

BAHRIA UNIVERSITY DENTAL COLLEGE BUHSC-(K)





First Year BDS
Batch XIII
STUDY GUIDE

FROM THE DESK OF PRINCIPAL

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Consultant Oral and Maxillofacial Surgeon

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
СР	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
НО	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
PMDC	Pakistan Medical & Dental Council
PPT	Power Point Presentation
PW	Practical work
QEC	Quality Enhancement Cell
SC	Short case
SEQS	Short Essay Questions
SGD/S	Small Group Discussion/Session
SGIS	Small Group Interactive Session
Skill Lab	Phantom Lab
SS	Self -Study
Viva	Viva
VD	Visual Display



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	MENTORING AND COUNSELING

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	Penalty	Awarding Authority	Appellate
Code			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 cafeteria 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:

- a) Unauthorized use of University's name or logo which is property of university.
- b) Harassment, sexual or otherwise, or intimidation of any member of university.
- c) Coming late for classes. The student may be considered absent and marked accordingly.
- d) Improper/inappropriate dress
- e) Loud and aggressive behavior in Cafeteria or Common rooms or within the premises of BUHS or PNS Shifa.
- f) 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	Penalties
1st occasion of offence on act of	Fine of Rs.5000/- along with warning letter with copy
smoking.	to parents from Director Campus
2nd or onward occasion of offense(s).	Fine of Rs.10,000/- along with warning letter (s) with
	copy to parents from DG Campus on each offence.

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	Minor punishment
contents of question papers through unfair	a Warning letter (Copy to parents)
means prior to examination	b. Fine of Rs.2,000.
	Major punishment
	a. Expulsion from the University
	b. Fine Rs. 5000/00.
	c. Letter to parents
Possession of written material, relevant to	a. Grade 'F' in the subject.
the subject/paper concerned.	b. Fine Rs.5,000.
• Writing on palm, arm or anywhere on the	c. Warning, copy to parents.
candidate's body or clothes whether the	d. Mobile phones/electronic devices to be
written material is relevant or irrelevant to	confiscated. (will be returned after

the concerned paper.	investigation
Possession of Mobile phones, Smart	
watches, PDAs and other electronics	
devices, whether or not carrying any	
relevant or irrelevant material in the	
memory.	
Giving/receiving assistance or allowing any	Minor Punishment
other candidate to copy from his/her answer	a. Cancellation of the relevant paper.
books.	b. Fine Rs.2,000/
	c. Letter of Warning.
	Major Punishment
	a. Grade 'F' in the subject.(for students
	involved)
	b. Fine Rs.5,000/-
	c. Letter of Warning.
Removing a leaf from answer book.	a. Grade "F" in the subject. (for students
Taking the whole or a part of an answer	involved)
book or a continuation sheet into or out of	b. Fine Rs.5,000.
examination hall.	c. Letter of warning
Substituting the whole or a part of an	a. Grade 'F' in the subject. (For students
answer book or a continuation sheet not	involved)
duly issued to him for the examination;	b. Fine Rs.5,000.
	c. Letter of Warning.
Forging, mutilating, altering, erasing or	a. Grade "F" in the subject. (for students
otherwise tampering with marked answer	involved)
scripts	b. Fine Rs.5,000.
	c. Letter of Warning
Impersonation	a. Grade "F" in all subjects of relevant
	semester studied at BU (including the
	impersonator/facilitator, if a student of BU).
	b. Expulsion from the university (including

	the impersonator/ facilitator, if a student of
	BU).
	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, asper
	law of the land.
Using abusive or obscene language in	a. Grade 'F' in the relevant course.
answer book	b. Fine Rs.5,000.
	c. Letter of Warning.
Refusing to obey the Invigilator or Head	Minor Punishment
Invigilator in the Examination Hall and	a. Grade 'F' in the course.
misbehaving, resorting to misconduct, or	b. Fine Rs.5,000.
creating any kind of disturbance in or	c. Letter of Warning.
around the Examination Hall	Major Punishment
	a. Rustication for one Semester.
	b. Grade 'F' in the course.
	c. Fine Rs.5,000/
	d. Letter of Warning.
Communicating or attempting to	a. Cancellation of relevant paper.
communicate with Examiners with the	b. Fine Rs.5,000.
intention of influencing them in the award	c. Letter of Warning.
of marks.	
Possession of firearms, knives etc. inside	a. Expulsion from the University.
and in the close vicinity of Examination	b. Fine Rs.5,000.
Hall	c. Letter of Warning.

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	Cell 0300-2130868	
Vice Principal (Medical)	Phone: 021-35319491-9, Ext: 1038 & 1070	
	Email: khalid.bumdc@bahria.edu.pk	
	drkhaiidmm@yahoo.com	
Prof. Dr. Shazia Shakoor	Phone: 021-35319491-9, Ext: 1056	
HOD, Physiology	Email: shazia.bumdc@bahria.edu.pk	
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INQUIRY COMMITTEE		
Prof. Shama Asghar, Chairperson	Cell 0334-3078082	
Vice Principal, Dental	Phone: 021-35319491-9, Ext: 1121	
Professor of Operative Dentistry	Email: shama.bumdc@bahria.edu.pk	
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Prof. Dr. Nasim Karim	Cell m51774	
Principal, BUHS-PGI	Phone: 021-35319491-9, Ext: 1057 & 1072	

HOD Pharmacology	Email: nasimkarim.bumdc@bahria.edu.pk
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APPELLATE BODY	
Capt (R) Noaman Imam PN	Cell 0336-9369222
Director Campus	Phone: 021-35319491-9, Ext: 1001
Chairman	Email: dac.burndc@bahria.edu.pk
Dr. Farzeen Tanwir	Cell 0336-1802464
HOD Periodontology	Phone: 021-35319491-9, Ext: 1104
Member	Email: farzeentanwir21@ gmail.com
Dr. Saifullah Shaikh	Cell 0333-2279425
Assistant Professor, Physiology	Phone: 021-35319491-9, Ext: 1066
Member	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 though 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 feel that its needs to be complainant, 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 its violet 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 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 "resit".
- 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:
 - o CBL/PBL/WPBAs sessions
 - o Logbooks
 - o Presentations assignments
 - o End of OPD rotation examinations, quizzes and tests held in a department.

Summative Assessment:

- The end-of-module test comprises:
 - o 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).
- 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 Honors List will be displayed on BU / CU web page and Campus Notice Boards. 9.3.5.3 Rector's Honors List will be prepared and promulgated by the Examinations Dept, 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.
- 1. 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	Vice Principal (Dental)	
Officer		
Approving	Principal	
authority		
Next scheduled	To be reviewed on a periodic basis, with allowance for minor annual	
review	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 receives 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

4 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.

4 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.

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.

iv. 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.

v. 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.

vi. 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

vii. 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.

MENTORING & COUNSELLING SCHEDULE

MENTORS

HEAD MENTOR

- 1. Dr. Lubna
- 2. Dr. Maliha Naveed
- 3. Dr. Abdul Wasey
- 4. Dr. Maliha Arshad
- 5. Dr. Farah Irshad

PROF. DR. SYED AHMED OMER

Procedure:

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, third Thursday of the month, 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 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

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INTRODUCTION TO DEPARTMENTS

Department of Anatomy

Department of Physiology

Department of Biochemistry

Department of Oral Biology & Tooth Morphology

DEPARTMENT OF ANATOMY

The Department of Anatomy at Bahria Medical and Dental College comprises of well trained and experienced post-graduate faculty members. Since Anatomy is one of the basic science subjects, the teaching methodology adopted is unique and integrated with other subjects of basic sciences.

For student learning, the department includes spacious and well-equipped museum, dissection hall, histology laboratory, and a micro technique section.

Head of Department: Dr. Yasmeen Mahar Professor

Facilitators: Dr. Aisha Qamar Senior Professor

Dr. Quratul-Ain Javaid Senior Associate Professor

Dr. Ayesha Mehwish Assistant Professor
Dr. Saima Khalid Assistant Professor

Dr. Wajahat Hassib Assistant Professor
Dr. Javeria Awan Assistant Professor

Dr. Shahab Shafi Senior Lecturer

Dr. Bilal Yousuf Lecturer

Dr. Areeba Younus Lecturer

Dr. Mahail Khan Lecturer

Dr. Sara Saeed Lecturer

Dr. Arooba Akram Lecturer

DEPARTMENT OF PHYSIOLOGY

Human Physiology is a branch of medicine that deals with the study of the functions of human body. It is intimately related with human anatomy, biochemistry, pharmacology, pathology, behavioral sciences, and is the mother of medicine.

The physiology laboratory is very well equipped with the latest and modern gadgets, apparatus and instruments like Power Lab, spirometer, stethograph, binocular microscopes, ophthalmoscope, centrifuge and ECG machine etc. The lab is also provided with overhead projectors and multimedia facilities for conduction of tutorials and practicals. The lab staff is also highly experienced and well trained.

Head of Department:	Prof. Dr. Shazia Shakoor	Professor
Facilitators:	Prof. Dr. Sheikh Abdul Saeed	Professor
	Prof. Dr. Saifullah Sheikh	Professor
	Prof. Dr. Irum Amir	Professor
	Dr. Hina Moazzam	Associate Professor
	Dr. Sana Akbar	Senior Lecturer
	Dr. Faryal Zaidi	Lecturer

DEPARTMENT OF BIOCHEMISTRY

Biochemistry is the science concerned with the chemical basis of life. The key objective of biochemistry is to learn molecular basis of all biochemical process and correlate it with clinical subjects. Biochemistry encompasses large areas of cell biology, molecular biology, and molecular genetics. The knowledge of biochemistry is essential to all life sciences. Health depends on a harmonious balance of biochemical reactions occurring in the body, and disease reflects abnormalities in biomolecules, biochemical reactions, and biochemical processes. Biochemical approaches are often fundamental in illuminating the causes of disease and in designing appropriate therapies.

Biochemistry department has well experienced, qualified and enthusiastic faculty. It has spacious laboratory and one preparation room. The laboratory is well equipped with modern gadgets and fine glassware. Teaching strategies as per PMDC guidelines based on lectures, problem based learning

(PBL), and case based sessions, tutorials seminars and practical's.

