓	BCQs, SAQs, Viva,
11.	Define dental plaque	SGD	✓	SAQs, Viva
12.	Discuss the different methods of plaque control	IL, SGD, PBL, VD, OP D	✓	BCQs, SAQs, OSPE, PBL, Viva,
13.	Explain clinical approaches in the prevention of oral cancer	IL, SGD, PBL	✓	BCQs, SAQs, Viva, PBL
14.	Understand the metabolism, excretion and mechanism of action of fluoride	IL, SGD	✓	BCQs, SAQs, Viva,
15.	Describe different modes of fluoride intake	IL, SGD	✓	BCQs, SAQs,

16.	Describe the significance of each mode of fluoride intake	IL, SGD	✓	BCQs, SAQs, OSPE, Viva,
17.	Discuss toxicity of fluoride and methods of defluoridation.	IL, SGD	✓	BCQs, SAQs,
18.	Explain the key areas outline in Ottawa Charter along with its examples	IL, SGD, PBL,	✓	BCQs, SAQs, OSPE, PBL, Viva,
19.	Define health promotion	IL,	✓	SAQs, Viva,
20.	Discuss elements of health promotion	IL	✓	SAQs, Viva,
21.	Illustrate different approaches of health promotion	IL	✓	SAQs
22.	Recall the scientific basis of oral health education	IL	✓	SAQs, Viva,
23.	Recognize models of planning oral health education	IL	✓	SAQs, Viva,
24.	Explain different methods and materials of health education	IL	✓	SAQs, Viva,
25.	Define health behavior	IL	✓	SAQs,
26.	Enlist different theories of behavior change	IL, SGD,	✓	BCQs, SAQs, Viva,
27.	Describe the health behavior in view of different behavior models	IL,	✓	SAQs, Viva,
28.	Describe ART along with its significance	SGD	✓	SAQs, Viva,
29.	Describe different technique for the application of ART	SGD, VD, Skill Lab, OPD, FV	×	BCQs, SAQs, Viva, Skill Demonstration, logbook
30.	Enlist the indication and contraindications of ART	SGD	✓	BCQs, SAQs, Viva,
31.	Describe the components of healthcare delivery system	ISGD	✓	BCQs, SAQs, Viva
32.	Describe clinical governance	SGD,	✓	SAQs, Viva,
33.	Discuss the financing of oral healthcare	IL	✓	BCQs, SAQs, OSPE, Viva,
34.	Explain the principles of planning	IL	✓	BCQs, SAQs, OSPE, Viva,
35.	Recall the quality assurance cycle	IL	✓	SAQs, OSPE, Viva,
36.	Recognize the common problems associated with health care	SGD	✓	BCQs, SAQs,
37.	Discuss dental workforce and their role in dentistry	IL, SGD, PBL	✓	BCQs, SAQs, OSPE, Viva, PBL,

38.	Express dental care of patients with special needs, elderly, HIV/AIDS & children	IL	✓	BCQs, SAQs
39.	Define ethics and discuss the guidelines required in making a biomedical decision	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
Behavioral Science				
40.	Explain Stress along with its manifestations	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
41.	Discuss ways to manage stress	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
42.	Define anxiety	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
43.	Discuss different components of anxiety	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
44.	Explain non pharmacological approaches to deal with anxiety	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
45.	Understand the reasons and phases in delay in seeking help	IL, SGD, PBL	✓	BCQs, SAQs, Viva, OSPE, PBL
46.	Demonstrate the application of methods of plaque control (tooth brushing Techniques, flossing, mouth washes and plaque disclosing agents)	Skill Lab, VD	×	OSPE
47.	Demonstrate the application of fissure sealant	Skills Lab, VD	×	OSPE
48.	Identify dental fluorosis	Practical	✓	OSPE
49.	Identify the different types of TDI in pictorial exercise	Practical	✓	OSPE
50.	Identify the different types of non-carious lesion in pictorial exercise	Practical	✓	OSPE
51.	Demonstrate topical fluoride application	Lab Skills, VD	×	OSPE
52.	Demonstrate ART technique on phantom teeth	Lab Skills, VD	×	OSPE
Research Methodology				
53.	Collect research data	OPD, FV	✓	Assign

54.	Enter and analyze research data	Lab Skills	✓	Assign
55.	Demonstrate skills in generating results for research write-up	Lab Skills	✓	Assign
56.	Write the research draft (introduction, methods)	SGD	✓	Assign
57.	Plan the Dental Health Education Material	SGD	✓	Assign
58.	Design the Dental Health Education Material	SGD	✓	Assign
	PROFESSIONALISM			
59.	Understanding the concept of Professionalism	SGD	✓	BCQs, SAQs
60.	Explain the traits of professionalism	IL, SGD	✓	BCQs, SAQs
61.	Describe the dress code of a true professional	SGD	✓	BCQs, SAQs, OSPE
62.	Define Ethics	IL, PBL	✓	BCQs, SAQs, PBL, Viva
63.	Describe the principles of Ethics.	IL, PBL	✓	BCQs, SAQs, PBL, Viva
64.	Recognize the Ethical Standards required of every professional/student.	IL, SGD, PBL	✓	BCQs, SAQs, PBL, Viva
65.	Recognize the professional obligations required of a Dental student & Dentist?	IL, SGD, PBL	✓	BCQs, SAQs, PBL, Viva
	PATIENT SAFETY/ CROSS INFECTION			
66.	Recognize the routes of spread of infection in a dental setting?	IL, SGD	✓	BCQs, SAQs, Viva, OSCE
67.	Describe the measures through which Cross-infection can be prevented?	IL, SGD, Practical	✓	BCQs, SAQs, Viva, OSCE
68.	Define the following terms a. Standard Precautions b. Body Substance Isolation c. Bloodborne pathogen standard d. Cross infection control e. Standard infection control procedure	IL, SGD, Practical	✓	BCQs, SAQs, Viva, OSCE
69.	Understand the mode of spread of HIV and HCV infection?	IL, SGD	✓	BCQs, SAQs, Viva, OSCE
70.	Discuss different preventive measures of COVID-19	IL, SGD, Practical,	✓	BCQs, SAQs,

		PBL		Viva, OSCE
71.	Discuss different disinfectants and sterilization procedures used in dental setting	IL,SGD, Practical, PBL	✓	BCQs, SAQs, Viva, OSCE
72.	Recognize the types of errors that can be encountered in a dental setting.	IL,SGD, Practical	✓	BCQs, SAQs, Viva, OSCE
73.	Describe occupational hazards, radiation & mercury protection	SGD,	✓	BCQs
74.	Enable logbook maintenance by acquisition of competency	SGD	✓	Assign
	SCIENCE OF DENTAL MATERIALS			
75.	Identify the process of casting as a means of shaping metal and alloys	IL	✓	BCQs, SAQs, Viva, OSP E, Assign
76.	Give examples of cast restorations and prosthesis	IL	✓	BCQs, SAQs. OSPE, Assign
77.	State the components of an investment mould	IL	✓	BCQs, SAQs, OSPE, Assign
78.	Discuss the different types of casting machines	IL	✓	BCQs, SAQs, OSPE, quiz
79.	Enlist the common faults occurring in a casting procedure	IL	✓	SAQs
80.	Discuss reasons for faults in casting	PBL	✓	BCQs, SAQs, OSPE, PBL
81.	Suggest ways to avoid such faults	IL	✓	SAQs, OSPE, Assign
82.	Outline the clinical applications of metal and alloys in dentistry	IL	✓	SAQs, Assign, Viva
83.	Discuss the shaping of metal and alloys through casting, cold working and amalgamation	IL	✓	BCQs, SAQs, OSPE, Viva
84.	Appreciate the crystalline structure of metals	IL	✓	SAQs, Viva, Assign
85.	Relate yield stress, dislocation and ductility/malleability	IL	✓	BCQs, SAQs,
86.	Discuss quenching and coring	IL	✓	BCQs, SAQs, Viva, Assign
87.	Explain cold working and its application in dentistry	IL	✓	SAQs, OSPE, Viva.
88.	Discuss the structure and properties of alloys	IL	✓	SAQs, OSPE, Viva.
89.	Explain cooling curves for metal and alloys	IL	✓	BCQs, SAQs, OSPE.
90.	Discuss the phase diagrams of solid-solution alloy	IL	✓	SAQs, OSPE
91.	Discuss eutectic phase diagrams	IL	✓	SAQs, OSPE
92.	Discuss properties and use of a eutectic alloy	IL	✓	BCQs, SAQs, Viva.

93.	Differentiate between noble and base metals	IL	✓	SAQs, Viva
94.	Enlist the properties of pure gold	IL	✓	SAQs, OSPE, Viva
95.	Discuss cold welding in relation to pure gold filling	IL, VD	✓	BCQs, SAQs, Viva
96.	Discuss advantages and disadvantages of pure gold filling	IL	✓	SAQs, Viva
97.	Discuss the composition, properties and clinical uses of different type of casting gold alloys	IL	✓	SAQs, OSPE, Viva, Assign
98.	Discuss hardening heat treatment	IL	✓	SAQs, Viva, Assign
99.	Differentiate between soldering and brazing	IL	✓	BCQs, SAQs
100.	Discuss the use of noble alloys in metal-bonded ceramic restorations	IL	✓	BCQs, SAQs
101.	Discuss the composition and properties of cobalt-chromium alloys and nickel chromium alloys	IL	✓	BCQs, SAQs, Viva,
102.	Discuss the manipulation of base metal casting alloys highlighting the fusion temperatures, mode of melting, type of investment material used, and methods of trimming and polishing	IL	✓	BCQs, SAQs, OSPE, Viva, Assign
103.	Discuss the process of electrolytic polishing	IL, VD	✓	SAQs, Viva
104.	Compare and contrast the properties of base metal casting alloys and casting gold alloys	IL	✓	BCQs, SAQs
105.	Correlate the clinical applications of base metal alloys with their properties	PBL	✓	BCQs, SAQs, Viva, PBL
106.	Discuss the types of base metal casting alloys for fixed restorations according to ISO standard	IL	✓	BCQs, SAQs, OSPE, Viva, Assign
107.	Discuss the biocompatibility of various constituents of base metal casting alloys	PBL	✓	PBL, BCQs, SAQs
108.	Discuss formation of a wrought alloy	IL	✓	BCQs, SAQs
109.	State the composition of Steel	IL	✓	BCQs, SAQs
110.	Explain the iron-carbon phase diagram	IL	✓	SAQs, Viva
111.	Identify the phases of cementite and ferrite and discuss their properties	IL	✓	SAQs, OSPE, Assign
112.	Explain the terms: austenite, cementite, ferrite, pearlite, eutectoid alloy, martensite, hypereutectoid alloy and hypoeutectoid alloy	IL	✓	BCQs, SAQs, Viva,
113.	Explain the hardening and tempering cycles of heat treatment done on steel	IL	✓	SAQs, Assign
114.	Differentiate between steel and stainless steel	IL	✓	BCQs, SAQs, OSPE, Viva, Assign
115.	Discuss properties and clinical uses of austenitic and martensitic stainless steel	IL	✓	BCQs, SAQs, OSPE, Viva, Assign, Ppt, Quiz
116.	Discuss advantages and disadvantages of stainless steel as a denture base	IL	✓	BCQs, SAQs, Viva

