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Foreword

With increasing public expectations about the health care services, the quality of care itself is under scrutiny all over the world. Therefore a positive change is needed in the role of Medical Technologists. The role of teachers and students in teaching and learning to bring in positive changes in paramedics and auxiliaries education also needs to be reviewed and further developed.

This revised Health Technology (HT) curriculum has been developed and scientifically designed, making it responsive to the needs of the learners and focussed towards the need of consumers. The present HT curriculum with its assessment methods is expected to effectively judge competencies acquired with those required to cater the health needs of our people. It is gratifying to note that all concerned in the promotion of paramedic health science in the country have involved themselves in the planning and formulation of this need-based HT curriculum

Contents like basic computer science, communicative English, ethics, communication skills, behavioural science, primary health care, environment and sanitation have been given the required emphasis in this document. Though the curriculum is not the sole determinant of the outcome, yet it is very important as it guides the faculty in preparing their instruction, tells the students where to go, what to do and what knowledge, skills and attitude they are expected to develop.

In conclusion, I would like to state that, the curriculum planning process should be continuous, dynamic and never-ending. If it is to serve best, the needs of the individual students, educational institutions and the expectations of client community to whom we are ultimately accountable, are required to be evaluated and given due attention.

I congratulate all who were involved in designing and developing the curriculum, particularly the Director, Medical Education & HMPD, DGHS, Director, CME, Secretary, SMFB, members of the working group and the faculty members of Centre for Medical Education (CME). I offer my special thanks to RTM International and Swisscontact-KATALYST for their technical and financial support.

Professor M A Faiz

Director General of Health Services
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Message

Curriculum planning and designing is not a static process, rather a continuous process done regularly through a system. The curriculum was developed a few years back but it was needed to be updated to make it more technology oriented and competency based.

Initially there were four meetings of the **Curriculum Working Group** of different disciplines from Institute of Health Technologies (IHT) to prepare a draft curriculum. Subsequently, in order to develop a consensus, decision was taken to hold Review Workshops through active participation of different groups of faculty members. A taskforce group examined the revised curriculum for the different courses of IHT to give it a final shape with the financial support by RTM International & Swisscontact-KATALYST.

The revised Curriculum for Health Technology (HT) is expected to be implemented for the newly admitted students of the next session. The success of this curriculum, which is made more competence based and need-based, depends on its proper implementation with active leadership of the teachers and interactive participation of students.

It is expected that this curriculum will serve as present day guideline for the students of IHT and its faculty members. In order to ensure further improvement, this curriculum needs constant review and revision with time to time updating.

My sincere thanks to Dr. Mainuddin Ahmed Chowdhury, Director, Centre for Medical Education (CME) for his supports. The technical team of the Centre for Medical Education (CME) deserves special appreciation.

I like to thank Dr. Md. Humayun Kabir Talukder, Associate Professor, CME, Co-ordinator of Working Group, Member Secretary, HT Curriculum Development Committee for his continuous technical assistance and co-ordination to prepare this curriculum. My special thanks to RTM International and Swisscontact-KATALYST for their technical and financial support.

Lastly, I would like to extend my deep and sincere gratitude to all teachers of different IHT faculty members and others computer and secretarial support staff of CME who shared their expertise and worked hard to produce this valuable document.

Prof. Dr. Khondhaker Md. Shefyetullah
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Acknowledgement

This is indeed a pleasant responsibility to bring out this curriculum on Health Technology course, which has been developed through a participatory approach by a team of teachers of IHTs and medical educationists. It aims to review and update the Health Technology (HT) curriculum.

I would like to express my deep gratitude to Prof. M A Faiz, Director General of Health Services, Prof. Dr. Khondhaker Md. Shefyetullah, Director of Medical Education and HMPD, DGHS, under the leadership of whom the plan of reviewing and updating the HT curriculum has been materialized, and who provided immense support and encouragement to finish the work.

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My thanks to all others of CME, who were involved directly or indirectly in the preparation of this curriculum.

Dr. Md. Abdul Jabbar Mollick

Secretary

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Course Overview

Course Aims:

To prepare dental technologist for dental technology department with proper knowledge, skill and attitude so that he/she can perform her/his duties accurately with the dental surgeon as per her/his need and as well as with the patient.

Course Objectives:

After successful completion of the 3 years Diploma in dental Technology course, the students will be able to learn:

- Assist the dental surgeon for major and minor oral and facial surgery such as
 - i) Extraction of teeth and impacted teeth
 - ii) Cyst operation and apicectomy operation
 - iii) Operative procedure after accidental trauma of maxilla and mandible
 - iv) Different kinds of conservative treatment
- Do by himself/herself the following works:
 - i) Advice to the patient about oral hygiene
 - ii) Construction and repair work of denture, crown, bridge and other dental appliances
 - iii) Minor dental services such as scaling, polishing, dressing, temporary and permanent filling of deciduous teeth.
 - iv) Extraction of the deciduous teeth under the direction of the dental surgeon.
 - v) Sterilization of the instruments
 - vi) Maintenance of the stock-ledger/ departmental records/ preparation of indents/ maintenance of breakage missing equipments and instruments.
 - vii) Maintenance of lab rooms and surgery rooms properly.
 - viii) Interpretation of the prescription of the dental surgeon and advice to the patient.
 - ix) General management of the patient where the services of a Dental surgeon is not available
 - x) Be aware of the role and scope of dental technologist in public health.
 - xi) Know the general condition of the patient such as hypertension, diabetes and patient with different types of blood dyscrasias.
 - xii) Contribute to the future development of the dental technology training and education.