Head of Department:	Dr. Hasan Ali	Senior Professor
Facilitators:	Dr. Sadia Rehman	Asst. Professor
	Dr. Zara Sami	Asst. Professor
	Dr Raheela Rafique	Lecturer
	Dr. Afsheen Zehra	Senior Lecturer
	Dr. Misbah Riaz	Senior Lecturer
	Dr. Tayyaba	Lecturer
	Dr. Madiha Fiaz	Lecturer

DEPARTMENT OF ORAL BIOLOGY AND TOOTH MORPHOLOGY

Oral Biology deals with the study of the oral and craniofacial tissues along with the application of basic scientific knowledge to oral tissues in health and diseased state. Our mission is to create a strong foundation of the basic structure of oral tissues on which students an further build up their forthcoming years of dental education. We meet the contemporary educational standards and create a positive learning environment by employing innovative integrated curriculum including thematic teaching strategy, lectures on multimedia, and educational videos. Interactive sessions are advocated to improve comprehension of students and to fortify their skills of communication and self-expression. The laboratory is fully equipped with microscopes for visualizing histological sections of oral tissues, along with tooth models to further enhance their skills on identification of individual teeth

FACULTY

Head of Department: Dr. Beenish Fatima Alam Associate Professor

Facilitators: Dr. Madiha Anwar Assistant Professor

Dr. Raima Bashir Assistant Professor

Dr. Sumbul Mukhtar Lecturer

Module I

	ANATOMY	Mode of Teaching	Online Learning	Mode of Assessment
1.	Describe the basic structure of cell	IL	√ ·	BCQs
2.	Describe the different types of organelles and inclusion bodies	IL	√	BCQs
3.	Describe the surface modification of cell	IL	√	BCQs
4.	Define the different types of cell junctional complex	IL / SGIS	~	BCQs
5.	Explain the cell cycle	IL	~	BCQs
6.	Differentiate between mitosis and meiosis	IL	✓	BCQs
7.	Identify the different stages of mitosis and meiosis	SGIS	✓	OSPE
8.	Discuss anatomical terms	IL/SGIS	✓	BCQs & OSPE
9.	Identify planes and sections with anatomical position of human body	BCQs & OSPE		
10.	Classify bones, joints, cartilages and muscles	cles IL/SGIS ✓		SEQS, BCQs, OSPE
11.	Introduction to nervous system	IL		BCQ
12.	Identify different parts of compound microscope	PW		OSPE
13.	Discuss the process of tissue processing	PW		BCQs
14.	Describe the microscopic features of epithelial tissues (squamous, cuboidal, columnar, and transitional)	IL	✓	SEQs, BCQs,OSPE
15.	Identify the epithelial tissues on a given slide (squamous, cuboidal, columnar andtransitional)	PW		SEQs, BCQs,OSPE
16.	Describe the microscopic features of connective tissues	IL	✓	SEQs, BCQs
17.	Identify the various types of connective tissue on a given slide	PW		OSPE
18.	Describe the microscopic features of skeletal, cardiac and smooth muscles	IL	✓	SEQS, BCQs
19.	Identify skeletal, cardiac and smooth muscles on a given slide	PW		OSPE
20.	Describe the microscopic features of different types of cartilage	IL	✓	SEQS, BCQs
21.	Identify the microscopic features of hyaline, elastic and fibrocartilage on a given slide	PW		OSPE
22.	Describe the microscopic features of compact and spongy bone	IL	✓	SEQS, BCQs

23.	Identify the microscopic features of compact and spongy bone on a given slide	PW		OSPE	
24.	Differentiate between gross and microscopic features of artery, vein and capillaries	IL	√	SEQS, BCQs	
25.	Identify the microscopic features of artery and vein	PW		OSPE	
26.	Describe the microscopic features of integumentary system	IL	√	BCQs, SEQs	
27.	Identify the microscopic features of integumentary system	PW		OSPE	
28.	Identify male and female genital organs	SGS		OSPE	
29.	Describe oogenesis and spermatogenesis	IL	√	SEQS, BCQs & OSPE	
30.	Discuss the uterine and ovarian cycle	IL	✓	BCQs	
31.	Describe the events of 1 st week of development	IL, TBL	✓	SEQS, BCQs& OSPE	
32.	Discuss the events of 2 nd week of development	IL/ SGIS	✓	SEQS & BCQs	
33.	Describe the events of 3 rd week of development	IL/ SGIS	✓	SEQS & BCQs	
34.	Identify different stages of zygote and 3 rd week of development on a given model				
35.	Discuss the fate of primitive streak and the related abnormalities	IL	√	SEQS & BCQs	
36.	Describe the 4th week of development	IL	✓	SEQS, BCQs	
37.	Describe the development of placenta	IL/ SGIS	✓	SEQS, BCQs, OSPE	
38.	Enlist events from 5th – 8th week of development	IL	✓	BCQs	
39.	Enlist the events of the Fetal period	IL	✓	BCQs	
40.	Describe the process and types of twin pregnancy and name the sites of ectopic pregnancy	IL/SGIS	✓	BCQS, OSPE	
41.	Discuss the factors causing Teratogenesis	IL	√	BCQS	
	PHYSIOLOGY				
42.	Describe the functional organization of human body.	IL/IS		SEQs, BCQs	
43.	Explain the concept of homeostasis and physiological control systems.	IL/IS		CQ	
44.	Differentiate between positive and negative feedback system with examples.	IL/IS		SEQs, BCQs	
45.	Calculate total body water and its distributions.	PW		OSPE	
46.	Explain briefly physical structure and organization of cell.	IL		SEQs, BCQs	
47.	Describe the structure and functions of a typical cell membrane.	IL		SEQs, BCQs	
48.	Define an organelle and discuss briefly the details of structure and functions of eachorganelle.	IL		CP, CQ	

49.	Explain the role of membrane proteins as channels, carriers, pumps, receptors and enzymes.	IL		SEQs, BCQs,
50.	Describe the various modes of transport across the membrane including osmosis, diffusion, facilitated		SEQs, BCQs	
	diffusion, active transport and bulktransport.			
51.	Distinguish excitable and non-excitable tissues.	IL	✓	SEQs, BCQs
52.	Explain briefly the structure and properties of nerve fiber.	IL		SEQs, BCQs
53.	Classify nerve fibers on the basis of conduction velocity, diameter, and myelination.	IL		SEQs, BCQs
54.	Discuss how resting membrane potential is established and maintained.	IS, SGS		SEQs, BCQs
55.	Explain different stages of generation of action potential in nerve fiber.	SGS		SEQs, BCQs
56.	Differentiate between graded potential and action potential.	IL		SEQs, BCQs
57.	Define synapse and classify its types.	IL	✓	SEQs, BCQs
58.	Describe neuromuscular junction and its disorders.	IL		SEQs, BCQs
59.	Describe mechanism of skeletal muscle contraction with special reference to slidingfilament theory.	IL, SGS		SEQs, BCQs
60.	Describe composition and function of blood & plasma proteins.	IL, PW	✓	OSPE
61.	Describe the salient features of RBC &Erythropoiesis.	SGS		SEQs, BCQs
62.	Define erythropoiesis and describe its various stages.	IL		SEQs, BCQs
63.	Explain iron metabolism, synthesis, and degradation of hemoglobin	IL	✓	SEQs, BCQs,PBL
64.	Define Anemias and classify its various causes and treatment.	IL		SEQs, BCQs,PBL
65.	Define white blood cells and classify its types.	IL	✓	SEQs, BCQs
66.	Define immunity. Classify its various types in detail.	IL		SEQs, BCQs
67.	Describe the characteristic features of blood platelets.	IL	✓	SEQs, BCQs
68.	Define hemostasis and describe extrinsic and intrinsic pathways of blood coagulation.	IL, PBL		SEQs, BCQs,
69.	Describe various types of blood groups.	IL		SEQs, BCQs
70.	Discuss blood transfusion and blood transfusion reactions.	SGS		OSPE, PBL
	BIOCHEMISTRY			
71.	Discuss the biochemical aspects of cell and biochemical composition of cell membrane.	IL, SGS	√	BCQs, SEQS
72.	Identify different types of instruments with their working.	PW	✓	OSPE
73.	Identify the laboratory hazards and their importance.	PW	✓	OSPE
74.	Discuss the cell organelles.	IL, SGS	√	BCQs SEQS
75.	Discuss the various modes of membrane transport.	IL, SGS	√	BCQs, SEQS
76.	Perform the preparation of solutions	PW	✓	OSPE

77.	Elaborate the concept of pH and explain different types of Buffers with their mechanism of action	IL, SGS	√	BCQs, SEQS
78.	Discuss the buffering capacity & H.H equation	IL, SGS	✓	BCQs, SEQs
79.	Identify pH of different solutions	PW	✓	OSPE
80.	Discuss the chemistry of nucleotide and nucleoside	IL, SGS	✓	BCQs, SEQs,
81.	Perform DNA extraction on onion cell	PW	✓	OSPE
82.	Discuss the chemistry of nucleic acid	IL, SGS	✓	BCQs, SEQs
83.	Discuss the structure, function & types of hemoglobin	IL, SGS	✓	BCQS, SEQS
84.	Perform the estimation of HbA1c	PW	√	OSPE
85.	Discuss hemoglobinpathies & their Biomedical causes, Thalassemia, Hbs	IL, SGS	√	BCQS, SEQ
86.	Discuss the factor affecting & regulating the oxygen binding capacity hemoglobin	IL, SGS	✓	BCQS, SEQS, CP
87.	Discuss the chemistry & biosynthesis of porphyrins & their clinical importance	IL, SGS	✓	BCQS, SEQS,
88.	Perform the estimation of Serum Bilirubin	PW	✓	OSPE
89.	Discuss the degradation of heme formation of bile pigment, it's types, transport & execration	IL, SGS	✓	BCQS, SEQS,
90.	Discuss the mechanism of development of different types of jaundice	IL, SGS	✓	BCQS, SEQS, CP
	ORAL BIOLOGY			
91.	Describe the boundaries of the oral cavity	IL	√	BCQs
92.	Define the terms vestibule, oral cavity proper, mucobuccal fold, frenum, alveolar mucosa, gingiva, exostoses, torus palatinus, and torus mandibularis	IL	√	BCQs
93.	Define the landmarks in the floor of the mouth, hard and soft palate.	IL	✓	BCQs
94.	Understand the basic structures of teeth including the enamel, dentine, pulp, periodontium, oral mucosa and salivary glands.	IL	√	BCQs
95.	Identify the demineralized and ground section of tooth in its socket.	PW		OSPE
96.	Enlist types of teeth and dentition and explain their function.	IL, SGS	✓	BCQs
97.	Discuss the order and time of eruption of deciduous and permanent dentition.	IL, SGS	√	BCQs, SEQS
98.	Understand the difference between primarydentition, secondary dentition, and mixed dentition.	IL, SGS	√	BCQs, OSPE
99.	Identify the teeth using Universal system, Palmer notation system, and FederationDentaire Internationale (FDI) system	SGS		BCQs

100.	Identify a tooth using the numbering systems on a tooth model.	OSPE/ PBL			
101.	Differentiate between anatomical crown, clinical crown, anatomical root and clinical root.	ifferentiate between anatomical crown, clinical crown, atomical root and clinical root.			
102.	Understand the functions and differences that exist among incisors, canines, premolars, and molars.	Understand the functions and differences that exist among IL, SGS			
103.	Identify line angle and point angles on surface of tooth	IL, PW	✓	OSPE	
104.	Identify the various anatomical landmarks of teethElevations on tooth -Depressions on tooth	IL, PW	✓	BCQs, OSPE	
105.	Define the landmarks present on the surface of root	IL	✓	BCQs	
106.	Assess the age of dentition using models.	PW		OSPE	
107.	Identify anatomical landmarks on tooth.	IL, SGS	✓	BCQs, OSPE	
108.	Study the physiological considerations of formand function including: - Embrasure, contact point, interproximal space, Height of contour, Lobes	BCQs			
109.	Identify anatomic features of maxillary and Mandibular central and lateral incisors.	IL, SGS		BCQs, SEQs	
110.	Compare maxillary central incisors with maxillary lateral incisors	IL, SGS		BCQs, SEQs	
111.	Compare maxillary incisors with their mandibular incisor counterparts	IL		BCQs, SEQs	
112.	Identify the anatomic structure and landmarks of the canine.	IL		SEQs	
113.	Compare the features of maxillary and mandibular canines	IL		BCQs, SEQs	
114.	Draw five aspects of each tooth.	PW		SEQs, CQ	
115.	Carve the morphological features of maxillary and mandibular anterior teeth on wax blocks.	PW			
116.	Classify salivary glands according to location, size, structure and type of secretion.	IL, TBL	✓	BCQs, SEQs, OSPE	
117.	Explain the sympathetic and parasympathetic nerve and blood supply of major salivary glands.	IL	✓	BCQs, SEQs, OSPE	
118.	Enlist the types of secretory acinar cells and ductal system.	IL, PBL	✓	BCQs, SEQs, OSPE	
119.	Differentiate between serous and mucous acini.	IL	✓	BCQs, SEQs, OSPE	
120.	Discuss the physiology of saliva including its composition, flow rate, functions, formation and ductal modification.	IL, SGS	✓	BCQs, SEQs,OSPE	
121.	Enlist the age changes of salivary glands.	IL	✓	BCQs	
122.	Interpret the general organization of the salivary Gland.	IL, PBL	✓	OSPE	
123.	Identify the secretory and ductal elements in a mixed salivary gland.	IL		OSPE	