117.	Discuss the requirements of wire	IL	✓	SAQs, OSPE, Viva
118.	Explain the use of various materials for making wires	IL	✓	SAQs, Assign
119.	Develop skills at bending wire into alphabets and clasps	SD		PW
120.	State the composition of different types of dental ceramic	IL	✓	SAQs, Assign
121.	State the uses of dental porcelain	IL	✓	BCQs, SAQs, Viva
122.	Explain the manipulation of porcelain with respect to its compaction, firing and glazing	IL, VD	✓	BCQs, SAQs, Assign
123.	Enlist the properties of porcelain	IL	✓	SAQs, Viva, Assign
124.	Discuss aluminous porcelain	IL	✓	BCQs, SAQs, Viva,
125.	Explain the formation of sintered alumina core ceramics	IL	✓	SAQs, Viva, Assign
126.	Discuss injection molded and pressed ceramics	IL	✓	SAQs, Viva, Assign
127.	Discuss cast glass and polycrystalline ceramics	IL	✓	BCQs, SAQs, Assign
128.	Discuss the advantages of CAD-CAM restorations	IL, VD	✓	BCQs, SAQs, OSPE, Viva
129.	Discuss porcelain veneers and alternate materials available for veneers	IL	✓	BCQs, SAQs, OSPE, Viva, Assign
130.	Discuss porcelain fused to metal restorations highlighting the requirements for alloys available for porcelain bonding	PBL	✓	BCQs, SAQs, PBL
131.	Compare the properties of different types of alloy used in PFM	IL	✓	Viva, Assign
132.	Classify impression materials on the basis of viscosity and elastic properties	IL, SGD	✓	BCQs, SAQs, OSPE, Viva, Assign, Quiz, Ppt
133.	Classify impression materials on the basis of viscosity and elastic properties	IL	✓	SAQs, OSPE, Viva
134.	Discuss the ideal requirements of impression materials	IL	✓	SAQs, OSPE, Viva, Assign, Quiz, Ppt
135.	Define the terms: elastic, non-elastic/rigid and viscoelastic	IL	✓	SAQs, OSPE, Viva, CQ
136.	Discuss clinical considerations (choice of material, trays, tissue management, technique, cross infection control).	IL	✓	SAQs, OSPE, Viva,
137.	Classify impression trays	IL, SD	✓	BCQs, SAQs, Viva
138.	Discuss the use of tray adhesives	IL	✓	BCQs, SAQs
139.	Discuss impression techniques.	IL, SD	✓	BCQs, SAQs, OSPE, Viva, Assign, Quiz

140.	Discuss infection control	IL	✓	SAQs, OSPE, Viva
141.	Classify non- elastic impression materials.	IL	✓	BCQs, SAQs, Viva
142.	Discuss composition, manipulation, setting reaction, properties and uses of impression plaster, impression compound ,impression waxes and zinc oxide	IL, SD	✓	BCQs, SAQs, Viva
143.	Classify elastic impression materials.	IL	✓	BCQs, SAQs, OSPE
144.	Differentiate between sol and gel forms	IL	✓	SAQs
145.	Discuss reversible hydrocolloids with respect to their composition, type's properties, handling and uses.	IL	✓	BCQs, SAQs, OSPE, Viva, Assign, Quiz
146.	Discuss irreversible hydrocolloids with respect to their composition, properties, handling and uses	IL, SD	✓	BCQs, SAQs, Viva, PW
147.	Discuss their advantages and disadvantages	IL	✓	SAQs
148.	Define modified alginate	IL	✓	SAQs, OSPE, Viva
149.	State methods for disinfection of alginate impression	IL	✓	BCQs, SAQs
150.	Discuss the making of an alginate impression through video demonstration	IL, VD, SD	✓	PW
151.	Enlist the types of synthetic elastomers	IL	✓	SAQs, OSPE
152.	Classify synthetic elastomers according to consistency	IL	✓	SAQs, OSPE, Viva
153.	Discuss their composition ,properties, handling, setting reaction and clinical uses	IL	✓	BCQs, SAQs, Viva,
154.	Compare and contrast their properties, advantages and disadvantages.	IL	✓	BCQs, SAQs, CQ
155.	State methods for disinfection of each type	IL	✓	BCQs, SAQs, OSPE
156.	Discuss the process for a putty wash type impression through video demonstration	VD	✓	PW
	PROFESSIONALISM/PRINCIPLES OF ETHICS			
157.	Discuss the ideal requirements of impression materials	IL	✓	Presentation
158.	Outline the clinical applications of metal and alloys in dentistry	IL	✓	Group Presentations
159.	PATIENT SAFETY			
160.	Discuss various clinical considerations.	IL	✓	SAQs, OSPE, Viva,
161.	Discuss infection control	IL	✓	SAQs, OSPE, Viva
162.	State methods for disinfection of each elastomers	IL	✓	BCQs, SAQs, OSPE
	COMMUNICATION SKILLS			

163.	Correlate the clinical applications of base metal alloys with their properties	PBL	✓	BCQs, SAQs, Viva, PBL
	PHARMACOLOGY			
164.	Explain the pharmacokinetics and pharmacodynamics of drugs used for cardiovascular diseases (anti-hypertensives & diuretics)	IL, SGD	✓	BCQs, SAQs, Viva
165.	Explain the pharmacokinetics and pharmacodynamics of drugs used for cardiovascular diseases (anti-arrhythmic, anti-anginal & CCF drugs)	IL, SGD	✓	BCQs, SAQs, Viva
166.	Describe oral & parenteral anticoagulants. Give an account of thrombolytic and antiplatelet drugs	IL, SGD	✓	BCQs, SAQs, Viva
167.	Classify and discuss pharmacological properties of emetic, anti-emetic, purgative and anti-diarrheal drugs	IL, SGD	✓	BCQs, SAQs, Viva
168.	Reproduce pharmacological details of drug treatment of acid peptic disease	PBL	✓	BCQs, Viva
169.	Describe the pharmacological properties of drugs used for IBD	IL	✓	BCQs, SAQs, Viva
170.	Compare the pharmacological properties of penicillins	IL	✓	BCQs, SAQs, Viva
171.	Give a detailed account of the pharmacokinetics and pharmacodynamics of cephalosporins	IL	✓	BCQs, SAQs, Viva
172.	Describe the pharmacokinetic and pharmacodynamic properties, mechanism, clinical uses and adverse effects of tetracyclines	IL	✓	BCQs, SAQs, Viva
173.	Present pharmacokinetic properties, mechanism, clinical uses and adverse effects of aminoglycosides	IL	✓	BCQs, SAQs, Viva
174.	Describe the pharmacokinetic properties, mechanism, clinical uses and adverse effects of macrolides	IL	✓	BCQs, SAQs, Viva
175.	Compare the pharmacokinetic properties, mechanism, clinical uses and adverse effects of chloramphenicol	IL	✓	BCQs, SAQs, Viva
176.	Discuss the pharmacokinetic and pharmacodynamic properties of sulfonamides	IL	✓	BCQs, SAQs, Viva
177.	Describe the pharmacokinetics and pharmacodynamics of fluoroquinolones	IL	✓	BCQs, SAQs, Viva
178.	Explain the clinical uses and adverse effects of carbapenems & monobactams	SGD	✓	BCQs, SAQs, Viva
179.	Explain the mechanism of action, clinical uses and adverse effects of vancomycin & clindamycin	SGD	✓	BCQs, SAQs, Viva
180.	Discuss 1 st line drug therapy for tuberculosis	IL	✓	BCQs, SAQs, Viva
181.	Explain 2 nd line drug therapy for tuberculosis	SGD	✓	BCQs, SAQs, Viva
182.	Describe the mechanism of action, clinical uses and adverse effects of various types of antiviral drugs	IL	✓	BCQs, SAQs, Viva
183.	Classify anticancer drugs based on cell cycle specificity and briefly discuss mechanisms of action and adverse effects	IL	✓	BCQs, SAQs, Viva

184.	Describe mechanism of resistance to anticancer drugs	IL	✓	BCQs, SAQs, Viva
185.	Discuss pharmacological properties of anti-anemic drugs	SGD	✓	BCQs, SAQs, Viva
186.	Write down the pharmacokinetics and pharmacodynamics of anti-hyperlipidemic drugs	IL	✓	BCQs, SAQs, Viva
187.	Prepare dilutions from 1mg of the given drug having strength of 10^{-3} up to 10^{-8}	Lab Skills	✓	OSPE, JV
188.	Interpret the effect of antibiotic drugs on bacterial colonies	Lab Skills	✓	OSPE, JV
189.	Interpret the effects of given drugs on the eyes of rabbit	Lab Skills	✓	OSPE, JV
190.	Interpret the effects of agonist and antagonist drugs on the eyes of rabbit	Lab Skills	✓	OSPE, JV
191.	Identify the parts of kymograph and organ bath assembly	Lab Skills	✓	OSPE, JV
192.	Interpret the effects of different dilutions of a given drug on an isolated piece of rabbit intestine	Lab Skills	✓	OSPE, JV
	PATHOLOGY			
193.	Compare the pathophysiologic categories of edema on the basis of underlying mechanism and clinical features.	ILD/SG DD		BCQ/SAQ
194.	Relate the abnormalities of normal hemostasis with the development of thrombosis and its clinical consequences.	SGDD		SAQ/BCQ
195.	Compare different types of emboli on the basis of underlying cause and clinical presentation.	ILD/SG DD		BCQ
196.	Differentiate between the various types of infarcts according to the mechanism of development, morphological features and clinical consequences.	ILD/SG DD		SAQ/BCQ
197.	Describe the types of shock as regards to their etiology, pathogenesis and management.	ILD/SG DD		BCQ/SAQ/AS
198.	Describe the nomenclature, characteristics and classification of tumors	ILD/SG DD		BCQ
199.	Classify tumors according to tissue of origin and clinical behavior.	ILD/SG DD	✓	SAQ/BCQ
200.	Compare benign and malignant tumors on the basis of their morphological characteristics and clinical behavior.	SGDD	✓	BCQ
201.	Discuss the molecular basis of carcinogenesis with special emphasis on proto oncogene, oncogene and tumor suppressor genes.	ILD/SG DD		BCQ/SAQ
202.	Explain the clinical effects of tumors on the basis of size, site and syndromes they produce.	ILD/SG DD		OSCE
203.	Explain the effects of physical, chemical and viral carcinogen and relate them to tumorigenesis	ILD/SG DD	✓	BCQ/AS/SAQ
204.	Comprehend the role of genetic alterations in carcinogenesis.	ILD/SG DD		BCQ/AS
205.	Describe the significance of tumor markers in the diagnosis and management of cancers	ILD/SG DD	✓	BCQ/SAQ
206.	Describe the structure and clinical manifestations of human immunodeficiency virus	ILD/SG DD		BCQ