Job description of Diploma Dental Technologist

A. General Job

1. Safety of the dental technologist:
 - Dental Technologists should be properly immunized.
 - Must have proper and protective dress and knowledge about personal protection.
 - Properly labeling of the high-risk specimens.
 - Appropriate maintenance of own hygiene after handling of each patient.
2. Safety of the patient
 - Maintain safety measures in every individual procedure.
 - Arrangements of First Aid measure for emergency situations and complications.
3. Proper maintenance of departmental records
 - Preparation of indents
 - maintenance of stock ledger for equipment, instrument and also record of materials

- Maintenance of breakage/ missing records and reports on any defects, disorders of instruments and equipments, check expiry dates of medicine and materials from time to time.
- 4. Proper maintenance of laboratory and surgery room
- 5. Supervision and training of junior colleagues.
- 6. Perform the duties assigned by the superior officers and seniors related to job description.
- 7. Commitment to the patient
 - Should be well behaved to the patients and attendants.
 - Explain procedures and consequences to the patients and their attendants.
 - Motivation and counseling where and when needed.
 - Consent of the patient and attendant where needed.
 - Maintain privacy of the patient.

B. Specific Jobs

1. Proper registration of the patient in details
 - Name, age, sex, religion
 - Occupation, address
 - Present problem
 - Past problem if any
2. Maintenance of all dental equipment, instruments, materials such as
 - Dental extraction sets, Scaling sets
 - Minor oral surgery sets
 - Equipment for oral surgery
 - Dental chair
 - Linens
 - Sterilization
3. Maintenance of stock ledger for equipment, instruments & materials and proper inventory time to time of the stock.
4. Maintain all departmental records such as
 - Register, Dental X-ray
 - Dental appliances
 - Treatment records
5. Prepare indents.
6. Provide oral health education and motivate the patients. Give pre and postoperative care to the patient if necessary:
 - Pre-operative care
 - Assure the patient
 - Check whether the patient has taken medicine before operation as advised by the dental surgeon
 - Check oral hygiene (Betel nut, chewing tobacco dust)
 - Pre-operative care

- Keep the cotton in mouth for 30-60 minutes
- Take soft and liquid diet
- Do not gargle or rinse for 24 hours

In case of all other major oral surgery post operative care should be taken.

7. Give chair side assistance to the dental surgeon during surgery or operation when called for such as
 - Placing the patient properly
 - Take protective measures for the patient
 - supply sterilized instruments
 - Proper use of the sucker and saliva suction
 - Ready the instrument tray
 - Prepare the operation field
 - After surgery remove the disposable & prepare the field for next surgery.
8. Supervision of junior colleagues.
9. In laboratory & Clinic – Take impression & construct dentures and other dental appliances such as
 - Prepare prosthodontic appliances- Models, Wax pattern, Fluxing, Curing
 - Prepare orthodontic appliances- Models, Clasp, Z & Finger springs
10. Proper maintenance of laboratory room, surgery room and sterilize instruments, cotton, gauze and other essentials.
11. Maintain patients' appointment diary.
12. Undertake minor dental surgery such as polishing,, scaling, dressing, simple cement filling & simple Endodontics Treatment..
13. Acquire knowledge about manipulation of different types of filling materials – Anterior filling materials, Alloys and Lining materials.
14. Acquire knowledge about how to manipulate different types of impression materials.
15. First aid dental treatment and minor tooth extraction such as extraction of loose & deciduous teeth under surface anesthesia & advice necessary medicine for the same purpose .
16. Acquire knowledge about technical support to
 - ART(Atraumatic restorative treatment)
 - Application of fissure sealents
 - Diet counseling
 - Topical application of fluorides
 - Computer program and other educational aids
 - Update knowledge about latest dental units & other modern appliances
17. Acquire skills on
 - laboratory procedure for casting of crown, bridge, inlay, onlay and metallic partial denture
 - Dental health education for individual and community people
 - Demonstration of oral hygiene like maintenance by brushing, flossing on models/ life models

- Chair side assistance during medically compromised patient's management i.e. physically handicapped and mentally retarded
- Handle non co-operative children patients
- Assist Dental Radiologist in Dental Radiology department if called for
- Assist Oral Pathologist in the oral Histopathology and Oral Microbiology department if called for

C. Job At the Teaching Institutes:

At the teaching Institutes the Medical Technologists (Dentistry) personnel are positioned at three levels:

- a. Lecturers
- b. Instructors
- c. Technologists

a. Lecturers:

- They shall perform small group teaching in tutorial, demonstration, and practical classes.
- Facilitate practical demonstration and work of the students in the dental practical room as a 'facilitator' of practical 'teaching group'.
- Senior lecturers can perform large group teaching as well.

b. Instructors:

- They will perform tutorial and demonstration classes relevant to practical items.
- Ensure and guide the students to prepare practical note books.
- Demonstrate elaborately procedures and methods of the practical works in the dental laboratory and follow students' performance in the practical classes.
- Supervise practical classes as a 'Team leader'.

c. Technologists:

- They shall perform practical in all practical classes.
- Run practical demonstration and works for the students.
- Perform small group demonstration relevant to practical.
- Responsible for dental practical room set up and organization including maintenance of registers, records and stock ledger under guidance of the supervisors.
- Responsible for the security and safety of the dental practical room especially in respect to maintenance, infection, fire, electric hazards and disposal of wastes.

COURSE DETAILS

A. **Course Title:** Diploma in Dental Technology (DDT).

B. Course philosophy and rationale

The dental practice requires four handed treatment. Dental surgery/Oral surgery needs helping hands to assist the dental surgeon in maintaining sterilization, management of patient, supplying surgical instruments and equipments etc.