124.	Draw the serous, mucous cells and the other ductal cells of salivary glands	PW		OSPE
125.	Define Immunology and role of antibiodies	IL	✓	BCQs
126.	Describe the role of different antibodies	BCQs		
127.	Discuss the composition, functions & physiology of saliva and functions of salivary proteins.	IL	√	BCQs
128.	Discern the composition, classification, and minstructural features of bone.	IL	✓	OSPE, BCQs,SEQs,
129.	Comprehend the structure and origin of cell types seen in bone.	IL	√	SEQs
130.	Appreciate how the structure of bone cells is related to their function.	IL	✓	SEQs
131.	Describe the formation of osteoblasts and osteoclasts.	IL	✓	SEQs
132.	Discuss the role of different hormones on the structure of bone.	IL	✓	SEQs, BCQs
133.	Discuss the process of resorption and formation of bone during remodeling	IL	✓	SEQs
134.	Draw the histological slides of bone, including the different type of lamellae and osteon.	PW	✓	OSPE
135.	Understand the basic structure of osteoclast	IL	✓	
136.	Define Alveolar bone.	IL		BCQs
137.	Classify Alveolar bone.	IL		BCQ
138.	Describe the nature of alveolar bone proper and supporting bone.	IL		BCQs
139.	Study parts of alveolar process.	PW		OSPE
140.	Describe the histological structure of alveolar bone proper.	PW		OSPE
	Behavioral Sciences	<u> </u>		
Introduc	tion to Behavioral Sciences			
141.	Discuss the role of dentist and desirable attitude toward patients.	IL	✓	BCQs, SEQs
Commu	nication			
142.	Discuss Various types of communication	IL	✓	BCQs, SEQs
143.	Discuss various mode of communication.	IL 🗸		BCQs, SEQs
Ethics				
144.	Discuss role of ethics in health profession	IL	√	BCQs, SEQs
145.	45. Discuss Hippocratic oath-Do's and Don'ts Presentation ✓ BCQs,			
Introdu	ction to Leadership & Management			
146.	Discuss role of leadership and management in dental practices	IL	✓	BCQs, SEQs

Commencement of 1ST Module		Weekly Schedule of Module I ANATOMY			
Activity	Week	Lecture 1	Lecture 2	Lecture 3	
	Week- 1	Introduction to human body, discuss the anatomical terms (8)	Identify planes and sections (9)	Describe the basic structure of cell (1)	
	Week- 2	Describe the different types of organelles and inclusion bodies (2)	Describe surface modification of cell, define different types of cell junctional complex (3, 4)	Describe the microscopic features of epithelial tissues (I) (simple) (14)	
	Week- 3	Explain cell cycle, Differentiate between mitosis and meiosis (5, 6, 7)	Describe the microscopic features of epithelial tissues(stratified) (II) (14)	Classification of bone (10)	
lı .	Week- 4	Discuss the uterine and ovarian cycle (30)	Describe the microscopic features of connective tissues (I) (16)	Describe the microscopic features of connective tissues (II) (16)	
fessiona	Week- 5	Describe oogenesis and spermatogenesis I (29)	Classification of muscles (10)	Describe the microscopic features of skeletal, cardiac and smooth muscles (18)	
Academic Session – BDS First Professional	Week- 6	Describe oogenesis and spermatogenesis II (29)	Describe the classification & microscopic features of different types of cartilage (10,20)	Introduction to nervous system (11)	
ssion – BD	Week- 7	Describe the phases of fertilization in events of 1st week of development (31) Describe the events of 3rd week	Describe the microscopic features of compact and spongy bone (22)	Discuss the events of second week of development (32)	
ıdemic Se	Week- 8	Describe the events of 3 rd week of development (33)	Discuss the fate of primitive streak and related abnormalities (35)	Differentiate between gross and microscopic features of artery, vein, and capillaries (24)	
Aca	Week- 9	Describe the 4th week of development (36)	Classification of joints (10)	Describe the development of placenta I (37)	
	Week10	Enlist events from 5th – 8th week of development (38)	Describe the development of placenta II(37)	Enlist events of fetal period (39)	
	Week 11	Describe the process and types of Twin pregnancy and sites of ectopic pregnancy (40)	Discuss the factors causing Teratogenesis (41)	Integumentary System (27)	
	Week 12	Revision	Revision	Revision	
	Week- 13&14	TH	HEORY AND VIVA EXAMINA	ATION	

Commencement of 1 ST Module		Weekly schedule of Module I PHYSIOLOGY		
Activity	Week	Lecture 1 Lecture 2		
	Week 1	Introduction to Physiology (42, 43, 45)	Homeostasis (43, 44)	
	Week 2	Composition & function of cell membrane (46, 47)	Functions of organelles & nucleus (48)	
	Week- 3	Genetics & protein synthesis (48)	Membrane transport, Membrane Potential &Action Potential (49, 50,54, 55, 56)	
	Week-4	Classification & properties of nerve fiber. (51, 52, 53)	Synapse & NMJ (57, 58)	
nal	Week 5	Muscle contraction 1 (59)	Muscle contraction II (59)	
Academic Session – BDS First Professional	Week- 6	Introduction & Composition, function of blood & plasmaprotein (60)	RBC & Erythropoiesis (61,62,63)	
S First	Week- 7	Anemia (types, causes & treatments) (64)	White Blood Cell (65)	
on – BDS	Week- 8	Immunity – 1 (66)	Immunity – 2 (66)	
nic Sessic	Week- 9	Platelets & Coagulation (67, 68)	Blood groups, Blood transfusion & transfusion reactions (69, 70)	
Acadeı	Week-	Revision	Revision	
7	Week- 11& 12	Revision	Revision	
	Week- 13 & 14	THEORY AND	VIVA EXAMINATION	

		Weekly Schedule	of Module I		
		BIOCHEMISTRY			
Activity	Week	Lecture-1	Lecture-2		
	Week-1	Biochemical aspects of cell I (71, 74)	Biochemical aspects of cell II (71, 74)		
	Week-2	Biochemical composition of cell membrane (71)	Membrane transport (75)		
	Week-3	pH Buffer system (77)	Buffering capacity & H.H equation (78)		
	Week-4	Chemistry of nucleoside (80)	Chemistry of nucleotide (80)		
	Week-5	Chemistry of nucleic acid-1 (82)	Chemistry of nucleic acid-2 (82)		
ssional	Week-6	Structure, function & types of hemoglobin (83)	Hemoglobinopathies & their Biomedical causes, Thalassemia, HbS (85)		
demic Session – BDS First Professional	Week-7	Factor affecting & regulating the oxygen binding capacity hemoglobin(86)	Chemistry & Biosynthesis of porphyrins & their clinical importance-I (87)		
– BDS F	Week-8	Chemistry & Biosynthesis of porphyrins & their clinical importance-II (87)	Degradation of heme formation of bile pigment, it's types, transport & excretion-I(89)		
Session	Week-9	Degradation of heme formation of bile pigment, it's types, transport & excretion-II(89)	Mechanism of development of different types of jaundice (90)		
demic	Week-10	Student presentation	Student presentation		
Acae	Week-11	Student presentation	Student presentation		
	Week-12	Revision	Revision		
	Week 13 & 14	THEORY AND VIVA	EXAMINATION		

	ement of 1 ST		Weekly Schedule of Module I ORAL BIOLOGY			
Activity	Week	Lecture 1	Lecture2			
	Week- 1	Introduction to Oral Biology (91, 92, 93, 94)	Tooth morphology I (96, 97, 98)			
	Week- 2	Tooth morphology II (101, 102, 103, 104, 105)	Eruption sequence, (97)			
	Week- 3	Orofacial Musculature (108)	Maxillary Incisors (109)			
nal	Week- 4	Mandibular Incisors (110)	Max & Mand Laterals Incisors (111)			
Academic Session – BDS First Professional	Week- 5	Max & Mand Canines (112, 113)	Salivary glands I (116 - 118)			
S First P	Week- 6	Salivary glands II (119- 121)	Salivary glands III (122- 123)			
ion – BD	Week- 7	Immunology (125, 126)	Oral Physiology (127)			
mic Sess	Week- 8	Bone I (128, 129, 130)	Bone II (131, 132, 133)			
Acade	Week- 9	Alveolar process(136, 137, 138)	Revision			
	Week-10	Test on tooth morphology	Test on Salivary Glands			
	Week-11	Test on Immunology and Oral Physiology	FAT (Formative Assessment Test)			
	Week-12	Revision of histology	Revision of Spots			
	Week 13 & 14	THEORY A	THEORY AND VIVA EXAMINATION			

Module II

	ANATOMY	Mode of Teaching	Online Learning	Mode of Assessment
1.	Discuss the components of reticulo-endothelial System	IL	✓ ✓	BCQ
2.	Describe the macroscopic and microscopic features of lymphoid organs: a. Lymph node b. Tonsils c. Thymus d. Spleen	ΙL	~	BCQ, SEQ
3.	Identify the microscopic features of lymphoid organs on given slides	PW		OSPE
4.	Identify the skeleton of the upper limb	SGIS		OSPE
5.	Name the muscles of the pectoral region, arm, and Forearm	SGIS	√	BCQ, OSPE
6.	Correlate the location and structure of cubital fossa with its clinical significance	SGIS	✓	BCQs, OSPE
7.	Relate the extent and branches of the brachial artery with its clinical significance	SGIS	✓	BCQ
8.	Identify the skeleton of the lower limb	SGIS	√	OSPE
9.	Name the muscles of the gluteal region, and thigh	SGIS	✓	BCQs, OSPE
10.	Identify the bones of rib cage	SGIS	✓	OSPE
11.	Discuss the boundaries and contents of mediastinum and thoracic cage	SGIS	✓	BCQ
12.	Discuss the gross anatomy of the heart	IL, TBL	✓	BCQs, OSPE
13.	Discuss the development of the cardiovascular System	IL	✓	BCQs, OSPE
14.	Discuss the great vessels of head and neck	IL	✓	BCQs, OSPE
15.	Describe the gross morphology and blood supply of nose	IL	✓	BCQ, SEQ
16.	Relate the location and structure of paranasal air sinuses with their clinical significance	IL	✓	BCQ, SEQ & OSPE
17.	Describe the gross morphology of pharynx	SGIS	✓	BCQ, SEQ
18.	Explain the macroscopic features of larynx (cartilages, joints, ligaments, membranes, cavity, muscles and neurovascular supply)	SGIS	√	BCQ, SEQ,OSPE
19.	Describe the gross morphology of trachea and bronco-pulmonary segments	IL	✓	BCQ
20.	Identify the anatomical structures related to cardiovascular and respiratory systems on a chest X- ray	SGIS		OSPE
21.	Describe the microscopic features of upper and lower respiratory tract	IL	√	BCQs, OSPE
22.	Identify the microscopic features of the respiratory system (trachea & lungs) on given slides	PW		OSPE
23.	Name the parts of gastrointestinal tract	SGIS	✓	OSPE