207.	Describe the pathogenesis, clinical presentation and diagnosis of mycobacterium.	ILD/SG DD	✓	OSCE
208.	Explain the overview of Gram negative rods and discuss the pathogenesis and clinical presentation of E coli.	ILD/SG DD		BCQ
209.	Describe the pathogenesis, clinical presentation and diagnosis of vibrio cholera.	ILD/SG DD		SAQ/BCQ
210.	Discuss different biochemical test for identification of Gram negative rods.	ILD/SG DD		BCQ
211.	Explain the role of pathogens to cause infection in hospitalized patients.	ILD/SG DD		SAQ/BCQ
212.	Describe the pathogenesis, clinical presentation and diagnosis of Pseudomonas aeruginosa.	ILD/SG DD		BCQ
213.	Correlate the clinical presentation of spirochetes with lab diagnosis.	ILD/SG DD		BCQ
214.	Describe the role of intracellular bacteria in causing a disease.	ILD/SG DD		SAQ/BCQ
215.	Discuss the pathogenesis, clinical presentation and diagnosis of mycoplasma and actinomyces.	ILD/SG DD		BCQ/SAQ
216.	Comprehend the role of respiratory Gram negative rods to cause various pulmonary diseases.	ILD/SG DD/PB L		BCQ/SAQ
217.	Discuss the pathogenesis and clinical presentation of zoonotic organisms	ILD/SG DD		BCQ
218.	Discuss structure and classification of viruses	SGDD		BCQ/AS
219.	Discuss the effectiveness of viral vaccine.	ILD/SG DD		BCQ
220.	Discuss the role of herpes simplex 1 & 2 & varicella zoster virus as contagious diseases.	ILD/SG DD		BCQ/SAQ
221.	Discuss the pathogenesis, clinical presentation and diagnosis of cytomegalo virus and Ebstein bar virus.	ILD/SG DD		BCQ/SAQ
222.	Discuss the pathogenesis, clinical presentation and diagnosis of measles and mumps.	ILD/SG DD		OSCE/BCQ
223.	Explain the different types of influenza virus and its preventive strategies.	ILD/SG DD		BCQ/SAQ
224.	Correlate the pathogenesis of rabies and rubella with their clinical presentation.	ILD/SG DD		SAQ/BCQ
225.	Describe different types of hepatitis (A, B and C) and their pathogenesis.	ILD/SG DD		BCQ
226.	Correlate the pathogenesis of HIV with its clinical presentation and lab diagnosis.	ILD/SG DD		SAQ/BCQ
227.	Identify histopathological features of Keloid	ILD/SG DD		BCQ
228.	Identify histopathological features of Leiomyoma (uterus)	LAB SKILLS		OSCE/VIVA
229.	Identify histopathological features of Follicular adenoma (thyroid)	LAB SKILLS		OSCE/VIVA
230.	Identify histopathological features of Fibroadenoma (Breast)	LAB SKILLS		OSCE/VIVA
231.	Identify histopathological features of granulation tissue	LAB SKILLS		OSCE/VIVA

232.	Identify histopathological features of Lipoma	LAB SKILLS		OSCE/VIVA
233.	Identify histopathological features of thrombus	LAB SKILLS		OSCE/VIVA
234.	Identify gross morphological features of follicular adenoma (thyroid)	LAB SKILLS		OSCE/VIVA
235.	Identify gross morphological features of fibroadenoma breast	LAB SKILLS		OSCE/VIVA
236.	Identify gross morphological features of lipoma	LAB SKILLS		OSCE/VIVA
237.	Identify gross morphological features of Leiomyoma (uterus)	LAB SKILLS		OSCE/VIVA
238.	Identify histopathological features of liposarcoma	LAB SKILLS		OSCE/VIVA
239.	Identify histopathological features of leiomyosarcoma	LAB SKILLS		OSCE/VIVA
240.	Identify histopathological features of adenocarcinoma stomach and Ductal carcinoma of breast	LAB SKILLS		OSCE/VIVA
241.	Discuss the pathogenesis and lab diagnosis of Staphylococcus aureus	LAB SKILLS		OSCE/VIVA
242.	Discuss the pathogenesis and lab diagnosis of Streptococcus species	LAB SKILLS		OSCE/VIVA
243.	Discuss the pathogenesis and lab diagnosis of Salmonella species.	LAB SKILLS		OSCE/VIVA
244.	Study the procedure of Zeihl Neelson staining and observe acid fast bacilli under microscope	LAB SKILLS		OSCE/VIVA
245.	Discuss the pathogenesis and lab diagnosis of Hepatitis B virus.	LAB SKILLS		OSCE/VIVA
246.	To study Escherichia coli and laboratory investigations its identification	LAB SKILLS		OSCE/VIVA
247.	To study HIV laboratory diagnosis.	LAB SKILLS		OSCE/VIVA
248.	Compare the pathophysiologic categories of edema on the basis of underlying mechanism and clinical features.	LAB SKILLS		OSCE/VIVA
	PRECLINICS-PROSTHODONTICS			
246.	Define the compensating curves.	SGD	✓	SAQ/BCQ
247.	Define balanced occlusion and articulation.	SGD	✓	SAQ/BCQ
248.	Orient the upper posterior teeth according to five planes in occlusal rims	PW	✓	OSPE
249.	Orient the lower posterior teeth according to five planes in occlusal rims	PW	✓	OSPE
250.	Perform final esthetic wax up of complete denture.	PW	✓	OSPE
251.	Achieve bilateral occlusal contacts in centric relation according to BULL's rule on the articulator.	PW	✓	OSPE
252.	Enlist the anatomical and physiological consequences of partial tooth	SDG	✓	SAQ/BCQ

	loss.			
253.	Define a removable partial denture.	SDG	✓	SAQ/BCQ
254.	Enlist its various indications and contra- indications.	SDG	✓	SAQ/BCQ
255.	Classify different types of removable partial denture.	SDG	✓	SAQ/BCQ
256.	Identify different types of removable partial denture.	SDG	✓	OSPE
257.	Identify various components of removable partial denture.	SDG	✓	BCQ/OSPE
258.	Define various components of removable partial denture.	SDG	✓	SAQ/BCQ/OS PE
259.	Sequence the clinical and laboratory steps involved in the fabrication of removable partial denture.	SDG	✓	BCQ/ OSPE
260.	Define inlay, onlay and crown	SDG	✓	SAQ/BCQ
261.	Classify crowns	SDG	✓	SAQ/BCQ
262.	Identify different types of crown.	SDG	✓	OSPE
263.	Define fixed partial denture.	SDG	✓	SAQ/BCQ
264.	Classify fixed partial dentures	SDG	✓	SAQ/BCQ
265.	Identify different types of fixed partial denture.	SDG	✓	OSPE
266.	Enlist its various indications and contra- indications.	SDG	✓	SAQ/BCQ
267.	Identify various components of fixed partial denture.	SDG	✓	BCQ/OSPE
268.	Define various components of fixed partial denture.	SDG	✓	SAQ/BCQ/OS PE
	Pre-Clinical Operative Dentistry			
269.	Introduction of Conservative/Operative Dentistry	IL	✓	BCQs/SAQs
270.	List the aims of Conservative/Operative Dentistry	IL	✓	BCQs/SAQs
271.	Repeat Nomenclature of dentition	IL/SG D	✓	BCQs/SAQs
272.	Illustrate Tooth Numbering systems, ADA, Zsigmondy-Palmer, and FDI systems	IL/SG D	✓	BCQs/SAQs
273.	Identify hand instruments	SGD/S kill Lab	✓	OSCE
274.	Recognize the design of hand instruments	SGD/S kill Lab	✓	BCQs/OSCE
275.	Apply different grips to hold hand instruments	SGD/S	✓	OSCE

		kill Lab		
276.	Classify rotary instruments	SGD/S kill Lab	✓	BCQs
277.	Demonstrate tooth preparation with rotary instruments	Skill Lab	-	BCQs/OSCE
278.	Describe know different components of patient history	IL/SG D	✓	BCQs/SAQs/ OSCE
279.	Perform documentation of history of patient	IL/SG D	✓	OSCE
280.	<i>Professionalism and Ethics</i>			
a.	Introduce himself/ herself	CR	-	Role play
b.	Communicate with supervisors respectfully	CR	-	Role play
c.	Explain various types of filling to the patient	CR	-	OSCE/ Role play
d.	Explain preventive treatments for dental caries to the patient	CR	-	Role play
281.	Communication Skills			
a.	Able to communicate with superiors and juniors respectfully	CR	-	Role play
b.	Speak clearly and confidently		-	Role play
c.	Display empathy and respect to the patient during history taking	CR	-	Role play
d.	Show positive gestures to the Juniors, class fellows & Seniors	CR	-	Role play
282.	Enlist steps of extra and intra oral examination and document findings	IL/SG D	✓	SAQs/OSCE
283.	Identify the parts of dental unit	Skill Lab	-	BCQs/ OSCE
284.	Operate dental unit in phantom lab	Skill Lab	-	OSCE
285.	Demonstrate about positioning the patients and the dentist in operatory	Skill Lab	✓	OSCE/Role play
286.	Define Dental caries	IL/SG D	✓	OSCE
287.	Review G.V. Black classification of dental caries	IL/SG D	✓	OSCE
288.	Describe Graham Mount classification of dental caries	IL	✓	BCQs/SAQs/ OSCE
289.	Differentiate between G.V. Black & Graham Mount classification of Dental caries	IL/SG D	✓	BCQs/OSCE
290.	Memorize parts of matrix band retainer	SGD/S kill Lab	✓	OSCE
291.	Apply matrix band Retainer & wedge	SGD/S kill Lab	-	BCQs/ OSCE