The various technical works need technical help such as making cast, clasp, splints, suture, crown, budge etc. Dental treatment also need indent of materials, supervision of cleanliness, maintenance of stock ledger etc which are not possible by a dental surgeon alone and so Diploma Dental Technologist is necessary for proper and effective dental treatment

This course finds its rationale to develop adequate number of Medical Technologists in the Dentistry disciple to cope up with growing demand and expansion of health care services in different sectors and to meet the desired need of Dental surgeon/Technologist ratio in Bangladesh.

C. Conditions for entrance:

1. Qualifications & prerequisite:

- (i) SSC Science or equivalent with Science with Physics & Chemistry.
- (ii) Candidate has to secure 2nd division or GPA 2.5 in the SSC examination. Candidate passed S.S.C. exam current year or previous three years or as decided by the authority for each year of admission.

2. Examinations for Entrance/Admission Test:

All candidates are to sit for admission tests through prescribed rules and examination method as specified in the advertisement. Selection of the candidates will be done on merit basis as based on marks obtained in the admission test.

Despite the general merit in consideration for selection the reserved quota for different groups of applicants as specified in the advertisement shall be maintained on the merit basis for the respective reserved quota as well. Candidates selected for admission will have to appear before the Medical Boards as organised by the respective Institute of Health/ Medical Technology.

D. Course structure and duration

The course will be of three years duration. The total period is divided into 3 parts – 1st year, 2nd year and 3rd year. In each there will be 40 weeks ((Teaching/Learning hours: 900-1400 hours/year) of teaching and learning at the end of which there will be an year final examination. Supplementary examinations will be held 6 months of the year final examination.

<i>Year</i>	Institutional teaching	Clinical placement	Revision & exam
<i>1st Year</i>	36 weeks	-	04 weeks
<i>2nd Year</i>	36 weeks	-	04 weeks
<i>3rd Year</i>	18 weeks	18 weeks	04 weeks

E. Setting of the papers & distribution of teaching /learning hours year wise:

1st Year

Papers	Subjects	Theory	Tutorial	Practical /Demon	Total Hours
I	English	75	25	-	100
II	Physics	50		50	100
III	Chemistry	80		20	100
IV	Basic Human Anatomy	70	60	70	200
V	Basic Human Physiology	75	60	65	200
VI	Basic Community Medicine	150		50	200
VII	Basic Microbiology & Parasitology	40		30	70
	Total	540	145	285	970

2nd Year

Paper	Subjects	Theory	Practical/ Demonstration	Total Hours
I	Chemistry of dental materials	150	150	300
II	Techniques of Partial Dentures Prosthesis	140	210	350
III	Techniques of Complete Dentures Prosthesis	150	200	350
IV	Introduction to oral and Dental Anatomy	150	150	300
V	Basic Computer Science	25	75	100
	Total	615	785	1400

3rd Year

Paper	Subjects	Theory	Practical / Demon	Clinical placement	Total Hours
I	Community Dentistry including Primary Dental Care & Oral Hygiene	100	150	200	450
II	Introduction to Drugs used in Dental Surgery & Dental Surgery Assistance	100	150	200	450
III	Applied Dental Prosthetic Technique	100	150	200	450
	Total	300	450	600	1350

F. Teaching & learning methods

The following teaching and learning methods will be followed:

1. Large Group Teaching Lecture aided by –
 - Chalk board
 - OHP/ Slide projector
 - Handouts
2. Small Group Teaching-
 - Tutorial/ Demonstration
 - Students interaction
3. Practical session-
 - Use of practical manual Chalk board
 - Performing the task/examination by the student
 - Writing the practical note book
4. Field Placement-
 - In small groups for performing activities by the student themselves

G. Assessment methods, grading and pass marks

Assessment Methods:

- A. There will be in-course (card/ item) and end-course (terminal) assessment for the students in each part (1st, 2nd & 3rd year) of the course i.e. formative and year final examination.
- B. There will be year final examinations at the end of each academic years and one supplementary examination 6 months after each regular year-final examination.
- C. Formative assessment will be done through items and card ending exam.
- D. In the year-final examination marks allocation will be as follows:
 - 20% from the formative examinations (Card final examination/Item marks).
 - 80% from year-final examination
- E. Eligibility for appearing in the year-final examination:
 - Certificate from the respective head of institutes regarding students obtaining at least 75% attendance in all aspects (theory, practical, tutorial, residential field practice) during one academic year.
 - Obtaining atleast 50% marks in the formative examinations.
 - No objection Certificate from the head of the respective heads of institutes regarding taking part any activities contrary to the discipline of the institute.
 - No student shall be allowed to appear in the Year II & Year III Final examinations unless the student passes in all the subjects of 1st and 2nd year Final examinations respectively.

Grading

1. Grade A+ : 75% and above

2. Grade A: 60% - 74%

3. Grade B: 45% - 59%

Pass Marks/Grade-C

Written Exam - 50%

Practical - 50%

Oral - 50%

Student shall have to pass written, oral , practical and formative separately in each paper of the examination.