24.	Describe the gross morphology of the oral cavity and tongue	IL	√	BCQ, SEQ
25.	Describe the microscopic features of tongue	IL	√	BCQs, SEQ
26.	Identify the microscopic features of tongue on a given slide	PW		OSPE
27.	Describe the gross structure of salivary glands (Parotid, submandibular and sublingual)	IL	√	BCQ, SEQ, OSPE
28.	Describe the microscopic features of salivary glands	IL	√	BCQ, SEQ
29.	Identify the microscopic structures of Parotid, submandibular and sublingual glands on givenslides	PW		OSPE
30.	Discuss the location and structure of the liver, pancreas and gall bladder	SGIS	√	OSPE
31.	Describe the microscopic features of the hepatobiliary system	IL	√	BCQ
32.	Identify the microscopic features of the hepatobiliary system on a given slide	PW		OSPE
33.	Name the organs of the urinary system	SGIS	✓	OSPE
34.	Describe the osteology of exterior of skull (Norma verticalis, occipitalis, frontalis and basalis)	SGIS		OSPE
35.	Explain the osteology of the interior of skull (vault, anterior, middle and posterior cranial fossae)	SGIS		OSPE
36.	Identify the foramina of skull and the structures passing through them	SGIS		OSPE, BCQ, SEQ
37.	Explain the external and internal attachments of skull	SGIS		OSPE, BCQ
38.	Describe the development of: a. Skull b. Cervical vertebrae c. Pharyngeal apparatus d. Face d. Tongue e. Palate			SEQ, BCQ, OSPE
39.	Correlate the features and attachments of maxilla with its clinical significance	SGIS		BCQ, SEQ, OSPE
40.	Describe the gross features of soft palate	IL	✓	OSPE, BCQ
41.	Discuss the features of mandible and hyoid bone	SGIS		OSPE, BCQ
42.	Describe the changes that occur in the mandible in different age groups (child, young, old)	SGIS		BCQ
43.	Identify the features of cervical vertebrae	SGIS		OSPE, BCQ
44.	Describe the scalp and superficial temporal region	IL	√	BCQ, SEQ
45.	Relate the attachments of facial muscles with their actions	IL	✓	BCQ, OSPE
46.	Explain the neurovascular supply of face, with course and branches of facial artery	IL	√	BCQ, SEQ & OSPE
47.	Describe the attachments, actions and neurovascular supply of the muscles of mastication	IL	√	BCQ, SEQ, & OSPE
48.	Correlate the structure of temporomandibular joint with its neurovascular supply and movements	IL	√	BCQ, SEQ &OSPE
49.	Describe the boundaries, communications and contents of pterygopalatine and infratemporalfossae	IL	√	BCQ, SEQ, &OSPE
50.	Discuss the parasympathetic ganglia present inhead	IL	✓	BCQ, SEQ

51.	Demonstrate over simulated subject the surfacemarkings of: a. Facial artery	SGIS	OSPE
	b. Common carotid artery		
	c. External carotid artery		
	d. Internal jugular vein		
	e. External jugular vein		
	f. Parotid gland and duct		
	g. Submandibular duct		
52.	Identify the normal anatomical structures visible on	SGIS	OSPE
32.	radiographs of head and neck		
	PHYSIOLOGY		
53.	Describe the functional organization/lay out of cardiovascular	IL	SEQs, BCQs
	system.	II	aro noo
54.	Explain cardiac action potential and spread of impulse through	IL	SEQs, BCQs
	different chambers of heart. Enumerate different heart sounds and describe mechanism of	IL, SGS	SEO- DCO-
55.		IL, SUS	SEQs, BCQs
5.0	production of heart sounds. Define ECG. Discuss its various intervals and segments along with	IL, PW	OSPE
56.	physiological basis.	IL, F W	OSFE
57.	Describe various leads of ECG.	PW	OSPE
58.	Define hemodynamics and explain laws governingthe flow of blood	IL	SEQs, BCQs, VIVA
50.	through blood vessel wall.		
59.	Define microcirculation. Elaborate upon the forces of capillary	IL, SGS	SEQs, BCQs
	membrane at the arterial and venousend.		
60.	Define cardiac output and venous return.	IL	SEQs, BCQs
61.	Enumerate factors affecting cardiac output and venous return.	IL	SEQs, BCQs
62.	Define blood pressure and discuss mechanisms regulating it.	PBL	SEQs, BCQs
63.	Define cardiac cycle. Explain its phases with asuitable diagram.	IL, PW	SEQs, BCQs,OSPE
64.	Discuss the functional organization of respiratory system.	IL	SEQs, BCQs
65.	Explain mechanics of respiration.	IL, PBL	SEQs, BCQs
66.	Discuss alveolar ventilation/perfusion ratio with its abnormalities	IL	SEQs, BCQs
67.	Enumerate lung volumes and capacities with its values.	PW	SEQs, BCQs
68.	Explain diffusion of gases with various applicablelaws.	IL, SGS	SEQs, BCQs
69.	Discuss mechanism of transport of oxygen and Carbon-dioxide with	SGS, PW	BCQs, OSPE
0).	graphical representations.		
70.	Describe the regulation of respiration.	IL	SEQs,BCQs,VIVA
71.	Define hypoxia and discuss its various types withexamples.	PBL	SEQs, BCQs
72.	Explain respiratory adaptations during exercise.	IL	SEQs, BCQs
73.	Describe functional organization of renal system.	IL	SEQs, BCQs
73. 74.	Discuss the structure and function of a nephron.	IL, SGS	SEQs, BCQs
	Define GFR and discuss factors regulating it.	IL	SEQs, BCQs
75.	Explain various mechanisms of tubular reabsorption and secretion.	IL	SEQs, BCQs
76.	Explain various mechanisms of tubular readsorption and secretion.	IL	SEQS, BCQS
77. 78.	Describe renal clearance. Describe countercurrent mechanism for formation of concentrated	SGS IL	SEQs, BCQs SEQs, BCQs, CP

79.	Describe functional organization of gastrointestinal tract.	IL,	✓	SEQs, BCQs,
80.	Explain different characteristics features of GI smooth muscles.	IL, PW	✓	SEQs, BCQs,OSPE
81.	Discuss enteric nervous system.	IL	✓	SEQs, BCQs
82.	Discuss properties, functions, regulation and applied aspects of salivary secretion.	PBL	✓	SEQs, BCQs
83.	Enumerate GIT secretions and explain mechanismof synthesis of secretion and their regulation.	IL	✓	SEQs, BCQs
84.	Discuss GIT motility and its reflexes.	IL		SEQs, BCQs
85.	Discuss the phases of swallowing and swallowing reflex in detail.	IL, SGS		SEQs, BCQs
86.	Discuss the stages of vomiting and vomiting reflex in detail.	IL, SGS		SEQs, BCQs
87.	Discuss the regulation of gastric emptying & phases of gastric secretion	IL, SGS		SEQs, BCQs
88.	Describe functions of liver and gall bladder.	IL	✓	SEQs, BCQs
89.	Discuss mechanism of synthesis of pancreatic secretions and its regulation.	IL	✓	SEQs, BCQs
90.	Explain functions of stomach small and largeintestine.	IL, SGS	✓	SEQs, BCQs
91.	Discuss GI disorders.	PBL	✓	SEQs, BCQs
	BIOCHEMISTRY			
92.	Perform the detection of different proteins in given solution	PW		OSPE
93.	Discuss the definition classification & importance of amino acids	IL, SGS		BCQS, SEQS
94.	Discuss the definition classification & importance of proteins	IL, SGS		BCQS, SEQS,
95.	Discuss the structure physical & chemical properties of amino acids	IL, SGS		BCQS, SEQS
96.	Discuss the importance of amino acids and maintenance of body pH	IL, SGS		BCQS, SEQS,
97.	Perform the separation of amino acids by paper chromatography	PW		OSPE
98.	Discuss the structure level of protein & clinical importance	IL, SGS		BCQS, SEQS,
99.	Discuss the plasma protein & immunoglobulin's clinical importance	IL, SGS		BCQS, SEQS
100.	Discuss the different principles of spectrophotometry	PW		OSPE
101.	Discuss the importance of protein & nutrition, kwashiorkor & marasmus	IL, SGS		BCQS, SEQS
102.	Detection of carbohydrates in given solution	PW		OSPE
103.	Classify carbohydrates with its biomedical importance	IL, SGS	√	BCQs, SEQs,CP
104.	Discuss the properties & Biomedical importance of carbohydrates	IL, SGS		BCQs, SEQs

105.				
	Discuss the chemistry of monosaccharaides and their biomedical importance	IL, SGS		BCQs, SEQs
106.	Discuss the chemistry of disaccharides and their biomedical importance	IL, SGS		BCQs, SEQs,
107.	Discuss the chemistry of oligosaccharides and their biomedical importance	IL, SGS		BCQs, SEQs,
108.	Discuss the chemistry of polysaccharides and their biomedical importance	IL, SGS		BCQs, SEQs,
109.	Discuss the different types of enzymes specificities with examples.	PW		OSPE
110.	Discuss the properties of enzymes	IL, SGS		BCQs, SEQs
111.	Discuss the mode of action & regulation of enzymes	IL, SGS		BCQs, SEQs
112.	Discuss the factors affecting enzymes activity	IL, SGS	✓	BCQs, SEQs
113.	Discuss the mechanism of action of different inhibitors of enzyme	IL, SGS	✓	BCQs, SEQs
114.	Discuss the isoenzyme clinical importance, application clinical & therapeutic uses of enzymes	IL, SGS	✓	BCQs, SEQs,CP
115.	Discuss the gastric, pancreatic, bile juice/ digestion & absorption carbohydrates	IL, SGS	√	BCQs, SEQs
116.	Discuss the digestion & absorption of protein and nucleic acid with clinical importance	IL, SGS	√	BCQs, SEQs
117.	Discuss the digestion & absorption of lipids with clinical importance	IL, SGS	✓	BCQs, SEQs
	ORAL BIOLOGY	L		
118.	Describe and identify the buccal, lingual, mesial, distal, and occlusal aspect for maxillary 1 st & 2 nd premolars	IL, SGS		BCQs, SEQs,OSPE
119.	Describe the traits that are useful in distinguishingpermanent maxillary first premolar from the maxillary second premolar	IL, SGS		BCQs, SEQs,OSPE
120.	Describe and identify the buccal, lingual, mesial, distal, and occlusal surfaces for mandibular 1 st and 2 nd premolars.	IL, SGS		BCQs, SEQs
120. 121.	surfaces for mandibular 1 st and 2 nd premolars. Differentiate mandibular first premolar from the mandibular	IL, SGS		BCQs, SEQs BCQs, SEQs,OSPE
	surfaces for mandibular 1 st and 2 nd premolars.			
121.	surfaces for mandibular 1 st and2 nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular	IL, SGS		BCQs, SEQs,OSPE
121. 122.	surfaces for mandibular 1st and2nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular premolars	IL, SGS		BCQs, SEQs, OSPE, BCQs, SEQs, OSPE,
121. 122. 123.	surfaces for mandibular 1st and2nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular premolars Sketch five aspects of each tooth.	IL, SGS IL, SGS PW		BCQs, SEQs, OSPE, OSPE
121. 122. 123. 124.	surfaces for mandibular 1st and2nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular premolars Sketch five aspects of each tooth. Learn to identify individual tooth models.	IL, SGS IL, SGS PW PW		BCQs, SEQs, OSPE, OSPE OSPE
121. 122. 123. 124. 125.	surfaces for mandibular 1st and2nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular premolars Sketch five aspects of each tooth. Learn to identify individual tooth models. Carve the morphological features of premolars using wax blocks.	IL, SGS IL, SGS PW PW PW		BCQs, SEQs, OSPE, OSPE OSPE OSPE
121. 122. 123. 124. 125.	surfaces for mandibular 1st and2nd premolars. Differentiate mandibular first premolar from the mandibular second premolar Compare morphology of maxillary premolars with mandibular premolars Sketch five aspects of each tooth. Learn to identify individual tooth models. Carve the morphological features of premolars using wax blocks. Enlist the derivatives of germ layers.	IL, SGS IL, SGS PW PW IL		BCQs, SEQs, OSPE BCQs, SEQs, OSPE, OSPE OSPE OSPE BCQs, SEQs,