292.	Patient Safety			
a.	Practice the use of isolation methods for patient safety (Rubber dam & matrix band application)	CR	-	OSCE
b.	Capable to seat patient on dental unit	CR	-	OSCE
c.	Know how to use saliva ejector to maintain isolation	CR	-	OSCE
d.	Show to the patient about use of lead apron & thyroid collar for X-ray taking	CR	-	Role play
293.	Express various steps in Class I cavity preparation	Skill Lab	✓	OSCE
294.	Plan Class I cavity on plaster models/ acrylic teeth in phantom lab	Skill Lab	-	OSCE
295.	Discuss different steps in Class V cavity preparation	Skill Lab	✓	OSCE
296.	Prepare Class V cavity on plaster models/ acrylic teeth in phantom lab	Skill Lab	-	BCQs/OSCE
297.	Explain cavity liners and bases	IL/SGD	✓	BCQs/ SAQs
298.	Discuss Steps of amalgam placement	IL	-	BCQs/ SAQs
299.	Complete finishing and polishing of amalgam restoration	Skill Lab	-	BCQs
Leadership and Management				
300.	Recognize the importance of strategic planning for the success of a dental practice.	SGD	✓	BCQs /SAQs
301.	Learn to conduct a SWOT analysis and formulate strategic goals for a dental practice.	SGD	✓	BCQs /SAQs
302.	Explore principles of human resource management specific to dental practices.	SGD	✓	BCQs /SAQs
303.	Understand recruitment, training, performance evaluation, and motivation of dental personnel.	SGD	✓	BCQs /SAQs

Weekly schedule of Module V Community & Preventive Dentistry		
Week no.	Lecture 1	Lecture 2
Week – 1	Levels of prevention/ Ottawa charter L.O (1-2)	Prevention of dental caries L.O (3-7 & 9)
Week – 2	Prevention of periodontal disease L.O (8,11-12)	Prevention of oral cancer L.O (13)
Week – 3	Role of Fluoride I L.O (14-15)	Role of Fluoride II L.O (16-17)
Week – 4	Principles of Oral health promotion L.O (18-21)	Fissure Sealant and ART L.O (10, 28-30)
Week – 5	Health education L.O (22-24)	Behavior change L.O (25-27)
Week – 6	Students competition	
Week – 7	Class assessment test	Health care systems of Pakistan L.O (31 -32)
Week –8	Principles of planning L.O (34-35)	Problems of the health care systems L.O (36)
Week -9	Financing/ economics of dental care L.O (33)	Dental workforce L.O (37)
Week -10	Ethics in dentistry L.O (39, 52-55)	Infection control L.O (56-63)
Week -11	Oral health care for special need (38) L.O	Professionalism in Dentistry LO (49-51)
Week –12	REVISION	REVISION
Week –13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

Weekly schedule of Module V Science of Dental Materials			
Week no.	Lecture 1	Lecture 2	Lecture 3
Week – 1	Metal and Alloys (LO=75-78)	Metal and Alloys (LO=79-81)	Metal and Alloys (LO=82-85)
Week – 2	Gold and Alloys of Nobel metal (LO=86-87)	Gold and Alloys of Nobel metal (LO=88-89)	Gold and Alloys of Nobel metal (LO=90-91)
Week – 3	Gold and Alloys of Nobel metal (LO=92)	Base metal casting alloys (LO=93-96)	Base metal casting alloys (LO=97-100)
Week – 4	Steel and wrought alloys (LO=101-112)	Casting (LO=68-71)	Casting (LO=72-74)
Week – 5	Requirements of impression materials (LO=125-129)	Requirements of impression materials (LO=130-133)	Non- Elastic impression materials (LO=134)
Week – 6	Non- Elastic impression materials (LO=134)	Non- Elastic impression materials (LO=135)	TEST (LO=75-135)
Week – 7	Elastic impression materials (LO=136)	Elastic impression materials (LO=137)	Elastic impression materials (LO=138-139)
Week –8	Elastic impression materials (LO=140-141)	Elastic impression materials (LO=142)	Elastic impression materials (LO=143)
Week -9	Synthetic Elastomers (LO=144-147)	Synthetic Elastomers (LO=148-150)	Synthetic Elastomers (LO=151-156)
Week -10	Ceramics (LO=113-116)	Ceramics (LO=117-120)	Ceramics (LO=121-124)
Week -11	Revision	Revision	Revision
Week –12	Revision	Revision	Revision
Week-13	Theory Examination		
Week-14	Viva Examination		

Weekly schedule of Module V PHARMACOLOGY			
Week Number	Lecture 1	Lecture2	Lecture 3
Week- 1	Antihypertensive drugs-1 (LO=157)	Antihypertensive drugs-2 (LO=157)	Diuretics-1 (LO=157)
Week- 2	Diuretics-2 (LO=157)	Drugs used in CCF (LO=158)	Antiarrhythmic drugs-1 (LO=158)
Week- 3	Antiarrhythmic drugs-2 (LO=158)	Antiarrhythmic drugs-3 (LO=158)	Antiarrhythmic drugs-4 (LO=158)
Week- 4	Antianginal drugs (LO=158)	Antianginal drugs (LO=158)	Thrombolytic & Antiplatelet (LO=159)
Week- 5	Oral anticoagulants (LO=159)	Parenteral anticoagulants (LO=159)	Emetics and Antiemetics (LO=160)
Week- 6	Antidiarrheal drugs and purgatives (LO=160)	IBD & Prokinetics (LO=162)	Penicillins (LO=163)
Week- 7	Cephalosporin (LO=164)	Tetracyclines (LO=165)	Aminoglycosides (LO=166)
Week- 8	Macrolides (LO=167)	Chloramphenicol (LO=168)	sulfonamides (LO=169)
Week- 9	Fluoroquinolones (LO=170)	Antituberculous drugs (1 st Line) (LO=173)	Antihyperlipidemic (LO=179)
Week- 10	Anticancer-1 (LO=176)	Anticancer-2 (LO=177)	Antiviral drugs-1 (LO=175)
Week- 11	Antiviral drugs-2 (LO=175)	REVISION	REVISION
Week-12	REVISION	REVISION	REVISION
Week-13	Theory Examination		
Week -14	Viva Examination		

Weekly schedule of Module V		
DEPARTMENT OF PATHOLOGY		
Week no.	Lecture 1	Lecture 2
Week – 1	Thrombosis(LO=195)	Gram Positive cocci and Staphylococcus (LO=192)
Week – 2	Thrombosis 2 (LO=195)	Streptococcal Infections (LO=193)
Week – 3	Embolism (LO=195)	Spores, resistance and incubation; Clostridium Species (LO=199)
Week – 4	Infarction (LO=186)	Classification of spore forming and Non Spore Forming Bacteria; Diphtheria (LO=200)
Week – 5	Shock (LO=204)	Gram Neg Rods and Lactose fermenting Rods; Features and Pathogenesis E.Coli (LO=203)
Week – 6	Nomenclature of neoplasia (LO=205-206)	Salmonella (LO=208)
Week – 7	Characteristics of benign and malignant Tumors (LO=205,206,209)	Pseudomonas (LO=210)
Week –8	Carcinogenesis(LO=212)	Basic Structure and classification of medically important viruses (LO=214)
Week -9	Tumor immunity(LO=215)	Influenza Virus (LO=216)
Week -10	Clinical features of tumor (LO=205)	Viral Hepatitis (LO=218,219,220)
Week -11	Tumor marker (LO=224)	HIV (LO=222)
Week –12	REVISION	REVISION
Week-13	Theory Examination	
Week-14	Viva Examination	

Commencement of Module V		Prosthodontics	
Activity	Week	Laboratory Session	Tutorial Session
Pre- Clinical Academic Session – BDS Second Professional	1.	Upper posterior teeth setup- Demonstration 246-248	Upper posterior teeth setup- Practice session
	2.	Lower posterior teeth setup- Demonstration 249	Lower posterior teeth setup- Practice session
	3.	Carving and festooning- Demonstration 250,251	Laboratory work
	4.	Investment, Packing and curing- Laboratory work	Prosthetic treatment modalities- Introduction to RPD <i>Pre reading, Pre-assessment, Lecture, Post – assessment</i> 252-259
	5.	Finishing and polishing- Laboratory work	Prosthetic treatment modalities- Introduction to FPD <i>Pre reading, Pre-assessment, Lecture, Post – assessment</i> 260-268
	6.	Laboratory work	Summative class assessment

Weekwise schedule of Module V Pre- Clinical Operative Dentistry		
Week no.	Tutorials (Group A & B)	Skill Lab (Group A & B)
W/1	<ul style="list-style-type: none"> • Introduction of Conservative/Operative Dentistry • Nomenclature of dentition & tooth numbering system (LO 1-4) 	<ul style="list-style-type: none"> • Identify hand & Rotary Instruments with their function (LO 5-9)
W/2	<ul style="list-style-type: none"> • Describe Components of patient history • Documentation of history of patient (LO 10-14) 	<ul style="list-style-type: none"> • Identify the parts of dental unit • Demonstrate about positioning the patients and the dentist in operatory (LO 15-17)
W/3	<ul style="list-style-type: none"> • Define Dental caries • Black & Graham Mount Classification of dental caries (LO 18-21) 	<ul style="list-style-type: none"> • Demonstration of matrix band application (LO 22,23,24a, b)
W/4	<ul style="list-style-type: none"> • Discuss Steps for Class I cavity preparation (LO 25-26) 	<ul style="list-style-type: none"> • Practice matrix band application • Use of lead apron & thyroid collar for X-ray taking (LO22,23,24)
W/5	<ul style="list-style-type: none"> • Discuss Cavity liners and bases (LO 29) 	<ul style="list-style-type: none"> • Demonstration of Class I cavity preparation (LO 25-26)
W/6	<ul style="list-style-type: none"> • Explain Steps for amalgam placement in Class 1 cavity (LO 27-28) 	<ul style="list-style-type: none"> • Practice of Steps of Class I cavity preparation (LO 25-26)