H. Examinations & distribution of marks

First Year Examination

Paper	Subjects	Written Exam	Oral Exam	Practical Exam	Formative Exam	Total Marks
I	English	50+25	-	25	-	100
II	Physics	75	10	15	-	100
III	Chemistry	75	10	15	-	100
IV	Basic Human Anatomy	100	40	40	20	200
V	Basic Human Physiology	100	40	40	20	200
VI	Basic Community Medicine	100	40	40	20	200
VII	Basic Microbiology, Parasitology	100	40	40	20	200
	TOTAL	625	180	215	80	1100

Second Year Examination

Paper	Subjects	Written Exam	Oral Exam	Practical Exam	Formative Exam	Total Marks
I	Chemistry of dental materials	100	40	40	20	200
II	Techniques of Partial Dentures Prosthesis & Orthodontics.	100	40	40	20	200
III	Techniques of Complete Dentures Prosthesis.	100	40	40	20	200
IV	Introduction to oral and Dental Anatomy .	100	40	40	20	200
V	Basic Computer Science	50	20	20	10	100
	Total	450	180	180	90	900

Third Year Examination

Paper	Subjects	Written Exam	Oral Exam	Practical Exam	Formative Exam	Total Marks
I	Community Dentistry including Primary Dental Care& Oral Hygiene .	100	40	40	20	200
II	Introduction to Drugs used in Dental Surgery & Dental Surgery Assistance	100	40	40	20	200
III	Applied Dental Prosthetic Technique	100	40	40	20	200
	TOTAL	300	120	120	60	600

Paper I: Subject - English

Total hours: 100 hour

Lecture: 66 hour (Lt No = 66)

Practical / Tutorial: 34 hours (Pract No = 34)

Total marks-50+50

Written-50+25

Oral & practical- 25

Objectives: At the end of the course the students will be able to: -

1. Read & write any story in English and attain HSC level English proficiency
2. Write letters in English (private, Official etc).
3. Translate & retranslate in English
4. Read and write essays on different topics in English
5. Develops listening skills in English
6. Communicate with each other in English

Subject : English (Part -I)

Marks = 50

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
1.	<p>Text book: English for Today-Published by N.C.T.B. (Intermediate)</p> <p>Unit- Three: Learning English.</p> <ol style="list-style-type: none"> 1. Learning a language 2. Why learn English 3. How to learn English 4. Different learners, different ways 5. Dealing with grammar 6. Integrated skills development 7. How well do I know my dictionary? <p>Unit-Six: Our Environment.</p> <ol style="list-style-type: none"> 1. The environment and the ecosystem 2. How the environment is polluted. 3. The world is getting warmer. 4. Let's not be cruel to them. 5. Beware of pollution. 6. Forests should stay. 7. How to manage waste. <p>Unit-Twenty-four: People, People Everywhere</p> <ol style="list-style-type: none"> 1. What's the problem? 2. Kalim Majhee's boat. 3. The rootless. 4. Why is there discrimination? 5-7. The Revenge. 	16	

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
2.	Grammar: Articles : <ul style="list-style-type: none"> ▪ Indefinite & definite articles Tense: <ul style="list-style-type: none"> ▪ Present, Past & Future tense Voice : <ul style="list-style-type: none"> ▪ Active voice ▪ Passive voice ▪ Voice change Speeches: <ul style="list-style-type: none"> ▪ Direct speeches ▪ Indirect speeches Linkers <ul style="list-style-type: none"> ▪ In addition ▪ Besides ▪ Moreover ▪ However ▪ Because ▪ Either or neither, nor Idioms & Phrases :	22	
	Paragraph writing : Letter writing: Application writing: Report writing :	10	
	Telegrams & E-mail:	2	
	Total	50	

A. **Subject : English (Part -II)**

Marks = 25+25

Sl. No	<u>Topics/Lessons</u>	Teaching/learning Hours	
		Theory	Practical
	Communicative English : <ul style="list-style-type: none">▪ Reading skill▪ Writing skill▪ Listening skill▪ Conversations skill	4 4 4 4	8 8 8 10
	Total	16	34

Teaching Methods:

Lecture
Practical/ Tutorial/Communication

Media:

Multi media,
Laptop,
OHP,
White Board,
Marker,
Wall chart
VCD, DVD, CD

Assessment:

Written - SAQ (50% + 25%)
Reading, Listening & conversation 25%

Paper II : Subject - Physics

Total hours: 100 hour

Lecture: 60 hour (Lt No = 60)

Practical / Tutorial: 40 hours (Pact No = 20)

Total marks-50+50

Written-50+25

Oral & practical- 25

Objectives : At the end of the course, the students will be able to-

1. Define Physics and state the importance of Physics in the Health Care System.
2. Describe the different systems of measurement and weights.
3. Demonstrate basic knowledge on measurement of density and specific gravity of a substance.
4. Demonstrate basic knowledge on fundamental aspects of heat and temperature, sound, light, electricity and magnetism.