130.	Describe the bud, cap, and bell stages and the various layers found in each.	IL		BCQs, SEQs
131.	Describe the following terms: Enamel cord, Enamel niche, Enamel septum, Enamel navel, and Enamel knot	IL		BCQs, SEQs
132.	Discuss the role of: Dental follicle, Dental papilla, Dental lamina, Hertwig's epithelial root sheath.	IL		BCQs, SEQs
133.	Discuss the theories of tooth type determination	IL		BCQs, SEQs
134.	Identify developmental anomalies related to different stages of tooth development.	IL		BCQs
135.	Discuss the process of root formation	IL		SEQs
136.	Describe the process of single-rooted and multi-rooted tooth development	IL		BCQs, SEQs
137.	Study and identify histological features of the bud stage, cap stage and bell stage.	PW		OSPE
138.	Discuss the organic and inorganic composition andthe physical features of enamel.	IL, SGS, TBL	✓	BCQs, SEQs,
139.	Discern the features of enamel crystallites and their orientation and apprehend how the structure ofenamel withstands the forces of mastication.	IL		BCQs
140.	Understand the concept of enamel prism, rodsheath and inter-rods, aprismatic enamel.	IL		BCQs, SEQs
141.	Describe the different patterns and direction of enamel rods.	IL		BCQs, SEQs
142.	Comprehend the histological features of enamel including incremental lines, bands of Hunter and Schreger, Perikymata, Gnarled Enamel.	IL		BCQs, SEQs
143.	Differentiate between enamel spindles, enamel tuftand enamel lamellae.	IL		BCQs, SEQs
144.	Discuss the significance of Enamel-Dentine Junction.	IL	✓	BCQs, SEQs OSPE
145.	Enlist the age changes in enamel.	IL		SEQs, OSPE
146.	Describe the life cycle of Ameloblast and related developmental defects including AmelogenesisImperfecta.	IL		SEQs, OSPE
147.	Interpret the life cycle of ameloblast with the help of a schematic diagram.	SGS, PW		OSPE
148.	Recognize the histologic structure of enamel.	PW		OSPE
149.	Describe the organic and inorganic composition of dentine.	IL		BCQs
150.	Define the physical features of dentine.	IL	✓	BCQs
151.	Explain the curvature, structure, and contents of dentinal tubules.	IL		BCQs, SEQs
152.	State the different types of dentine including primary, secondary, tertiary, hyaline and granularlayer.	IL		BCQs, SEQs,OSPE
153.	Enlist the differences between mantle and circumpulpal dentine.	IL		SEQs, OSPE
133.		1		

155.	Understand the age changes that occur in dentine.	IL		BCQs
156.	Enumerate the theories of dentine sensitivities.	IL		SEQs
157.	Explain the process of dentinogenesis including patterns of mineralization.	IL, SGS		BCQs
158.	Compare the processes of amelogenesis and dentinogenesis.	IL, SGS		BCQs
159.	Draw the histological features of dentine	PW		OSPE
160.	Explain the composition and functions of Dental Pulp.	IL		BCQs, SEQs,
161.	State the zones of dental pulp.	IL	✓	SEQs
162.	Discuss the role of various cell types seen in pulp.	IL		SEQs
163.	Explain the blood supply & nerve supply of dentalpulp.	IL		BCQs
164.	Study age changes in pulp.	IL	√	SEQs
165.	Draw the histological picture of zones of dental pulp.	PW		OSPE
166.	Describe the mesenchymal facial processes aroundthe developing mouth.	IL		SEQs
167.	Describe the role of facial processes in theformation of the face.	IL		BCQs
168.	Discuss the developmental process of primary &secondary palate.	IL		SEQs
169.	Discuss the mechanisms involved in elevation and fusion of the palatal shelves.	IL		BCQs, SEQs
170.	Describe the mechanisms involved in the formation of cleftlip & palate.	IL	✓	BCQs, SEQs
171.	Explain the environmental and genetic stimuli responsible for development of facial and palatal clefts.	IL	✓	BCQs, SEQs
172.	Discuss features of mandible and the process of mandible formation.	IL		BCQs
173.	Describe the fate of Meckel's cartilage.	IL		SEQs
174.	Describe the process of maxilla formation	IL		BCQs
175.	Describe the neurovascular supply of maxilla and mandible	IL		BCQs
176.	Describe the processes involved in development of anterior two- third and post one-third of tongue and relate this to the innervation of the tongue once fully developed.	IL		BCQs, SEQs
	Behavioral Sciences			
177.	Demonstrate competency in reflection writing and feedback	IL		BCQs, SEQs
Commun				
178. Ethics	Discuss factor affecting communication.	IL	✓	BCQs, SEQs
179.	Discuss responsibilities of health professionals	IL	✓	BCQs, SEQs
	nip and management	11		DCO. SEC
180.	Discuss various leadership theories.	IL	✓	BCQs, SEQs

Commencement of 2 nd Module		Weekly Schedule of Module II ANATOMY				
Activity	Week	Lecture 1	Lecture 2	Lecture 3		
	Week- 1	Discuss the components of reticuloendothelial system (1)	Microscopic features of tonsils and thymus (2)	Microscopic features of spleen (2)		
	Week- 2	Describe the scalp and superficial temporal region (44)	Describe the development of skull & cervical vertebrae (38)	Describe the boundaries, communication and contents of pterygopalatine fossa (49)		
	Week- 3	Describe the development of pharyngeal apparatus I (38)	Describe the boundaries, communications and contents of the infratemporal fossa (49)	Describe gross morphology of nose & blood supply of nose (15)		
	Week- 4	Describe the development of pharyngeal apparatus II (38)	Relate location and structure of Para nasal sinuses with their clinical significance (16)	Describe gross morphology of oral cavity and tongue(I) (24) Describe gross features of hard and soft palate (40)		
	Week- 5	Describe the development of palate (38)	Describe gross morphology of oral cavity and tongue II (24)	Describe microscopic features of tongue (25)		
essional	Week- 6	Development of tongue (38)	Gross features of salivary glands (27)	Microscopic features of salivary glands (28)		
Academic Session – BDS First Professional	Week- 7	Describe the facial muscles with their action (45)	Explain the neurovascular supply of face, with course and branches of facial artery (46)	Describe great vessels of head and neck (14)		
ion – BDS	Week- 8	Describe the development of face (38)	Describe the development of palate (38)	Describe gross morphology of pharynx (17)		
ic Sessi	Week- 9	Describe the morphology of larynx I (18)	Describe the morphology of larynx II (18)	Describe the gross morphology of trachea and bronchopulmonary segments (19)		
Academi	Week- 10	Describe the microscopic features of upper and lower respiratory tract (21)	Describe microscopic features of hepatobiliary tract and pancreas (31)	Describe the gross anatomy of heart (12)		
	Week-11	Describe the development of heart (13)	Correlate the structure of temporomandibular joint with its neurovascular supply and movements (48)	Revision		
	Week- 12	Revision	Revision	Revision		
	Week-13 & 14		THEORY AND VIVA EX	XAMINATION		

Commencement of 2 ND Module		Weekly Schedule of Module II PHYSIOLOGY			
Activity	Week	Lecture 1	Lecture 2		
	Week- 1	Introduction to CVS & Cardiac action potential (53, 54)	Cardiac contraction & Im	pulse conduction pathway (53,54)	
	Week- 2	Electrocardiogram (ECG) (56, 57)	Cardiac cycle (62)		
	Week- 3	Heart sounds and murmurs (55)	Introduction to haemody vessels (58)	ynamics & functions of blood	
	Week- 4	Cardiac output and venous return (60)	Blood pressure and its re	gulation (61)	
onal	Week- 5	Micro circulation (59)	Functional organization ventilation. (63, 64, 67)	of respiratory system &pulmonary	
– BDS First Professional	Week- 6	Alveolar ventilation & ventilation perfusion ratio (V/P Ratio) (65)	Diffusion of gases (67)		
3DS Firs	Week- 7	Transport of Oxygen & Carbon dioxide (68)	Regulation of respiration (69)		
ession – F	Week-8	Hypoxia and its types (70)	Respiratory adaptations during exercise (71)	Introduction to renal system & Nephron & GFR & its regulation (72, 73, 74)	
Academic Session	Week- 9	Filtration, reabsorption & secretion (73, 75)	Renal clearance (76)	Countercurrent mechanism(77)	
Ac	Week- 10	Introduction to GIT, GI muscle function & Enteric nervous system (78, 79,80)	GIT secretions, motility and reflexes (82, 83, 84)	Saliva & Vomiting(81, 85)	
	Week-11	Regulation of gastric emptying & phases of gastric secretion (86)	Functions of stomach, small & large intestine. (89)	Functions of gall bladder, liver & pancreatic secretion.(87,88)	
	Week- 12	GIT disorders (90)	Revision	Revision	
	Week- 13 & 14	THEORY AN	ND VIVA EXAMINAT	TION	