MODULE VI

	COMMUNITY & PREVENTIVE DENTISTRY	Teaching Method	Online Learning	Assessment Mode
	Behavioral Science			
1.	Define child psychology, human personality	IL	✓ ✓	BCQs, SAQs, Viva
2.	Discuss theories involved in personality development	IL	✓	BCQs, SAQs, Viva
3.	Discuss Freud developmental stages of personality	IL	✓	BCQs, SAQs, Viva
4.	Discuss developmental theory by Erik Erikson	IL	✓	BCQs, SAQs, Viva
5.	Discuss behavior learning theories	IL	✓	BCQs, SAQs, Viva
6.	Discuss classification of operant conditioning	IL	✓	BCQs, SAQs, Viva
7.	Explain different behavior management techniques	IL, PBL	✓	BCQs, SAQs, OSPE, Viva, PBL
	Research Methodology			
8.	Define statistics and biostatistics	IL,	✓	BCQs, SAQs, OSPE, Viva
9.	Classify different types of research variables with examples	IL,	✓	BCQs, SAQs, OSPE, Viva,
10.	Describe measures of central tendency	IL	✓	BCQs, SAQs, Viva,
11.	Describe measures of dispersion	IL	✓	BCQs, SAQs, Viva,

12.	Understand tests of significance	IL	✓	BCQs, SAQs, Viva,
13.	Describe frequency distribution	IL	✓	BCQs, SAQs, OSPE, Viva,
14.	Explain the concept of sampling error and types of error	IL,	✓	BCQs
15.	Describe confidence interval and probability	IL,	✓	BCQs, SAQs, Viva,
16.	Implement the Dental Health Education program	FV	×	Assign
17.	Evaluate the Dental Health education promotion program	FV	×	Assign
18.	Write Research draft (Results, discussion, conclusion)	SGD	✓	Assign
DENTIST-PATIENT COMMUNICATION				
19.	Recognize the dentist-patient communication and its benefits	IL		BCQs, SAQs, OSPE, Viva
20.	Discuss why good communication is important	IL		BCQs, SAQs, OSPE, Viva
21.	Explain the impact of good communication on patient's compliance	IL, PBL		BCQs, SAQs, OSPE, Viva, PBL
22.	Explain the impact of good communication on patient's anxiety reduction	IL, PBL		BCQs, SAQs, OSPE, Viva, PBL
23.	Explain the impact of good communication on patient's treatment outcome	IL, PBL		BCQs, SAQs, OSPE, Viva, PBL
24.	Discuss different models of dentist patient communication	IL		BCQs, SAQs, OSPE, Viva
25.	Describe the 3 different components of interpersonal communication (verbal , paralinguistic and non-verbal)	IL		BCQs, SAQs, OSPE, Viva
26.	Identify different zones of interaction in workplace	IL		BCQs, SAQs, OSPE,

				Viva
27.	Identify key skills of communication (active listening, information giving, positive negative talk, partnership, social conversation, art of listening & questioning, counseling,)	IL		BCQs, SAQs, OSPE, Viva
28.	Discuss dentist patient communication during examination and treatment	SGD		BCQs, SAQs, OSPE, Viva
29.	Discuss how to deal a crises and conflict situations in health setup	IL		BCQs, SAQs, OSPE, Viva
30.	Explain the use of informational care in a health setup	IL		BCQs, SAQs, OSPE, Viva
31.	Evaluate structure process and outcome of a good patient dentist communication setup	IL		BCQs, SAQs, OSPE, Viva
SCIENCE OF DENTAL MATERIALS				
32.	Differentiate between direct and indirect restorations and give examples	IL	✓	BCQs, SAQs, Viva OSPE
33.	Enumerate the requirements of direct filling materials	IL	✓	SAQs
34.	Discuss composition of dental amalgam	IL	✓	BCQs, SAQs, Viva
35.	Classify dental amalgam on basis of copper content, zinc content, shape of the alloy particle, number of alloy metals, and size of alloy	IL	✓	BCQs, SAQs, OSPE, CQ
36.	Discuss manufacture of alloy powder	IL	✓	SAQs, Assign
37.	Differentiate between amalgamation and trituration	IL	✓	BCQs, SAQs, OSPE, Assign
38.	Explain the setting reaction of amalgam (Y phases).	IL	✓	BCQs, SAQs, Assign, Viva
39.	Enlist the properties of amalgam.	PBL	✓	BCQs, SAQs, Viva, PBL
40.	Define creep, tarnish and corrosion	PBL	✓	SAQs, OSPE, PBL, Viva

41.	Discuss clinical handling of dental amalgam	IL	✓	BCQs, SAQs, OSPE, Viva
42.	Discuss its manipulative variables including selection of materials, proportioning and dispensing, trituration , mulling , condensation, shaping and finishing	IL, VD	✓	BCQs, SAQs, OSPE, Viva
43.	Discuss zinc free alloys	IL	✓	SAQs, Viva
44.	Outline uses of dental amalgam	PBL	✓	BCQs, SAQs, OSPE, Viva, PBL
45.	Compare dental amalgam with composite restorative materials	IL	✓	BCQs, SAQs, Viva
46.	Discuss 'amalgam controversy'	IL	✓	SAQs
47.	Discuss the previous use of silicate and acrylic resin as permanent filling materials	IL	✓	BCQs, SAQs, Viva
48.	State the classification of composite resin according to the type of monomer, filler size and content, modes of activation and viscosity	IL	✓	BCQs, SAQs, Viva
49.	State the composition, properties and use of self-cured composite	IL	✓	BCQs, SAQs
50.	State the composition, properties and use of light activated composite resin	IL	✓	BCQs, SAQs, Viva, Assign
51.	Discuss the different light systems used for activation of composite resin	IL	✓	SAQs
52.	Discuss the various types of composites based on filler content and size	IL	✓	SAQs, OSPE
53.	Discuss the effect of filler size and content on properties of composite	IL	✓	BCQs, SAQs, OSPE, Viva.
54.	Discuss the clinical application of various types of composite resin	IL	✓	BCQs, SAQs, OSPE, Viva.
55.	Explain the properties of resin based composites including biocompatibility, setting characteristics, polymerization shrinkage ,thermal properties, mechanical properties, surface hardness ,appearance, adhesion/bonding	PBL	✓	BCQs, SAQs, OSPE, Viva, PBL, Assign
56.	Discuss factors affecting depth of cure	IL	✓	BCQs, SAQs, Viva

57.	Discuss compensation for polymerisation shrinkage	IL	✓	BCQs, SAQs, OSPE, Viva
58.	Describe C-factor	IL	✓	BCQs, SAQs, PBL, Viva
59.	Discuss fiber reinforcement of composite structures and their use	IL	✓	BCQs, SAQs, Viva.
60.	Differentiate between finishing and polishing	IL	✓	BCQs
61.	Discuss the benefits of finishing and polishing	IL	✓	BCQs, SAQs
62.	Discuss instruments used for finishing and polishing of composite restorations Enlist types of abrasives	IL	✓	BCQs, SAQs, OSPE, Viva.
63.	Discuss immediate and delayed finishing	IL	✓	BCQs, SAQs
64.	Discuss variables which may affect the finishing and polishing of composite restoration	IL	✓	BCQs, SAQs, Viva
65.	Understand manipulation of light-cured composites through a video demonstration	VD	✓	PW
66.	Briefly discuss acid etch systems.	IL	✓	BCQs, SAQs, OSPE, Viva, Assign
67.	Describe enamel etching.	IL	✓	BCQs, SAQs, OSPE, Viva
68.	Explain applications of acid etch technique.	IL	✓	SAQs, OSPE, Viva.
69.	Explain dentine bonding.	IL	✓	BCQs, SAQs, OSPE, Viva.
70.	Explain hybrid layer.	IL	✓	BCQs, SAQs, Viva.
71.	Define smear layer.	IL	✓	SAQs, Viva.
72.	Understand chemical structure of enamel and dentine.	IL	✓	BCQs, SAQs, Viva
73.	Differentiate between primer and bonding agent.	IL	✓	BCQs, SAQs,

				OSPE
74.	Discuss the generations of bonding systems	IL	✓	BCQs, SAQs, Viva
75.	Compare and contrast total etch method and self-etching primer method	IL	✓	BCQs, SAQs
76.	Discuss dry and wet bonding	IL	✓	BCQs, SAQs, OSPE
77.	Understand and discuss bonding to alloys, amalgam and ceramics.	IL	✓	BCQs, SAQs
78.	Briefly discuss bond strength resin with enamel and dentine	IL	✓	BCQs, SAQs, Viva.
79.	Enlist the composition of conventional glass ionomer restorative material	IL	✓	BCQs, SAQs
80.	Discuss its the setting reaction ,properties and uses	IL	✓	BCQs, SAQs, Viva
81.	Discuss Cermets.	IL	✓	BCQs, SAQs, Viva
82.	Discuss the sandwich technique and its applications.	IL	✓	BCQs, SAQs, Viva
83.	Discuss ART	IL	✓	BCQs, SAQs, Viva
84.	Compare glass ionomers with composite restorative materials	IL	✓	BCQs, SAQs, Viva
85.	Discuss resin modified glass ionomers.	IL	✓	BCQs, SAQs
86.	Enlist its composition and properties.	IL	✓	SAQs, CQ
87.	Outline their clinical applications and handling	IL, VD	✓	BCQs, SAQs
88.	Discuss giomers and compomers	IL	✓	BCQs, SAQs, CQ, Viva
89.	Compare and contrast conventional glass ionomers with resin modified	IL	✓	SAQs, OSPE, Viva
90.	Explain the need for temporization	IL	✓	BCQs, SAQs
91.	Enlist the requirements for temporary crown and bridge resins	IL	✓	SAQs, Viva
92.	Discuss the types, composition and properties of temporary crown and bridge resins	IL	✓	BCQs, SAQs, Viva.