Course contents of Physics

Sl. No	Topic/Lessons তত্ত্বীয়	Teaching/Learning Hours	
		Theory	Practical
১।	বলবিদ্যা ও পদার্থের ধর্ম : <ul style="list-style-type: none"> ➤ সরল রেখার গতি, গতির সমীকরণ, নিউটনের গতির সূত্র ত্বরণ ও বল, খাত বল, ভেকটর ও সেলের রাশি। ➤ কৌণিক গতি, কৌণিক বেগ ও ত্বরণ বৃত্তাকার পথে গতি, কেন্দ্রভিগ বল। ➤ কাজ, ক্ষমতা ও শক্তি, শক্তির সংরক্ষণনীতি। ➤ সরল দোল গতি, সরল দোলক ➤ আর্কিমিডিসের সূত্র ও তার প্রয়োগ আপেক্ষিক গুরুত্ব নির্ণয়। 	১০ ঘন্টা	
২।	তাপ : তাপমিতি, তাপের একক, আপেক্ষিক তাপ, তাপীয় ক্ষমতা পানিসম ও সুপ্ততাপ এবং হাঁহাদের নির্ণয় পদ্ধতিঃ সরলীয় পদ্ধতিতে তাপের পরিবাহিতা নির্ণয়।	৫ ঘন্টা	
৩।	শব্দ : <ul style="list-style-type: none"> ➤ শব্দের উৎপত্তি ও শব্দ সালন, আড় তরঙ্গ ও দীঘল তরঙ্গ শব্দের ব্যভিচার ও বীট। বীটের সাহায্যে কম্পন সংখ্যা নির্ণয়। ➤ শব্দের বেগ নির্ণয়। ➤ টানা তারের আড় কম্পন, সূত্রের প্রমাণ। 	৫ ঘন্টা	
৪।	আলোক : <ul style="list-style-type: none"> ➤ গোলীয় পৃষ্ঠে প্রতিফলন। ➤ সমতল ও গোলীয় পৃষ্ঠে প্রতিফলন। সম্পূর্ণ প্রতিফলন, প্রতিসরাংক, প্রিজম প্রতিসারণ। ➤ লেন্সঃ উত্তল ও অবতল লেন্স। লেন্সের শক্তি ও বিবর্ধন লেন্স সংযোজন। চোখের ত্রুটি সমূহ ও প্রতিকার। ➤ আলোক যন্ত্র-মাইক্রোস্কোপ। 	৬ ঘন্টা	
৫।	চুম্বক : <ul style="list-style-type: none"> ➤ চুম্বকের বিভিন্ন পদ্ধতিঃ চুম্বকের মতবাদ চুম্বকের ক্ষেত্র ও প্রবাল্য। বিপরীত বর্গীয় সূত্র প্রান্তমুখী ও প্রস্থমুখী অবস্থানে চুম্বকের প্রাবল্য। বিক্ষেপী চুম্বকমান যন্ত্র ও ইহার ব্যবহার। ➤ ভূচুম্বকত্ব। 	৪ ঘন্টা	

Sl.No	Topic/Lessons	Teaching/Learning Hours	
		Theory	Practical
৬।	তড়িৎ : ➤ স্থির তরিত্ব, চার্জের অস্তিত্ব ও প্রকৃতি নির্ণয়। বৈদ্যুতিক আবেশ, কুলম্বের সূত্র, ধারকত্ব, তড়িৎ বিভব। সমান্তরাল পাত ধারক। ➤ বিদ্যুৎ কোষ, তাদের কেন্দ্রে উৎপন্ন চুম্বকক্ষেত্র। বিদ্যুৎ প্রবাহ ও চার্জের একক। ➤ ওহমের সূত্র, বিভব বৈষম্যের একক। রোধ ও আপেক্ষিক রোধ, রোধের একক, রোধ সংযোজন, এমিটার, ভোল্ট মিটার। ➤ বৈদ্যুতিক পরিমাপ, হুইট স্টেম ব্রিজ, মিটার ব্রিজ, পোস্ট অফিস বক্স ও পাটেন শিও মিটার। ➤ তড়িৎ প্রবাহ ও উত্তাপ, জুলের সূত্র, বৈদ্যুতিক পদ্ধতিতে নির্ণয়। ➤ তড়িৎ প্রবাহে রাসায়নিক ক্রিয়া, তড়িৎ বিশেষণ, সূত্র ও ইহাদের প্রমাণ। ➤ তড়িৎ চুম্বকীয় আবেশ।	২০ ঘন্টা	
	ব্যবহারিক		
	১। স্পর্শাইড ক্যালিপার্স, জুগজ ও স্পেরোমিটারের ব্যবহার শিক্ষা। ২। পানি অপেক্ষা হালকা/ভারি তরল ও কঠিন পদার্থের হাইড্রো-স্টেটিক ব্যালেন্স, নিকলসন হাইড্রোমিটার ও আঃ হাইড্রো বোতলের সাহায্যে আপেক্ষিক গুরুত্ব নির্ণয়। ৩। সরল দোলকের সাহায্যে জি এর মান নির্ণয়। ৪। একটি ক্যালরিমিটারের সাহায্যে পানিসম নির্ণয়। ৫। কঠিন ও তরলের আপেক্ষিক তাপ নির্ণয়। ৬। অবতল দর্পনের ফোকাস দূরত্ব নির্ণয়। ৭। প্যারালাক্স পদ্ধতি উত্তল লেন্স ফোকাস দূরত্ব নির্ণয়। ৮। একখানা কাচ ফলকের প্রতিসরাংক নির্ণয়। ৯। ওহমের সূত্রের সত্যতা নির্ণয়। ১০। যে কোন দৈর্ঘ্যের তারে আপেক্ষিক রোধ নির্ণয়। ১১। নাল পদ্ধতিতে দুইখানা দৃষ্টব্যবহারিক চুম্বকের চৌম্বক ক্রমের তুলনা।		৩ ঘন্টা ৬ ঘন্টা ৩ ঘন্টা ৩ ঘন্টা ৫ ঘন্টা ৩ ঘন্টা ৩ ঘন্টা ৩ ঘন্টা ৩ ঘন্টা ৩ ঘন্টা ৫ ঘন্টা
	মোট : ১০০ ঘন্টা	৬০	৪০

মান বন্টন : তত্ত্বীয় = ৬০

১। পদার্থের সাধারণ ধর্ম, আলোক ও তড়িৎ প্রতিটি শাখা থেকে ৮ নম্বরের দুটি ও ৪ নম্বরের ২টি করে মোট (৬টি + ৬টি) = ১২টি প্রশ্ন আকারে।
তন্মধ্যে ৮ নম্বরের ১টি করে ৩ শাখায় ৩টি ও ৪ নম্বরের ১টি করে ৩ শাখার ৩টি অর্থাৎ মোট ৬টি প্রশ্নের উত্তর দিতে হবে।

$$8 \times 1 \times 3 = 24$$

$$4 \times 1 \times 3 = 12$$

২। শব্দ ও তাপ ও চুম্বকত্ব প্রতিটি শাখা থেকে ৪ নম্বরের ৪টি করে মোট ১২টি প্রশ্ন থাকবে। সেগুলোর মধ্যে থেকে ২টি করে মোট ৬টি প্রশ্নের উত্তর দিতে হবে।

$$4 \times 2 \times 3 = 24$$

দ্রষ্টব্যঃ বলবিদ্যা ও পদার্থের ধর্ম থেকে ও অন্য যে কোন শাখা থেকে ১টি পরীক্ষণ করতে হবে।