Commencement of 2 ND Module		Weekly Schedule of Module II BIOCHEMISTRY			
Activity	Week	Activity	Week		
	Week- 1	Definition, classification & importance of amino acids(93)	Definition classification & importance of proteins (94)		
	Week- 2	Structure physical & chemical properties of amino acids (95)	Importance of amino acids and maintenance of body pH (96)		
	Week- 3	Structure level of protein & clinical importance (98)	Plasma protein & clinical importance (99)		
	Week- 4	Immunoglobulin's & clinical importance (99)	Importance of protein & nutrition, kwashiorkor & marasmus (101)		
	Week- 5	Chemistry of Carbohydrates (103)	Properties & Biomedical importance of carbohydrates (104)		
sional	Week- 6	Monosaccharides-1 (105)	Monosaccharides-2 (105)		
cademic session – BDS First Professional	Week- 7	Disaccharides and Oligosaccharides (106,107)	Polysaccharides-1 (108)		
-BDS Fi	Week- 8	Polysaccharides-2 (108)	Definition of enzyme withclassification (109)		
session –	Week- 9	Properties of enzymes (110)	Mode of action & regulation of enzyme (111)		
Academic	Week- 10	Factors affecting enzymes activity (112)	Mechanism of action of different inhibitors of enzyme (113)		
7	Week- 11	Isoenzyme clinical importance, application clinical & therapeutic uses of enzymes (114)	Discuss the gastric, pancreatic, intestinal & bile juices with their composition and digestion & absorption carbohydrates with their clinical disorder (115)		
	Week- 12	Digestion & absorption of protein and nucleic acid with clinical importance andtheir clinical disorder (116)	Digestion & absorption of lipids withclinical importance and their clinical disorder (117)		
	Week- 13&14	THEORY AND	VIVA EXAMINATION		

Commer of 2 ND N		Weekly Schedule of Module II- O	ral Biology
Activity	Week	Lecture 1	Lecture 2
	Week- 1	Maxillary premolars(118, 119, 122)	Mandibular Premolars(120, 121, 122)
	Week- 2	Embryology (126, 127)	Tooth Development I (128,129,130)
	Week- 3	Development of tooth II (131,132)	Development of tooth III (133, 134)
	Week- 4	Root Formation (135, 136)	Enamel Structure I (138, 139, 140))
sional	Week- 5	Enamel structure II(141, 142, 143, 144, 145)	Amelogenesis I(146)
Academic Session – BDS First Professional	Week- 6	Amelogenesis II(146)	Dentine I(149, 150, 151, 152,153)
– BDS F	Week- 7	Dentine II(154, 155, 156)	Dentinogenesis (157,158)
c Session	Week- 8	Dental Pulp(160, 161, 162, 163, 164)	Development of Face (166, 167)
cademi	Week- 9	Development of Palate (168, 169)	Cleft Lip and Palate (170, 171)
Ac	Week-	Development of Mandible (172, 173)	Development of Maxilla (174, 175)
	Week-	Development of Tongue (176)	Test on Tooth Development and Enamel
	Week-	FAT (Formative Assessment Test)	Revision of Histology & Spots
	Week- 13&14	THEORY AND V	VIVA EXAMINATION
L		76	

MODULE III

	ANATOMY	Mode of Teaching	Online Learning	Mode of Assessment
1.	Explain the general layout of the nervous system and its classification.	IL		BCQs
2.	Discuss the gross anatomy & crosssections of spinal cord with blood supply.	IL		BCQs, SEQs
3.	Discuss the ascending tracts of spinal cord with their functions and clinicalcorrelates.	IL		BCQs, SEQs
4.	Discuss the descending tracts of the spinal cord with their functions and clinical correlates.	IL		BCQs, SEQs
5.	Explain the gross structure of brain stem (medulla, pons and midbrain).	SGIS		BCQs, SEQs & OSPE
6.	Discuss the cross sections of brain stem(medulla, pons and midbrain) at different levels with clinical correlates.	IL	✓	BCQs, SEQs &OSPE
7.	Discuss in detail cranial nerves I – XII.	IL		BCQs, SEQs & OSPE
8.	Discuss the gross structure of cerebellum and fibers associated with it.	IL		BCQs, SEQs & OSPE
9.	Explain the cranial meninges with theirneurovascular supply and clinical correlates.	SGIS		BCQs, OSPE
10.	Explain the Dural infoldings/ reflections (falx cerebri, tentorium cerebelli, falx cerebelli and sellar diaphragm).	SGIS		BCQs, OSPE
11.	Relate the location and communications of Dural venous sinuses with their clinical significance.	SGIS	✓	BCQs, SEQs &OSPE
12.	Demonstrate the sulci and gyri of cerebrum on the given model.	SGIS	✓	BCQs, OSPE
13.	Explain the functions of different cortical areas of cerebrum with their lesions.	SGIS	✓	BCQs, SEQs
14.	Describe the white matter (commissural, projection and association fibers) of brain.	IL	✓	BCQs
15.	Relate the parts of basal nuclei of the brain with clinical disorders.	IL	✓	BCQs
16.	Describe the gross structure of autonomic nervous system.	IL	✓	BCQs
17.	Describe the microscopic features of: a. Spinal cord b. Cerebellum	IL	✓	BCQs, SEQs

	c. Cerebral Cortex			
18.	Identify the microscopic features of spinal cord, cerebellum and cerebral cortex.	PW	√	OSPE
19.	Explain the ventricular system of brain with clinical correlates.	SGIS		BCQs, SEQs, OSPE
20.	Describe the blood supply of the brain.	SGIS, TBL		BCQs, SEQs, OSPE
21.	Describe the vertebral system of veins.	SGIS		BCQs
22.	Explain the gross anatomical features of eye with its neurovascular supply.	SGIS	✓	BCQs, OSPE
23.	Describe the microscopic features of eye.	IL, PW	✓	OSPE
24.	Describe the extra-ocular muscles with their nerve supply and actions.	SGIS	✓	BCQs, SEQs, OSPE
25.	Identify the extra-ocular and facial muscles on a given model.	SGIS	✓	OSPE
26.	Explain the gross features of ear (external, middle and internal) with itsneurovascular supply and clinical correlates.	SGIS	√	BCQs, SEQs, OSPE
27.	Describe the development of brain and spinal cord with its anomalies.	IL	✓	BCQs, SEQs, OSPE
28.	Discuss cervical fascia.	IL	✓	BCQs
29.	Explain the anterior and posterior triangles of the neck.	SGIS	✓	BCQs, SEQs, OSPE
30.	Describe the lymphatic drainage of head and neck.	IL		BCQs
31.	Discuss the ganglia and plexus present in the neck.	IL		BCQs
32.	Identify the muscles and joints in the pre-vertebral region of the neck.	SGIS		OSPE
33.	Describe the location, structure and blood supply of pituitary gland.	IL	✓	BCQs, SEQs
34.	Explain the location and structure of thyroid.	IL	√	BCQs, SEQs
35.	Explain the location and structure of parathyroid gland.		✓	BCQs, SEQs
36.	Discuss the location and structure of endocrine pancreas.	IL	✓	BCQs
37.	Explain the location and structure of suprarenal glands.	IL	✓	BCQs
38.	Describe the developmental anatomy of the endocrine glands.	IL	✓	BCQs, SEQs
39.	Describe the microscopic features of endocrine glands	IL	✓	BCQs, SEQs
40.	Identify the microscopic features of endocrine glands on the given slide.	PW	✓	OSPE
41.	Demonstrate the examination of cranial nerves over the simulated subject	SGS	✓	OSPE

	PHYSIOLOGY			
42.	Describe the functional organization of central nervous system.	IL, PBL	✓	SEQs, BCQs
43.	Discuss synaptic transmission along with its disorders.	IL	✓	SEQs, BCQs
44.	Classify Sensory receptors.	IL, SGS	✓	SEQs, BCQs
45.	Trace the sensory pathways.	IL		OSPE
46.	Describe pain physiology and its pathway.	IL,		SEQs, BCQs
47.	State the different types of headaches and briefly describe each of them.	IL		SEQs, BCQs
48.	Explain pyramidal and extrapyramidal system along with motor pathways.	IL		SEQs, BCQs
49.	Classify spinal reflexes and discuss in detail.	PW	√	SEQs, BCQs, OSPE
50.	Describe functions of basal ganglia along with its neurons.	IL	√	SEQs, BCQs
51.	Discuss functional organization of Autonomic nervous system.	IL	√	SEQs, BCQs
52.	Explain the phenomenon of Reticular activating system and sleep in relationship to different waves of EEG.	IL	√	SEQs, BCQs, OSPE
53.	Discuss the different lobes and areas of cerebral cortex with their functions.	IL, IS	✓	SEQs, BCQs
54.	Discuss functions of cerebellum with special reference to its neuronal circuitry.	IL	√	SEQs, BCQs
55.	Discuss physiological anatomy of eye and image forming mechanisms.	IL	√	SEQs, BCQs
56.	Discuss photo transduction and visual processing.	IL, SGS		SEQs, BCQs,CP
57.	Discuss physiology of hearing.	IL	√	SEQs, BCQs, CP
58.	Explain functions of vestibular system.	IL	✓	SEQs, BCQs
59.	Discuss physiology of gustation and olfaction.	IL	✓	SEQs, BCQs,CQ
60.	Explain the protective mechanisms of brain.	IL, IS	✓	SEQs, BCQs
61.	Discuss the formation, circulation, and absorption of CSF.	IL, IS	✓	SEQs, BCQs
62.	Define endocrine secretions and enumerate different hormones and theirmechanism of action.	IL	✓	SEQs, BCQs
63.	Describe hormones of hypothalamus and pituitary gland.	IL, IS	✓	SEQs, BCQs
64.	Discuss parathyroid hormones and calcium metabolism.	IL, IS	✓	SEQs, BCQs
65.	Describe functions of thyroid hormones and its disorders.	IL, IS	✓	SEQs, BCQs