93.	Explain direct and indirect technique for making temporary crown and bridge	IL	✓	SAQs, OSPE, Viva.
94.	State the uses of dental cements and give examples	IL	✓	BCQs, SAQs, OSPE, Viva.
95.	Differentiate between a liner and base	IL	✓	BCQs, SAQs, OSPE, Viva.
96.	Discuss the requirements of cavity liner/base	IL	✓	BCQs, SAQs, OSPE, Viva.
97.	Discuss the requirements of luting cement	IL	✓	BCQs, SAQs, OSPE, Viva.
98.	State the requirements of endodontic cements	IL	✓	BCQs, SAQs, Viva
99.	State the requirements of orthodontic cements	IL	✓	BCQs, SAQs, OSPE, Viva.
100.	Enlist cements based on phosphoric acid.	IL	✓	SAQs
101.	Enlist the composition ,properties and uses of zinc phosphate cements	IL	✓	BCQs, SAQs, Viva
102.	Discuss silicophosphate cements.	IL	✓	SAQs, Viva.
103.	Discuss copper cements	IL	✓	BCQs, SAQs
104.	Enlist cements based on organometallic chelate compounds.	IL	✓	SAQs, Viva.
105.	Classify zinc oxide eugenol cements.	IL	✓	SAQs, OSPE
106.	Enlist the composition, properties and uses zinc oxide eugenol cements.	IL	✓	BCQs, SAQs
107.	Discuss ortho-ethoxybenzoic acid (EBA) cements.	IL	✓	BCQs, SAQs
108.	Enlist the composition, properties and uses of calcium hydroxide cements	IL	✓	BCQs, SAQs, Viva
109.	Explain pulp capping	PBL	✓	BCQs, SAQs, OSPE, Viva, PBL
110.	Discuss the composition, properties and uses of polycarboxylate cements	IL	✓	SAQs, Viva

111.	Discuss the composition, properties and uses of glass ionomer cements	IL	✓	BCQs, SAQs, OSPE, Viva
112.	Discuss the composition, properties and uses of resin modified glass ionomer cement	IL	✓	BCQs, SAQs, OSPE, Viva
113.	Compare and contrast dental cements belonging to different groups	IL	✓	BCQs, SAQs
114.	State the objectives of endodontics	IL, SGD	✓	BCQs, SAQs, OSPE, Viva.
115.	List the different materials used during endodontic treatment	IL, SGD	✓	BCQs, SAQs, OSPE, Viva.
116.	State ideal requirements for lubricants and irrigants and give examples	IL, SGD	✓	BCQs, SAQs, OSPE, Viva.
117.	Discuss intracanal medicaments	IL, SGD	✓	BCQs, SAQs, OSPE, Viva.
118.	Discuss sealants and their properties	IL	✓	CQs, OSPE
119.	Discuss bulk filling materials in endodontic treatment	IL	✓	CQs, OSPE, Viva
120.	Classify dental implants	IL	✓	BCQs, OSPE, Viva
121.	Enlist materials for dental implants	IL	✓	BCQs, OSPE, Viva
122.	State uses of dental implants	IL	✓	BCQs, OSPE, Viva.
123.	Discuss advantages and disadvantages of dental implants	IL	✓	OSPE, Viva.
124.	Explain osteointegration	IL	✓	OSPE.
125.	Discuss biocompatibility of dental implants	IL	✓	OSPE.
	PATIENT SAFETY			
126.	Discuss 'amalgam controversy'	IL	✓	SAQs
127.	Outline the safety concerns regarding mercury in dental amalgam and its potential hazards.	IL	✓	BCQs, SAQs,

				Viva.
	COMMUNICATION SKILLS/Professionalism			
128.	Outline uses of dental amalgam	PBL	✓	BCQs, SAQs, OSPE, Viva, PBL
129.	Explain pulp capping (Poster, Oral Presentation and PBL)	PBL	✓	PBL, Viva, SAQs.
	PHARMACOLOGY			
130.	Present a detailed account of mechanism of action, clinical uses and adverse effects of benzodiazepines & barbiturates	IL	✓	BCQs, SAQs, Viva
131.	Describe the mechanism and adverse effects of various groups of anti-epileptic drugs	IL	✓	BCQs, SAQs, Viva
132.	Discuss mechanism of action of general anesthetic agents	IL, Assignmen t	✓	BCQs, SAQs, Viva
133.	Explain merits, demerits and adverse effects of intravenous and inhalational anesthetic agents	IL, Assignmen t	✓	BCQs, SAQs, Viva
134.	Present the pharmacokinetics and pharmacodynamics of local anesthetic drugs	IL, SGD	✓	BCQs, SAQs, Viva
135.	Describe the mechanism, uses and adverse effects of skeletal muscle relaxants	IL	✓	BCQs, SAQs, Viva
136.	Present pharmacokinetics and pharmacodynamics of important anti-parkinsonian drugs	IL	✓	BCQs, SAQs, Viva
137.	Describe mechanism, uses and adverse effects of antipsychotic drugs and lithium	IL	✓	BCQs, SAQs, Viva
138.	Classify the various antidepressant drug groups according to their mechanism of action and discuss pharmacological details	IL	✓	BCQs, SAQs, Viva
139.	Describe the pharmacological properties, uses and adverse effects of alcohol	IL	✓	BCQs, SAQs, Viva
140.	Describe the mechanism of action, uses and adverse effects of CNS stimulants	IL	✓	BCQs, SAQs, Viva
141.	Discuss the pharmacological properties and uses of anti-thyroid drugs	IL,SGD	✓	BCQs, SAQs, Viva

142.	Describe the mechanism of action and adverse effects of female sex hormones	IL	✓	BCQs, Viva
143.	Recall the clinical uses of female sex hormones	IL	✓	BCQs, Viva
144.	Briefly explain the mechanism of action, clinical uses and adverse effects of male sex hormones	SGD	✓	BCQs, Viva
145.	Describe the pharmacokinetics and pharmacodynamics of oral anti-diabetic drugs	IL, Assignment	✓	BCQs, SAQs, Viva
146.	Discuss parenteral drug treatment of diabetes mellitus in detail	IL, Assignment	✓	BCQs, SAQs, Viva
147.	Develop a basic understanding of pharmacogenetics	IL	✓	BCQs, Viva
148.	Reproduce the pharmacological properties of parathyroid hormone	SGD	✓	BCQs, Viva
149.	Give a thorough account of the pharmacological properties of antifungal drugs	IL	✓	BCQs, SAQs, Viva
150.	Explain the mechanism of action, clinical uses and adverse effects of anti-protozoal drugs	IL, SGD	✓	BCQs, SAQs, Viva
151.	Interpret the effects of lignocaine and procaine on the legs of frog	Lab skills	✓	OSPE, JV
152.	Identify the slides and write down the treatment of the causative Helminth / Protozoa	Lab skills	✓	OSPE, JV
153.	Identify and write down the characteristics of the given Pharmacognosy specimen	Lab skills	✓	OSPE, JV
154.	Interpret the effect of strychnine and picrotoxin on the CNS of frog	Lab skills	✓	OSPE, JV
155.	Identify parts of a prescription order	Lab skills	✓	OSPE, JV
156.	Write down prescriptions for different diseases	Lab skills	✓	OSPE, JV
	PATHOLOGY			
157.	Illustrate the immune responses with the help of flow diagram	ILD		BCQ
158.	Describe the role of antibodies and complement system in immune responses.	ILD		BCQ/SAQ
159.	Comprehend the role of MHC in transplant rejection	ILD		BCQ/SAQ
160.	Relate the loss of central and peripheral tolerance to the development of different autoimmune diseases and the subsequent clinical effects	SGD		SAQ/BCQ

161.	Classify the immunodeficiency disorders on the basis of deficiency of major immune components and clinical consequences	SGD		BCQ/SA Q
162.	Compare hypersensitivity reactions (type I, type II, type III, and type IV) on the basis of underlying mechanism along with relevant examples.	SGD		SAQ/BC Q
163.	Compare the different patterns of inheritance of single gene disorders,(i.e. autosomal dominant, autosomal recessive, X-linked dominant/recessive and Y- linked disorders)	ILD/SGD		BCQ/SA Q
164.	Differentiate between single gene disorders with atypical patterns of inheritance and Mendelian disorders on the basis of characteristics of inheritance	ILD		BCQ/SA Q
165.	Explain chromosomal disorders, involving autosomes and sex chromosomes, as regards to the underlying chromosomal abnormality, risk factors and clinical features	IL		SAQ/BC Q
166.	Interpret normal and abnormal karyotypes and describe them using shorthand system of notation.	IL		BCQ/SA Q
167.	Classify and discuss pathogenesis of medically important fungi	IL		BCQ
168.	Discuss clinical presentation and laboratory diagnosis of cutaneous, subcutaneous and opportunistic mycoses	IL		SAQ
169.	Classify parasites on the basis of different morphological structures and their site of infection	IL		BCQ/SA Q/OSCE
170.	Describe etiology, mode of transmission, pathogenesis, control and preventive strategies of common pathogens (Entamoeba Histolytica, giardia lamblia, cryptosporidium, trichomonas vaginalis)	IL		BCQ/SA Q
171.	Describe etiology, mode of transmission, pathogenesis, lab diagnosis and preventive measures of pneumocystis and toxoplasmosis	IL		BCQ/SA Q/AS
172.	Describe the etiology, mode of transmission, lab diagnosis and preventive measures of plasmodium.	IL		BCQ/SA Q
173.	Describe etiology, mode of transmission, lab diagnosis and preventive measures of leishmania.	SGD		BCQ/SA Q
174.	Describe the etiology, mode of transmission, lab diagnosis and preventive measures of Cestodes (Taenia).	IL		BCQ/SA Q
175.	Describe the etiology, mode of transmission, control and preventive strategies of Echinococcus Granulosis.	IL		BCQ/SA Q
176.	Describe the etiology, mode of transmission, pathogenesis, control and preventive strategies for intestinal nematodes (Entrobium, trichuris, Ascaris lumbricoides)	IL		OSCE/BC Q/SAQ