ব্যবহারিকঃ ক্লাস রেকর্ড ৯+১ নং ও ২নং পরীক্ষণ ৮ করে = ২৫

মৌখিক = ১৫

মোট : তত্ত্বীয়+ব্যবহারিক+মৌখিক = ১০০

Sl.No	Topic/Lessons	Teaching/Learning Hours	
		Theory	Practical
৫।	এলুমিনিয়াম - এলুমিনিয়াম ফ্লোরাইড, এলুমিনিয়াম সালফেট।	১ ঘন্টা	
৬।	আয়রন - আয়রন সালফেট।	১ ঘন্টা	
৭।	লেড - লেড অক্সাইড।	১ ঘন্টা	
৮।	সিলভার - সিলভার নাইট্রেট।	১ ঘন্টা	
	গ্রুপ - প জৈব রসায়ন		
১।	জৈব রসায়নের সংজ্ঞা, জৈব ও অজৈব যৌগের মধ্যে পার্থক্য জৈব যৌগের গঠন, শ্রেণী বিভাগ, কার্যকরী বা ক্রিয়াশীল মূলক।	৪ ঘন্টা	
২।	জৈব যৌগের নিষ্কাশন ও বিশুদ্ধকরণ	১ ঘন্টা	
৩।	সম্পৃক্ত ও অসম্পৃক্ত হাইড্রোকার্বনঃ প্রস্তুত প্রণালী, ধর্ম এবং ব্যবহার -মিথেন, ইথেন, ইথিলিন, এসিটাইলিন।	২ ঘন্টা	
৪।	এলকোহল হ্যালোজেন জাতকঃ মিথাইল ফ্লোরাইড, ক্লোরোফর্ম এর প্রস্তুতি, ধর্ম ও ব্যবহার।	৪ ঘন্টা	
৫।	এলকোহলঃ শ্রেণী বিভাগ, মিথাইল এলকোহল, ইথানল এলকোহল ও গিসারিনের প্রস্তুতি, ধর্ম ও ব্যবহার।	২ ঘন্টা	
৬।	ডাই-ইথাইল ইথারঃ প্রস্তুতি, ধর্ম ও ব্যবহার।	১ ঘন্টা	
৭।	এলডিহাইড ও কিটোল সমূহঃ নিম্নলিখিত যৌগসমূহের প্রস্তুতি, ধর্ম ও ব্যবহার, ফরমালডিহাইড, এসিটালডিহাইড ও এসিটোন।	৩ ঘন্টা	
৮।	কার্বক্লিনিক এসিডঃ এসেটিক এসিড ও সাইট্রিক এসিডের প্রস্তুতি, ধর্ম ও ব্যবহার।	৩ ঘন্টা	
৯।	এলকোহল এ্যামাইনঃ এ্যামাইনের শ্রেণী বিভাগ, মিথাইল এ্যামাইন ও ইথাইল এ্যামাইনের প্রস্তুতি, ধর্ম ও ব্যবহার।	২ ঘন্টা	
১০।	এ্যারোমেটিক যৌগঃ নিম্নলিখিত যৌগসমূহের প্রস্তুতি, ধর্ম ও ব্যবহার। বেনজিন, টলুইন, ফ্লোরোবেজিন নাইট্রোবেজিন, অ্যানিলিন, কার্বলিক এসিড, বেনজালডিহাইড, বেনজোয়িক এসিড ও স্যালিসাইলিক এসিড।	৫ ঘন্টা	
	ব্যবহারিক :		
১।	অল্প ও ক্ষারের মাত্রা নির্ণয়।		২০ ঘন্টা
২।	হাইড্রোজেন ও অক্সিজেনের প্রস্তুতি।		
৩।	সহজ জৈব ও অজৈব যৌগের আঙ্গিক বিশেষণ।		
	মোট : ১০০ ঘন্টা	৮০ ঘন্টা	২০ ঘন্টা

মান বন্টন :
তত্ত্বীয় - ৬০
ব্যবহারিক - ১৫
মৌখিক - ১০

গ্রুপ - ক - ২০ নম্বর
গ্রুপ - খ - ২০ নম্বর
গ্রুপ - গ - ২০ নম্বর

গ্রুপ -ক থেকে ৩টি, গ্রুপ -খ থেকে ৩টি এবং গ্রুপ -গ থেকে ৩টি মোট ৯টি প্রশ্ন থাকবে। তন্মধ্যে প্রত্যেক গ্রুপ থেকে অন্ততঃপক্ষে ২ টি করে মোট ৬টি প্রশ্নের উত্তর দিতে হবে।

Paper IV: Subject - Basic Human Anatomy

Total hours: 200 hour

Lecture: 70 hour (Lt No = 70)

Practical: 70 hours (Pact No = 35)

Tutorial : 60 hours (Lt No. = 60)

Total marks-200

Written-100

Oral & practical- 80

Formative- 20

Objectives: At the end of the course the students will be able to: -

1. Demonstrate a comprehensive knowledge base above the major anatomical system and structure of human body
2. Identify major anatomical system and structure of human body
3. Identify the specific structures and organs and application of such knowledge in studying their individual disciplines.
4. Do surface marking of important organ of human body.