Describe functions of adrenal cortical hormones and its disorders.	IL, IS	√	SEQs, BCQs
Describe functions of adrenal medullary hormones and its disorders.	IL, IS	√	SEQs, BCQs
Discuss endocrine functions of pancreas and its disorders.	IL, PBL	✓	SEQs, BCQs
Discuss skin and body temperature regulation.	IL, IS	√	SEQs, BCQs
-		√	SEQs, BCQs
Discuss female reproductive system.	IL, IS	✓	SEQs, BCQs
BIOCHEMISTRY			
Discuss the definition & classification of lipids	IL, SGS	✓	BCQS, SEQS
Discuss the biomedical importance of lipids	IL, SGS	√	BCQS, SEQS
Perform the detection of different lipids in given solution	PW	✓	OSPE
Discuss the definition & classification of fatty acids	IL, SGS		BCQS, SEQS
Discuss the chemistry of essential fatty acids & their biomedical importance	IL, SGS		BCQS, SEQs
Discuss the importance of cholesterol & lipoproteins	IL, SGS		BCQS, SEQS
Discuss the chemical & Physical properties of triglycerides	IL, SGS		BCQS, SEQS
Discuss the Identification of fat (Saponification, Iodine No.)	IL, SGS	√	BCQS, SEQS
Discuss the rancidity its types & Biomedical importance	IL, SGS	√	BCQS, SEQS
Perform the analysis of normal and abnormal urine	PW	✓	OSPE
Discuss the sources, Absorption, regulation, biomedical importance, clinical aspect of Na & K	IL, SGS	√	BCQs, SEQs
Discuss the sources, Absorption, regulation, biomedical importance, clinical aspect of Cl, PO ₄ & Ca	IL, SGS	√	BCQs, SEQs
	IL, SGS		BCQs, SEQs
Discuss the sources, absorption, regulation, biomedical	IL, SGS		BCQs, SEQs
Perform milk analysis by separating different components	PW	√	OSPE
Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of copper, chromium, cadmium, manganese	IL, SGS	√	BCQs, SEQs,CP
Discuss the sources, absorption, regulation, biomedical	IL, SGS		BCQs, SEQs
Discuss the sources, absorption, regulation, biomedical role, clinical	IL, SGS	√	BCQs, SEQs
	disorders. Describe functions of adrenal medullary hormones and its disorders. Discuss endocrine functions of pancreas and its disorders. Discuss skin and body temperature regulation. Discuss male reproductive system. Discuss female reproductive system. BIOCHEMISTRY Discuss the definition & classification of lipids Discuss the biomedical importance of lipids Perform the detection of different lipids in given solution Discuss the definition & classification of fatty acids Discuss the chemistry of essential fatty acids & their biomedical importance Discuss the importance of cholesterol & lipoproteins Discuss the chemical & Physical properties of triglycerides Discuss the Identification of fat (Saponification, Iodine No.) Discuss the rancidity its types & Biomedical importance Perform the analysis of normal and abnormal urine Discuss the sources, Absorption, regulation, biomedical importance, clinical aspect of Na & K Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Iron & Zinc Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Opper, chromium, cadmium, manganese Discuss the sources, absorption, regulation, biomedical role, clinical aspect deficiency of vitamin A & E Discuss the sources, absorption, regulation, biomedical role, clinical aspect deficiency of vitamin A & E Discuss the sources, absorption, regulation, biomedical role, clinical aspect deficiency of vitamin A & E	disorders. Describe functions of adrenal medullary hormones and its disorders. Discuss endocrine functions of pancreas and its disorders. Discuss skin and body temperature regulation. Discuss skin and body temperature regulation. Discuss male reproductive system. Discuss female reproductive system. 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Discuss the definition & classification of lipids Discuss the biomedical importance of lipids Discuss the biomedical importance of lipids Discuss the definition & classification of fatty acids Discuss the definition & classification of fatty acids Discuss the chemistry of essential fatty acids & their biomedical importance Discuss the importance of cholesterol & IL, SGS Discuss the importance of cholesterol & IL, SGS Discuss the importance of cholesterol & IL, SGS Discuss the Identification of fat (Saponification, Iodine No.) Discuss the rancidity its types & Biomedical importance Discuss the sources, Absorption, regulation, biomedical importance, clinical aspect of Na & K Discuss the sources, Absorption, regulation, biomedical importance, clinical aspect of Iron & Zinc Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of Mg, selenium, iodine Perform milk analysis by separating different components Discuss the sources, absorption, regulation, biomedical importance, clinical aspect of vitamin A & E Discuss the source

	(1.0)			1
0.0	aspects/deficiency of vitamin D, K	** ***		
90.	Discuss the sources, absorption, regulation, biomedical	IL, SGS	✓	
0.1	role, clinical aspectdeficiency of vitamin C	II CCC	√	
91.	Discuss the sources, absorption, regulation, biomedical	IL, SGS	•	
92.	role, clinical aspectdeficiency of vitamin B1 & Folic acid Discuss the sources, absorption, regulation, biomedical	IL, SGS	√	BCQs, SEQ
12.	role, clinical aspect deficiency of Pyridoxine, Riboflavin	IL, 505		DCQs, SEQ
93.	BCQs, SEQs	IL, SGS	✓	BCQs, SEQ
,,,	200,520	12,505		
94.	BCQs, SEQs	IL, SGS	✓	BCQs, SEQ
95.	Perform CSF analysis	PW	√	OSPE
	ORAL BIOLOGY			1
96.	Discuss the morphology of maxillary 1st Molar	IL		BCQs, SEQ
97.	Describe the morphology of maxillary 2 nd & 3 rd Molar	IL		BCQs, SEQ
98.	Understand the morphology of Mandibular 1 st Molar	IL		BCQs, SEQ
99.	Describe the morphology of Mandibular 2 nd & 3 rd Molar	IL		BCQs, SEQ
100.	Compare the morphology of maxillary molars with	IL		SEQs
	mandibular molars			
101.	Differentiate between deciduous and permanentdentition	IL		SEQs
102.	Discuss the root canal morphology of all teeth	IL		SEQs
103.	Identify the landmarks of molars on tooth models	PW		OSPE
104.	Sketch five aspects of maxillary & mandibular 1st molars	PW		SEQs, OSPI
	on graph			
105.	Carve the morphological feature of maxillary and	PW		OSPE
106	mandibular 1 st molar usingwax block	***	√	D.C.O.
106.	Define and classify occlusion in permanent dentition	IL	•	BCQs
107.	Describe the following terms:	IL	✓	BCQs
	Centric relation			
	Centric occlusion			
	 Overjet 			
	Overbite			
	Balanced occlusion			
100	• Group function	**		D.G.O.
108.	Describe the Incisor, Canine and Molar classification.	IL	✓	BCQs
109.	Define curve of Spee, curve of Wilson, sphere of Monson.	IL	✓	BCQs
110.	Describe different face types and profiles	IL	√	BCQs
111.	Relate the facial profiles with gender and age.	IL	✓	BCQs
112.	Understand the components and functions of oral mucosa	IL, PW	√	BCQs

114. Interpret the structural variations associated with different types of oral mucosa	IL, PW		OSPE
115. Describe histological features of lining and masticatory mucosa.	IL, PW		BCQs, SEQs, OSPE
116. Describe the histology of keratinized & non-keratinized epithelium	IL,		BCQs, SEQs, OSPE
117. Differentiate between keratinized & non-keratinized epithelium	IL, PW, TBL		BCQs, SEQs, OSPE
118. Enlist the lamina propria and basement membrane	IL, PW		SEQs,OSPE
119. Appreciate the clinical diseases associated with each component	IL,		BCQs,
120. Describe the specialized mucosa of tongue and different types of papillae.	IL	√	BCQs, SEQs, OSPE
121. List the types of lingual papillae according to their location and taste sensation	IL, PW		BCQs, SEQs, OSPE
122. Compare different types of papillae with each other	IL, PW		BCQs, SEQs, OSPE
123. Describe the features of the gingiva	IL, PW		OSPE
124. Discuss the clinical parts and fibers of gingiva.	IL, PW		BCQs, SEQs, OSPE
125. Discuss the types of junctions found in oral mucosa.	IL	✓	BCQs, SEQs, OSPE
126. Differentiate between sulcular and junctional Epithelium	IL	✓	SEQs
127. Define mucogingival and dento-gingival junction.	IL, PW	✓	OSPE
128. Enlist the arrangement of the principal collagen bundles and their fibrils, the orientations and the mode of attachment of these fibers into tooth and bone.	IL	√	BCQs, OSPE
129. Describe the role of different cells present in PDL	IL	✓	BCQs, SEQs
130. Discuss the changes that take place with age in the periodontal ligament.	IL	✓	BCQs
131. Enlist the features that make PDL a specialized Connective tissue.	IL	✓	BCQs
132. Explain the blood and nerve supply of PDL.	IL	✓	BCQs
133. Discuss the composition, functions and physical features of cementum.	IL	✓	BCQs, SEQs
134. Identify and describe the histological features of cementum including its types, distribution.	IL		BCQs, SEQs
135. Describe the lines of Salter	IL		BCQs
136. Discuss the importance of cementum– enamel and cementum-dentinal junction.	IL		BCQs
137. Differentiate between primary and secondary cementum.	IL	✓	SEQs

138.	Enlist age changes in cementum.	IL	✓	BCQs
139.	Describe the process of cementogenesis.	IL	✓	SEQs
140.	Discuss the fate of Hertwig root sheath	IL	✓	BCQs
141.	Classify the types of joints.	IL, PBL	✓	SEQs
142.	Describe the structure of TMJ.	IL	✓	BCQs
143.	Describe the different components of TMJ including	IL, TBL	✓	BCQs, SEQs, OSPE
144.	capsule, condyle, articular fossa, synovial membrane. Describe the role of different ligaments associated with	IL	✓	BCQs
145.	TMJ. Comprehend the biomechanics of the joints	IL, TBL	✓	BCQs
146.	including movements initiated by muscles of mastication. Describe the different types of nerve endings present in TMJ.	IL		BCQs
147.	State the neurovascular supply of TMJ.	IL		BCQs
148.	Enumerate the features of Pre-eruptive, Eruptive & Post-eruptive phases of tootheruption	IL		BCQs, SEQs
149.	Describe the various theories of tooth eruption	IL		BCQs, SEQs
150.	Explain the pattern of shedding of teeth & factors involved in it.	IL	√	BCQs, SEQs,
151.	Discuss the process of repair and regeneration of the dental hard and soft tissues.	IL	✓	BCQs, SEQs
152.	 Enlist features of following clinicalanomalies: Cleft Lip and Palate, Treacher Collins syndrome, Pierre Robin syndrome, Down's syndrome, Hemifacial microsomia, Apert's syndrome, Crouzon syndrome Di George Syndrome 	IL	√	BCQs, SEQs
153.	Describe the significance of primary dentition	IL		SEQs, BCQs
154.	Recall the eruption timing and sequence of primary and permanent dentition	IL		SEQs, BCQs, OSPE
155.	Understand the detailed description of all anterior primary teeth	IL		SEQs, BCQs, OSPE
156.	Understand the detailed description of all posterior primary teeth	IL		SEQs, BCQs, OSPE
157.	Identify the number of pulp horns and root canals in each primary tooth	IL		BCQs
158.	Define forensic dentistry	IL	✓	BCQs
159.	Discuss the methods of identifying unidentified individuals using data from dental tissues	IL	✓	BCQs

160.	Describe the methods of chronological	IL	✓	BCQs
	age estimation from tooth models and radiographs			
161.	Discuss the applications forensic dentistry	IL	✓	BCQs
	Behavioral Sciences			L
Leader	ship and Management			
162.	Discuss Non-Verbal Communication	IL	✓	BCQs, SEQs
163.	Discuss effective communication in dentistry.	IL	✓	BCQs, SEQs
164.	Discuss importance of communication in leadership and management.	IL	√	BCQs, SEQs
Ethics				
165.	Discuss dentist interaction with patients and colleagues.	IL	✓	BCQs, SEQs

Commencement of 3rd Module		Weekly Schedule of Module III Anatomy			
Activity	Week	Lecture 1	Lecture2	Lecture3	
Academic Session – BDS First Professional	Week- 1	Explain the general layout of the nervous system and its classification (1)	Discuss the gross anatomy of spinal cord and its blood supply (2)	Describe the microscopic features of spinal cord (17)	
	Week- 2	Discuss the ascending tracts of spinal cord with their functions & clinical correlates (I) (3)	Discuss the ascending tracts of spinal cord with their functions & clinical correlates (II) (3)	Discuss the descending tracts of the spinal cord with their functions and clinical correlates (4)	
	Week- 3	Discuss the cross section of spinal cord (2)	Discuss the cross section of medulla oblongata (6)	Discuss the gross & microscopic structure of cerebellum and fibers associated with it (8, 17)	
	Week- 4	Discuss the cross section of Pons (6)	Discuss the cross section of Midbrain (6)	Describe white matter (commissural, projection & association fibers) of brain (14)	
	Week- 5	Describe the development of spinal cord (27)	Relate parts of basal nuclei of brain with clinical disorders (15)	Describe the microscopic features of cerebrum (16)	
	Week- 6	Introduction to cranial nerves, discuss CN I (56)	Cranial nerve II (7)	Describe the microscopic features of eye (57)	
	Week-7	Cranial nerve III, IV and VI (7)	Cranial nerve V (7)	Cranial nerve VII (7)	
	Week- 8	Describe the development of brain 27)	Cranial nerve VIII (7)	Cranial nerve IX (7)	
mic S	Week- 9	Cranial nerve X (7)	Cranial nerve XI & XII (7)	Discuss cervical fascia (28)	
Acade	Week- 10	Describe the lymphatic drainage of head and neck (30)	Discuss the ganglia and plexus present in the neck 31)	Describe the location, structure & blood supply of pituitary gland 33)	
	Week-11	Describe development & microscopic features of pituitary gland (38, 39)	Explain the location and structure of thyroid and parathyroid gland (35)	Describe development and microscopic features of thyroid and parathyroid gland (38, 39)	
	Week-12	Discuss the location, structure, development & microscopic features of suprarenal gland (37, 38, 39)	Describe the location, structure, development and microscopic features of endocrine pancreas (36, 38, 39)	Revision	
	Week-13 & 14	THEORY AND VIVA EXAMINATION			