177.	Describe the etiology, mode of transmission, control and preventive strategies for parasitic diseases of public health importance: Ankylostomaduodenale.	IL		BCQ/SA Q
178.	Describe the etiology, mode of transmission, control and preventive strategies for parasitic diseases of public health importance: strongyloides.	SGD		SAQ/BC Q
179.	Identify histopathological features of papilloma	SGD		BCQ/AS
180.	Identify histopathological features of Basal cell carcinoma	SGD		SAQ/BC Q
181.	Identify histopathological features of malignant melanoma.	SGD		BCQ
182.	Identify histopathological features of squamous cell carcinoma	IL		BCQ
183.	Identify histopathological features of osteochondroma and osteosarcoma	IL		SAQ/BC Q
184.	Identify gross morphological features of Malignant melanoma	IL		BCQ
185.	Identify gross morphological features of osteosarcoma	IL		BCQ/SA Q
186.	Identify gross morphological features of adenocarcinoma pylorus	LAB SKILLS		OSCE/VI VA
187.	Identify gross morphological features of Malignant melanoma	LAB SKILLS		OSCE/VI VA
188.	Identify gross morphological features of Adenocarcinoma-rectum	LAB SKILLS		OSCE/VI VA
189.	Identify gross morphological features of squamous cell carcinoma cervix	LAB SKILLS		OSCE/VI VA
190.	Identify gross morphological features of angle of mouth	LAB SKILLS		OSCE/VI VA
191.	Discuss the pathogenesis and lab diagnosis of Candida albicans	LAB SKILLS		OSCE/VI VA
192.	Identify different parasites in stool examination	LAB SKILLS		OSCE/VI VA
193.	Discuss the pathogenesis and lab diagnosis of plasmodium in different stages of its development	LAB SKILLS		OSCE/VI VA
194.	Discuss the pathogenesis of Ascaris lumbricoides	LAB SKILLS		OSCE/VI VA
195.	Illustrate the immune responses with the help of flow diagram	LAB SKILLS		OSCE/VI VA
196.	Describe the role of antibodies and complement system in immune responses.	LAB SKILLS		OSCE/VI VA
197.	Comprehend the role of MHC in transplant rejection	LAB SKILLS		OSCE/VI VA
198.	Relate the loss of central and peripheral tolerance to the development of different autoimmune diseases and the subsequent clinical effects	LAB SKILLS		OSCE/VI VA
199.	Classify the immunodeficiency disorders on the basis of deficiency of major immune components and clinical consequences	LAB SKILLS		OSCE/VI VA

200.	Compare hypersensitivity reactions (type I, type II, type III, and type IV) on the basis of underlying mechanism along with relevant examples.	LAB SKILLS		OSCE/VI VA
201.	Compare the different patterns of inheritance of single gene disorders,(i.e. autosomal dominant, autosomal recessive, X-linked dominant/recessive and Y- linked disorders)	LAB SKILLS		OSCE/VI VA
202.	Differentiate between single gene disorders with atypical patterns of inheritance and Mendelian disorders on the basis of characteristics of inheritance	LAB SKILLS		OSCE/VI VA
	PRE-CLINICS- OPERATIVE DENTISTRY			
203.	Manipulate lining material/filling materials	SGD/Skill Lab	-	OSCE
204.	Demonstrate placement of lining on acrylic tooth	Skill Lab	-	OSCE
205.	Perform filling of Amalgam in Class I tooth cavities	Skill Lab	-	OSCE
206.	Illustrate steps of Class II Slot preparation	SGD/Skill Lab	✓	BCQs/SA Qs
207.	Prepare Class II Slot cavity on plaster models/ acrylic teeth in phantom lab	SGD/Skill Lab	-	BCQs
208.	Restore Class II Slot preparation with amalgam	SGD/Skill Lab	-	BCQs/SA Qs
209.	Discuss steps of Class II MO/DO/ MOD cavity design	SGD/Skill Lab	✓	OSCE
210.	Execute Class II MO/DO cavity design on plaster models/ acrylic teeth in phantom lab.	Skill Lab	-	BCQs/SA Qs/OSC E
211.	Perform Class II MOD cavity design on plaster models/ acrylic teeth in phantom lab.	Skill Lab	-	BCQs/SA Qs/OSC E
212.	Demonstrate restoration of Class II MO/DO/MOD preparation with amalgam	SGD/Skill Lab	-	BCQs/SA Qs
213.	Explain purpose of Acid Etching of Enamel/Dentin	IL/SGD	✓	BCQs /SAQs
	Demonstrate bonding to enamel and dentine	IL/SGD	✓	BCQs /SAQs
214.	Describe Composite as a restorative material	SGD	✓	BCQs /SAQs
215.	Discuss steps of Class III cavity preparation	SGD/Skill Lab	✓	BCQs /OSCE
216.	Propose steps of Class IV cavity preparation	SGD/Skill Lab	-	BCQs/SA Qs/OSC E

217.	Prepare Class III cavity on plaster models/ acrylic teeth in phantom lab.	Skill Lab	-	OSCE
	Prepare Class IV cavity design on plaster models /acrylic teeth in phantom lab	Skill Lab	-	OSCE
218.	Apply Etchant on the tooth cavities	SGD	✓	BCQs /SAQs
219.	Use bonding agent on the tooth cavities	SGD	✓	BCQs /SAQs
220.	Demonstrate how composite is placed in Class III/IV tooth cavities	Skill Lab	-	OSCE
221.	Perform the finishing and polishing of composite restoration	Skill Lab	-	OSCE
222.	Commination Skill			
223.	Presentation			
224.	Teaching strategies IL*= Interactive large group discussion SGD*= Small group discussion Skill Lab*= Phantom Lab	Assessment tools BCQs=Best choice questions SAQs= Short Assays Questions OSCE= Oral Structured & Clinical Exam		
Leadership and Management				
225.	Understand the concept of quality improvement in dental care.	SGD	✓	BCQs /SAQs
226.	Identify strategies for implementing and sustaining quality improvement initiatives in a dental practice.	SGD	✓	BCQs /SAQs
227.	Recognize ethical challenges in dental practice management.	SGD	✓	BCQs /SAQs
228.	Understand legal responsibilities related to patient care, employment, and business operations in a dental setting.	SGD	✓	BCQs /SAQs

ACADEMIC SCHEDULE

Department of Community & Preventive Dentistry

Department of Science of Dental Materials

Department of Pre-clinics (Prosthodontics and Operative Dentistry)

Department of Pharmacology

Department of Pathology

Weekly schedule of Module VI		
Community & Preventive Dentistry		
Week no.	Lecture 1	Lecture 2
Week – 1	Sociology I L.O (1-2)	Sociology II L.O (3-4)
Week – 2	Behaviour Management I L.O (10)	Behaviour Management II L.O (10)
Week – 3	Child psychology I L.O (8-9)	Child psychology II L.O (8-9)
Week – 4	Stress/ Anxiety L.O (5-6)	Delay in seeking help L.O (7)
Week – 5	Community Field Trip	
Week – 6	Patient dentist communication L.O (23-35)	Class assessment test
Week – 7	Introduction to biostatistics L.O (11-13)	Types of sampling I L.O (19)
Week –8	Types of sampling II L.O (19)	Measures of Central Tendency/ dispersion L.O (14, 15, 17, 19)
Week -9	Community Field Trip	
Week -10	Tests of significance L.O (16)	Concept of sampling error L.O (18)
Week -11	Revision	Revision
Week –12	Revision	Revision
Week –13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

Weekly schedule of Module VI Science of Dental Materials			
Week no.	Lecture 1	Lecture 2	Lecture 3
Week – 1	Requirements of direct filling materials (LO=36)	Requirements of direct filling materials (LO=37)	Dental Amalgam (LO=38-40)
Week – 2	Dental Amalgam (LO=41-43)	Dental Amalgam (LO=44-46)	Dental Amalgam (LO=47-50)
Week – 3	Resin based filling materials (LO=51-56)	Resin based filling materials (LO=57-62)	Resin based filling materials (LO=63-69)
Week – 4	Adhesive restorative materials (LO=70-73)	Adhesive restorative materials (LO=74-77)	Adhesive restorative materials (LO=78-82)
Week – 5	GIC (LO=83-85)	GIC (LO=86)	GIC (LO=87-88)
Week – 6	Resin- modified GIC (LO=89-90)	Resin- modified GIC (LO=91-92)	Resin- modified GIC (LO=93)
Week – 7	Temporary crown and bridge (LO=94-95)	Temporary crown and bridge (LO=96-97)	TEST (36-97)
Week –8	Requirements of dental cement (LO=98-100)	Requirements of dental cement (LO=101-103)	TEST
Week -9	Cements based on phosphoric acid (LO=104-105)	Cements based on phosphoric acid (LO=106-107)	Cements based on organometallic chelate compounds (LO=108-110)
Week -10	Cements based on organometallic chelate compounds (LO=111-113)	Polycarboxylate cements (LO=114-115)	Polycarboxylate cements (LO=116-117)
Week -11	Endodontics (LO=118-123)	Endodontics (LO=124-129)	Revision
Week –12	Revision	Revision	Revision
Week-13	THEORY EXAMINATION		
Week-14	VIVA EXAMINATION		

Weekly schedule of Module VI PHARMACOLOGY			
Week no.	Lecture 1	Lecture 2	Lecture 3
Week – 1	Benzodiazepines (LO=134)	Barbiturates (LO=134)	Anti-epileptic drugs-1 (LO=135)
Week – 2	Anti-epileptic drugs-2 (LO=135)	General Anaesthetics-1 (LO=136)	General Anaesthetics-2 (LO=137)
Week – 3	General Anaesthetics-3 (LO=137)	Local Anaesthetics-1 (LO=138)	Local Anaesthetics-2 (LO=138)
Week – 4	Anti-Parkinsonian drugs-1 (LO=140)	Anti-Psychotic drugs-1 (LO=141)	Anti-Psychotic drugs-2 (LO=141)
Week – 5	Anti-depressant Drugs-1 (LO=142)	Anti-depressant Drugs-2 (LO=142)	Alcohol (LO=143)
Week – 6	Female sex hormones-1 (LO=146)	Female sex hormones-2 (LO=147)	Oral hypoglycemic drugs-1 (LO=149)
Week – 7	Oral hypoglycemic drugs-2 (LO=149)	Insulin-1 (LO=150)	Insulin-2 (LO=150)
Week –8	Pharmacogenetics (LO=151)	Anti-fungal drugs-1 (LO=153)	Anti-fungal drugs-2 (LO=153)
Week -9	Anti-malarial drugs (LO=154)	Anti-amebic drugs (LO=154)	Anti-thyroid drugs (LO=145)
Week -10	Skeletal muscle relaxants (LO=139)	CNS stimulants (LO=144)	Revision
Week -11	Revision	Revision	Revision
Week –12	Revision	Revision	Revision
Week –13	THEORY EXAMINATION		
Week-14	VIVA EXAMINATION		