Course Contents of Basic Human Anatomy

Sl. No	Topics/Lessons	Teaching/learning Hours		
		Theory	Tutorial	Practical/ Demonstration
1.	Introductory Anatomy : a) Anatomical Terminologies : i) Definition of Anatomy ii) Anterior, Posterior, superior, inferior, medial, lateral & median plane. b) i) Systems of Human body ii) Human cell: structure and classification. iii) Cell division: types. Phases of mitosis iv) Tissue: Types of tissues.	10	05	10
2.	Musculoskeletal system: ▪ component ▪ Types of bones & joints ▪ short description of important bones	10	10	10
3.	Cardio-vascular system. ▪ Location & Basic structure of cardiovascular system ▪ Short description of heart, major arteries, capillaries/veins	10	05	10
4.	Respiratory system ▪ Basic structure of respiratory system ▪ Description of larynx, trachea, bronchi, bronchioles and alveoli ▪ Gross Anatomy of lung	06	06	10

Sl. No	Topics/Lessons	Teaching/learning Hours		
		Theory	Tutorial	Practical/ Demonstration
5.	Gastro-intestinal and Hepatobiliary system: <ul style="list-style-type: none"> ▪ Short description of the different parts of alimentary system: mouth, tongue, oesophagus, stomach, small and large intestine, rectum & anal canal ▪ Anatomy of salivary glands, pancreas, liver, gall bladder 	10	10	10
6.	Genito –urinary system: <ul style="list-style-type: none"> ▪ Anatomy of urinary system ▪ Male genital system: ▪ Female genital system 	10	10	10
7.	Nervous system and Endocrine system. <ul style="list-style-type: none"> ▪ Basic structure of nervous system ▪ Parts of nervous system and short description of brain,, spinal cord, cranial nerves, peripheral nerves ▪ Autonomic nervous system and short description of sense organs-eye, ear, nose, tongue and skin ▪ Important endocrine glands 	12	12	10
8.	Lymphatic System : <ul style="list-style-type: none"> ▪ Anatomy of lymph nodes and vessels 	2	2	

Teaching Methods:

Lecture
 Tutorial
 Practical/ Demonstration

Media:

Multi media,
 Laptop,
 OHP,
 White Board,
 Marker,
 Skeleton
 Wall chart

Assessment:

Written - SAQ (50%)
 Practical (20%), Oral (20%), formative (10%)

Paper V: Subject -Basic Human Physiology

Total hours: 200 hour

Lecture: 70 hour (Lt No = 70)

Practical: 66 hours (Pract No = 33)

Tutorial : 59 hours (Lt No. = 59)

Total marks-200

Written-100

Oral & practical- 80

Formative- 20

Objectives: At the end of the course the students will be able to: -

1. Demonstrate a comprehensive knowledge on functional aspects of different important systems, components and organs of human body.
2. Apply the practical knowledge of human physiology in studying and performing the allotted tasks in their individual disciplines.

Course Content of Basic Human Physiology

Sl. No	Topics/Lessons	Teaching/learning Hours		
		Theory	Tutorial	Practical/ Demonstration
1.	Introductory Physiology: <ul style="list-style-type: none"> ▪ Physiological terminologies ▪ Basic structure and organizations of human body ▪ Cell physiology and metabolism/multiplication of living cells ▪ General functions of different systems of the body: Musculoskeletal/Respiratory/Circulatory/Digestive/Urinary/Nervous/Endocrine/Immune/Reproductive 	10	04	06
	Musculoskeletal system : <ul style="list-style-type: none"> ▪ Physiological components of musculoskeletal system ▪ Functions of important muscles, bones & joints of human body ▪ Movements of joints ▪ 	10	10	10
	Cardiovascular System: <ul style="list-style-type: none"> ▪ Functions of circulatory system ▪ Composition of Blood and their Functions ▪ Conductive system of heart & Cardiac cycle ▪ Physiology of Blood Pressure 	10	05	10

Sl. No	Topics/Lessons	Teaching/learning Hours		
		Theory	Tutorial	Practical/ Demonstration
	Respiratory system : <ul style="list-style-type: none"> ▪ Functions of respiratory system ▪ Mechanism of breathing 	05	05	10
	Digestive and hepatobiliary system: <ul style="list-style-type: none"> ▪ Definition of digestion, absorption, metabolism ▪ Digestion, absorption & metabolism of carbohydrate, fat protein ▪ Nutritional deficiency disorders: anaemia, iodine deficiency, vitamin deficiencies ▪ Functions of liver, pancreas and gall bladder ▪ Composition & functions of different digestive juices & bile 	10	10	10
	Genitourinary system: <ul style="list-style-type: none"> ▪ Functions of Kidney ▪ Formation, appearance and composition of urine ▪ Functions of reproductive organs of both sexes: uterus/ovary/fallopian tube/vagina/ penis/testes/scrotum/vas deferens/prostate 	10	10	10
	Nervous system, organs of special sense: <ul style="list-style-type: none"> ▪ Functions of motor, sympathetic & parasympathetic nervous system ▪ Functions of cranial nerves ▪ Cerebrospinal fluid formation, composition & function ▪ Functions of special sense organs-eye, ear, nose, tongue and skin ▪ Functions of the endocrine glands & hormones secreted by them: Pituitary / thyroid / parathyroid / adrenal /gonads/pancreas/placenta 	12	10	10
	Immune System : <ul style="list-style-type: none"> ▪ Definition/classification and components of immune system ▪ Cells and tissues of immune system & their functions 	05	05	
	Lymphatic System : <ul style="list-style-type: none"> ▪ Composition & functions of lymph nodes and vessels 	03		