Commencement of 3 rd Module		Weekly Schedule of Module III PHYSIOLOGY		
Activity	Week	Lecture 1	Lecture 2	
	Week- 1	Functional organization of Nervous system (43)	Synaptic transmission and disorders (44)	
	Week- 2	Sensory receptors (45)	ANS (51)	
	Week- 3	Sensory pathways (46)	Motor pathways + Spinal reflexes (48, 49)	
	Week- 4	Pain physiology and headache (47)	Basal ganglia + RAS, Sleep, EEG (50, 52)	
sional	Week- 5	Cerebellum (53)	Vision and image forming (54)	
t Profes	Week- 6	Photo-Transduction & visual processing (55)	Physiology of Hearing (56)	
S Firs	Week-7	Vestibular system (57)	Gustation & Olfaction (58)	
Academic Session – BDS First Professional	Week- 8	Introduction to endocrinology &mechanism of action of hormones (60)	Hypothalamus & pituitary (61)	
ıdemic S	Week- 9	Parathyroid hormone & calcium Metabolism (61)	Thyroid hormone (62)	
Aca	Week-10	Adrenal cortex (63)	Adrenal medulla (64)	
	Week- 11	Skin and temperature regulation (66)	Endocrine role of pancreas (65)	
	Week- 12	Male reproduction (67)	Female reproduction (68, 69)	
	Week- 13 &14	THEORY AND VIVA EXAMINATION		

Commencement of 3rd Module		Weekly Schedule of Module III Biochemistry		
	Week-1	Define & classify lipids (72)	Biomedical importance of lipids(73)	
	Week-2	Definition & classification of fatty acids (75)	Essential fatty acids & their biomedical importance (76)	
	Week-3	Importance of cholesterol & lipoproteins (77)	Chemical & physical Properties oftriglycerides(78)	
	Week-4	Identification of fat (Saponification), Iodine No. (79)	Rancidity its types & Biomedical importance(80)	
	Week-5	Sources, Absorption, regulation, biomedical importance, clinical aspect of Na & K (82)	Sources, Absorption, regulation, biomedical importance, clinical aspect of Cl, PO ₄ & Ca (83)	
	Week-6	Sources, Absorption, regulation, biomedical importance, clinical aspect of iron & Zinc (84)	Sources, Absorption, regulation, biomedical importance, clinical aspect of Mg., selenium, iodine (85)	
	Week-7	Sources, Absorption, regulation, biomedical importance, clinical aspect of copper, chromium, cadmium, manganese (87)	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of vitamin A & E (88)	
	Week-8	Sources, Absorption, regulation, biomedical role, clinical aspects/deficiency of vitamin D, K (89)	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of vitamin C (90)	
	Week-9	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of vitamin B1 & folic acid (91)	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of Pyridoxine, riboflavin (92)	
	Week-10	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of nicotinic acid & biotin (93)	Sources, Absorption, regulation, biomedical role, clinical aspect deficiency of vitamin B12 (94)	
	Week- 11-12	Revision	Revision	
	Week- 13 &14	THEORY AND	O VIVA EXAMINATION	

Commencement of 3 rd Module		Weekly Schedule of Module III Oral Biology		
Activity	Week	Lecture 1	Lecture 2	
	Week- 1	Maxillary 1st molar (96)	Maxillary 2 nd & 3 rd molar (97)	
	Week- 2	Mandibular 1st molar (98)	Mandibular 2 nd & 3 rd molar (99-100)	
	Week- 3	Primary & Permanent Dentition (101)	Root Canal Morphology (102)	
	Week- 4	Occlusion (105, 106)	Occlusion (107, 108, 109)	
fessional	Week- 5	Facial Profiles (110, 111)	Oral Mucosa I (112-115)	
First Pro	Week- 6	Oral Mucosa II (116-119)	Oral Mucosa III (120-127)	
Academic Session – BDS First Professional	Week- 7	Cytoskeleton (128)	PDL (129-132)	
ic Sessior	Week- 8	Cementogenesis & Cementum (133-140)	TMJ (141-147)	
λcademi	Week- 9	Eruption & Shedding of teeth (148-150)	Repair & Regeneration (151)	
A	Week-10	Syndromes of Head & Neck (152)	Anatomy of Primary Dentition (153-157)	
	Week-11	Forensic Dentistry (158 - 160)	Test on Histology	
	Week-12	Revision of histology	Revision of Morphology	
	Week 13 & 14	THEORY AND VIVA EXAMINATION		

LEARNING RESOURCES

Department of Anatomy

Department of Physiology

Department of Biochemistry

Department of Oral Biology & Tooth Morphology

ANATOMY

BOOKS

- 1. Clinical Anatomy Seventh Edition by Richard Snell
- 2. Junqueira's Basic Histology: Text and Atlas, Latest Edition by Anthony Mescher
- 3. The Developing Human, Latest Edition, Clinically Oriented Embryology. Authors: Keith Moore T. V. N. Persaud Mark Torchia
- 4. Clinical Neuroanatomy, by Richard S. Snell, Latest edition.

E-BOOKS

- 1. BRS Cell Biology and Histology 6th Edition
- 2. BRS Gross Anatomy 5th Edition
- 3. Netter atlas of Human Anatomy
- 4. BRS Neuroanatomy 4th Edition
- 5. Diffores Atlas of Histology 11th Edition
- 6. Last Anatomy Regional and applied 9th Edition
- 7. Wheater's Functional Histology 5th Edition
- 8. Grant's Atlas of Anatomy 13th ed.
- 9. Gray's Anatomy 39th ed.
- 10. Neurohistology
- 11. Junqueira Basic Histology
- 12. Netter Clinical Anatomy
- 13. Langman's Medical Embryology 2003
- 14. Clinical Oriented Anatomy KLM
- 15. BRS Gross Anatomy by Kyung W Chung
- 16. BRS Cell Biology and Histology by Leslie P. Gartner
- 17. BRS Neuro-anatomy by Doughals J, Gould

- 18. High yield Embryology
- 19. BRS Embryology

Before we born embryology

- 20. The development human clinical oriented embryology 9th
- 21. High Yield Embryology
- 22. Thieme Atlas of Anatomy, General Anatomy and Musculoskeletal System
- 23. Text Book of Anatomy: Head and Neck by Visharm Sing

PHYSIOLOGY

BOOKS

- Textbook of Medical Physiology, latest Edition. Authors: John Hall Arthur Guyton John Hall
- 2. Medical Physiology for Undergraduate Students, Latest Edition. Authors: Indu Khurana
- 3. Review of Medical Physiology (Lange Basic Science). By William F. Ganong
- 4. Human Physiology: From Cells to Systems, Latest Edition. By Lauralee Sherwood.

E-BOOKS

- 1. Sherwood Human Physiology 3rd Edition
- 2. Guyton text book of medical physiology 11th Edition
- 3. Guyton Text Book of Medical Physiology 12th Edition.
- 4. USMLE Step 1 Physiology (lecture notes)
- 5. Sherwood Human Physiology for cell to system 7th edition.
- 6. Medical Physiology 11th edition.
- 7. Ganong Review of Medical Physiology
- 8. BRS Physiology by Constanzo
- 9. Jaypee Essential of Medical Physiology
- 10. Principal Anatomy and Physiology by Totora
- 11. Pocket companion by Guyton
- 12. Medical physiology for undergraduate by Khurana
- 13. Medical Physiology: Principles for clinical Medicine

BIOCHEMISTRY

BOOKS

- 1. Harpers Illustrated Biochemistry (Lange Medical Book) by Robert K. Murray, David A. Bender
- 2. Biochemistry (Lippincott Illustrated Reviews Series) latest Edition by Denise R. Ferrier
- 3. Text book of Biochemistry with clinical correlations. Thomas M. Devein (Reference Book)

E-BOOKS

- 1. Harper the Biochemistry 26th
- 2. Lehniger principle of biochemistry 4th
- 3. USMLE Step 1 Biochemistry and Genetic (lecture notes)
- 4. USMLE Step 1 Biochemistry and Genetic (lecture notes)
- 5. Lippincott biochemistry 6th ed.
- 6. Text Book of Medical Biochemistry by Chatterjee 8th Edition.
- 7. BRS Biochemistry

ORAL BIOLOGY & TOOTH MORPHOLOGY

Oral Histology Books

- 1. Oral Anatomy, Histology and Embryology 5th Edition.
- 2. Ten Cate's Oral Histology: Development, Structure, and Function. 9th Edition.
- 3. Oral Development and Histology. By James K. Avery
- 4. Orban's Oral Histology and Embryology. by S.N. Bhaskar, C.L. Anderson

Tooth Morphology Books

- 1. Wheeler Dental Anatomy, Physiology and Occlusion 9th ed.
- 2. Woelfel's Dental Anatomy, Enhanced Edition, 9th edition

BAHRIA UNIVERSITY HEALTH SCIENCES

First Professional BDS Batch XIII

Academic Calendar (2025)

SESSION STARTS

Commencement Day

10th April 2025 (Thursday)

FIRST MODULE (12 WEEKS)

Pre-Vacation Session (9 weeks)

Module Starts Module Break

10th April 2025 (Thursday0 6th June 2025 (Friday)

Eid Ul Adha & Annual Vacations* (2 week)

9th June - 20th June 2025

Post-Vacation session (3 weeks)

Module starts

23rd June 2023 (Monday)

Module End

11th July 2025 (Friday)

Theory/OSPE/Viva Examination

14- 18th July 2025 (Monday to Friday)

SECOND MODULE (12 WEEKS)

Module Starts Module Ends

21st July 2025 (Monday) 10th October 2025 (Friday)

Theory/OSPE/Viva Examination

13-17th October 2025 (Monday to Friday)

THIRD MODULE (12 WEEKS)

Module Starts

Module Ends

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Theory/OSPE/Viva Examination

20th October 2025

9th January 2026

12th - 16th January (Monday to Friday)

FINAL EXAMINATION:

DR. BEENISH FATIMA ALAM

1ST year BDS Coordinator

Bahria University Dental College BUHSCK January 2026

PROF. OR TARZEEN TANWIR

Vice-Principal

Bahria University Dental College

BUHSCK

PROF. DR. KASHIF NAOVI

Principal

Bahria University Dental College

BUHSCK

^{*} Subject to Sighting of Moon