Weekly schedule of Module VI		
DEPARTMENT OF PATHOLOGY		
Week no.	Lecture 1	Lecture 2
Week – 1	Immune response(LO=158)	HPV (herpes)(LO=157)
Week – 2	Cells of immune system(LO=159)	Introduction to Mycology(LO=170)
Week – 3	Hypersensitivity reactions type I &II(LO=148)	Candida Albicans(LO=170)
Week – 4	Hyper sensitivity reactions type – III & IV(LO=163)	EntamoebaHystolitica(LO=173)
Week – 5	Immune tolerance(LO=165)	Plasmodium (LO=174)
Week – 6	Auto immune disorders(LO-165)	Ascaris lumbricoides (LO=176)
Week – 7	Primary immune deficiency disorders(LO=166)	Mumps and Measles(LO=182)
Week –8	Secondary immune deficiency disorders(LO=166)	Leishmaniasis-I (LO=183,184)
Week -9	Single gene disorders-I(LO=169)	Leishmaniasis-II (LO=183,184)
Week -10	Single gene disorder –II(LO=169)	Other Protozoa of medical Importance (LO=175)
Week -11	Single gene disorders with atypical pattern of inheritance(LO=171,172)	Other Fungi of Medical importance (LO=167)
Week –12	REVISION	REVISION
Week –13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

Weekwise schedule of Module VI Pre- Clinical Operative Dentistry BDS Second Professional		
Week no.	Tutorials (Group A & B)	Skill Lab (Group A & B)
W/1	<ul style="list-style-type: none"> Discuss Steps for Class V cavity preparation (LO 29-34) 	<ul style="list-style-type: none"> Practice for amalgam placement in Class I cavity (LO 27-28)
W/2	<ul style="list-style-type: none"> Explain Steps of Class II Slot cavity Design (LO 35-36) 	<ul style="list-style-type: none"> Demonstrate steps of Class II Slot preparation for amalgam (LO 37)
W/3	<ul style="list-style-type: none"> Describe Restoration of Class II Slot preparation with amalgam (LO 37) 	<ul style="list-style-type: none"> Practice of Class II Slot preparation (LO 37)
W/4	Discuss Class II MOD cavity Design for Amalgam (LO 38-39)	<ul style="list-style-type: none"> Practice of Class II Slot preparation (LO 37)
W/5	<ul style="list-style-type: none"> Restoration of Class II MOD cavity Design for Amalgam (LO 38-39) 	<ul style="list-style-type: none"> Demonstrate Class II MO/DO /MOD cavities preparation (LO 40-41)
W/6	<ul style="list-style-type: none"> Explain Bonding to enamel and dentine & Composite as a restorative material (LO 42-44) 	<ul style="list-style-type: none"> Practice Class I, II, MOD cavities preparation (LO 25-39)
W/7	<ul style="list-style-type: none"> Discuss Steps of Class III and Class IV cavity preparation (LO 45-46) 	<ul style="list-style-type: none"> Practice Class I, II, MOD cavities preparation (LO 25-39)
W/8	Describe placement of composite Restoration (LO 52)	<ul style="list-style-type: none"> Demonstrate Class III cavity on plaster models & restore it with composite (LO 47-48)
W/9	<ul style="list-style-type: none"> Describe Finishing and polishing of composite Restoration (LO 52) 	<ul style="list-style-type: none"> Demonstrate how composite is placed in Class IV tooth cavities (LO 49-51)
W/10	Revision of cavity preparation (LO 25-51)	<ul style="list-style-type: none"> Revision of cavity preparation (LO 25-51)
W/11	Revision of cavity preparation (LO 25-51)	<ul style="list-style-type: none"> Revision of cavity preparation (LO 25-51)
W/12	Presentation competition (Group 1) (LO 53) Assessment of cavities design & its restoration	<ul style="list-style-type: none"> Presentation competition (Group 2) (LO 53) Assessment of cavities design & its restoration
Week –13	THEORY EXAMINATION	
Week-14	VIVA EXAMINATION	

LEARNING RESOURCES

DEPARTMENT OF COMMUNITY & PREVENTIVE DENTISTRY

1. Burt, B. & Eklund, S. (2005) Dentistry, Dental Practice & The Community. 6th ed. Saunders
2. SS Hiremath, (2009), textbook of Preventive and Community Dentistry
3. Daly B, Watt R, Batchelor P & Treasure E (2013) Essential Dental Public Health, Oxford University Press.
4. Smeeton Nigel (2012) Dental Statistics Made Easy 2nd edition Radcliffe Publication
5. Essential of Preventive and Community Dentistry Soben Peter (Latest Edition)
6. Text Book of Preventive and Community Dentistry Joseph John (Latest Edition)

DEPARTMENT OF SCIENCE OF DENTAL MATERIALS

7. Applied Dental Materials, John F McCabe (Latest Edition)
8. Philips Science of Dental Materials, Kenneth J. Anusavice (Latest Edition)
9. Sturdevant Art and Science of Operative Dentistry, Harald O Heyman, Edward J Swift.(Latest Edition)
10. Craig's Restorative Dental Materials, John M Powers Ronald L Sakaguchi. (Latest Edition)

DEPARTMENT OF OPERATIVE DENTISTRY

11. Joseph R Evans, John H Wilke. Atlas of Operative Dentistry: Preclinical and clinical procedures. Quintessence books Publishing Co.
12. Richard L Kahn, Pinkerton RJ, Kagihara LE. Fundamentals of Preclinical Operative Dentistry.
13. Pickardards Manual of Operative Dentistry by EAM Kidd.
14. Fundamentals of Operative Dentistry by Schwartz

15. Dental Restorative Materials – Craig

DEPARTMENT OF PHARMACOLOGY

16. Lazo JS & Parker. Goodman and Gillman's The Pharmacological basis of therapeutics 12th edition McGrawHillCompany,USA 2006.
17. Katzung BG, Masters SB & Trevor AJ. Basic and Clinical Pharmacology-Katzung 14th edition TATA McGrawHill Education Private Ltd, New Delhi 2009.
18. Finkel R Cubeddu L X, Clark MA, Harvey R & Champe P. Lippincott's Illustrated Reviews Pharmacology. 7th edition, Wolters Kluwer-Lippincott Williams & Wilkins New Delhi 2009.

DEPARTMENT OF PATHOLOGY

19. Peter D. Turnpenny, Emery's Elements of Medical Genetics (14thed.). New York: Churchill Livingstone. 2011.
20. Cotran RS, Kumar V and Collins T. Robbin's Pathologic Basis of Disease (8thed.). Philadelphia: W.B. Saunders. 2010.
21. Walter JB and Talbot IC. Walter and Israel's General Pathology (7thed.). New York: Churchill Livingstone. 1996.
22. Kumar V, Cotran RS, and Robbins SL. Basic Pathology (8thed.). Philadelphia: W.B. Saunders. 2007.
23. Rubin E, Pathology (4thed.) Philadelphia: Lippincott-Raven. 2005
24. Ivan Roitt. Riott's Essential Immunology (11thed.). New Delhi:I.K. International Pvt. Ltd. 2007.
25. Harsh Mohan. Textbook of pathology. 6th ed. Jaypee broth. 2010.

ATLAS:

26. Wheater P et al. Basic Histopathology: A Color Atlas and Text (2nded.). Edinburgh: Churchill Livingstone. 1990.
27. Harsh Mohan. Pathology practical book. 2nd ed. Jaypee broth. 2007.

Microbiology

28. Jawetz .medical microbiology.25th ed.2010 Lange/McGrawHill
29. Levinson W. Microbiology and Immunology: Review. 10th ed. 2009
Lange/TataMcGrawHill

30. Michael j pelczar .Microbiology.6th ed. TataMcGraw

31. Richard a harvey. Microbiology.lippincottillustrated review 2nd edition.

WEBSITES

Department of Community & Preventive Dentistry

<http://www.who.int/en/>

<http://www.nhs.uk/Pages/HomePage.aspx>

<http://www.ada.org/>

<http://www.bda.org>

Department of Pharmacology

www.studentcorner.com

www.drugs.com

www.pharmacology.com

www.medicalstudent.com

Department of Pathology

The internet pathology laboratory for medical education

library.med.utah.edu/WebPath/webpath.html

Microbiology

www.asm.org

BAHRIA UNIVERSITY DENTAL COLLEGE
2ND PROFESSIONAL BDS
12TH BATCH
ACADEMIC CALENDAR 2025

SESSION START:

30TH DECEMBER 2024 (MONDAY)

FOURTH MODULE (12 WEEKS):

MODULE START
MODULE ENDS

30TH DECEMBER 2024 (MONDAY)
21TH MARCH 2025 (FRIDAY)

THEORY AND OSCE EXAMINATION

24TH MARCH → 28TH MARCH 2025

EID UL FITR VACATIONS:

31ST MARCH → 4TH APRIL 2025

FIFTH MODULE (12 WEEKS):

PRE EID VACATION SESSION (9 WEEK)

MODULE START
MODULES BREAK

7TH APRIL 2025 (MON)
6TH JUNE 2025 (FRIDAY)

EID UL ADHA & SUMMER VACATIONS:

9TH JUNE → 20TH JUNE 2025

POST EID VACATIONS SESSION (3 WEEKS)

MODULE STARTS
MODULE ENDS

23RD JUNE 2025 (MON)
11TH JULY 2025 (FRIDAY)

THEORY AND OSCE EXAMINATION

14TH JULY → 18TH JULY 2025

SIXTH MODULE (12 WEEKS):

MODULE STARTS
MODULE ENDS

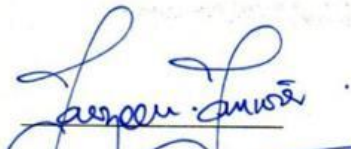
21ST JULY 2025 (MONDAY)
10TH OCT 2025 (FRIDAY)


THEORY AND OSCE EXAMINATION

13TH OCT → 17TH OCT 2025

FINAL EXAMINATION:

NOVEMBER/ DECEMBER 2025


PROF. DR. FARZEEN TANVIR
VICE PRINCIPAL DENTAL COLLEGE


PROF. DR. KASHIF NAQVI
PRINCIPAL DENTAL COLLEGE