Teaching Methods:

Lecture
Tutorial
Practical/ Demonstration

Media:

Multi media,
Laptop,
OHP,
White Board,
Marker,
Wall chart
Lab. Reagent & Apparatus

Assessment:

Written - SAQ (50%)
Practical (20%), Oral (20%), formative (10%)

Paper VI: Subject - Basic Community Medicine

Total hours: 200 hour

Lecture: 150 hour (Lt No = 150)

Practical / Tutorial : 50 hours (Pact No = 25)

Total marks-200

Written-100

Oral & practical- 80

Formative- 20

Objectives: At the end of the course the students will be able to: -

1. Describe the general aspects of community medicine
2. Describe the basic concepts of epidemiology
3. Explain the concept of primary health care
4. Define organisations of health services and major health programmes in Bangladesh
5. Carry on elementary bio-statistics
6. Narrate the concept of Demography and Family Planning
7. Define Maternal and Child Health (MCH), describe its objectives and explain the importance of ante-natal and post-natal care for mother and children
8. Define food and nutrition and be aware of nutritional problems in Bangladesh
9. Be aware of occupational health hazards and their preventive and protective measures
10. Describe the principles of health education and their application in the community
11. Be aware of environmental pollution and methods of prevention and control of pollution
12. Explain the basic concept of Essential Service Package (ESP)

Course Content of Basic Community Medicine

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1.	Introductory community medicine: <ul style="list-style-type: none"> ▪ Definition of Community Medicine ▪ Concept of health : Definition / Dimensions / Determinants / Indicators ▪ Concept of general principles for prevention and control of communicable and Non-communicable diseases ▪ Concept of health promotion: Definition / Interventions 	16	10
2.	Primary health care: <ul style="list-style-type: none"> ▪ Definition/Elements/ Principles/Scope 	05	02
3.	Health care services and organization: <ul style="list-style-type: none"> ▪ Primary/Secondary/Tertiary Health Care services ▪ WHO/UNDP/UNICEF/CARE/ International Red Crescent / BIRDEM / ICDDR,B 	06	02

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
4.	Basic Epidemiology: <ul style="list-style-type: none"> ▪ Definition /Aims/Methods/Scope ▪ Definition of epidemiological terms erg. Epidemic/Endemic/Pandemic/ Sporadic/ Zoon tic disease/ Incubation period/ period of communicability/ Epidemiological Triad/Infection/ Contamination/ Infestation /isolation/quarantine etc. ▪ Major health programs in Bangladesh ▪ Medical Information system (MIS) 	12	06
5.	Basic Bio-statistics : <ul style="list-style-type: none"> ▪ Definition /Scope/Functions/Importance and uses of Biostatistics, Medical statistics, Health statistics, Vital statistics ▪ Definition of vital events ▪ Definition/types/characteristics/functions/importance/sources/colle ction and presentation of data ▪ Morbidity/Mortality/Fertility statistics 	17	04
6.	Demography and family planning.: <ul style="list-style-type: none"> ▪ Demography: Definition/Focus/Process/Stages/Cycle and how to conduct census ▪ Family Planning: Definition/Objectives/Scope/Health aspects/ Benefits ▪ Contraceptive methods: Short description / Advantages / Disadvantages / Indication/Contra indication/ Complications 	12	04
7.	Maternal and Child Health Care (MCH): <ul style="list-style-type: none"> ▪ Introduction/Definition/Aims & Objectives / Components of MCH ▪ Maternal health care: Antenatal/Intra natal/Postnatal ▪ Care of the New-born/Under 5 children ▪ Indicators of MCH care: MMR, IMR etc 	10	
8.	Food and nutrition: <ul style="list-style-type: none"> ▪ Food: Definition/Functions/Classification ▪ Sources/types/function/daily requirements and deficiency of protein, fat, carbohydrate, vitamins and mineral ▪ Definition of nutrition /Balanced Diet ▪ Malnutrition: Definition/Forms/Causes and prevention ▪ Common nutritional problems of Bangladesh: low Birth Weight/Protein Energy Malnutrition/ Nutritional Blindness/ Nutritional Anaemia/ Lathyrism 	15	06
9.	Occupational Health : <ul style="list-style-type: none"> ▪ Occupational health : Definition /Objectives ▪ Occupational Hazards: Introduction /Types ▪ Occupational disease: Definition/Classification/Prevention and control 	08	02
10.	Health education behavioral science and Ethics: <ul style="list-style-type: none"> ▪ Health Education: Definition/Importance / Objectives / Components / Principles/Methods/Media of ▪ Communication Skills: Definition/Key elements /Barriers ▪ Behavioral Science : Introduction & concept ▪ Ethics: Introduction and concept 	12	04

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
11.	Environment and sanitation: <ul style="list-style-type: none"> ▪ Definition of pollution, environment, sanitation and environmental sanitation ▪ Water: Safe wholesome water/Source of water/water pollution/Hazards of water pollution /water borne diseases/Hardness of water/ Purification of water ▪ Air : Definition/Composition ▪ Air pollution : Sources, pollutants, indicators, health & other effects, prevention & control ▪ Ventilation: Definition/Standards/ Types/Criteria of good ventilation/effects of good ventilation ▪ Solid waste: Definition/Types/Sources/Health hazards ▪ Disposal of solid waste: Dumping/Controlled tipping or sanitary land fill/ incineration/composting/Manure pits/Burial ▪ Excreta or night soil: Public health importance/Health hazards/how disease occurs from it/Sanitation Barrier/ Methods of excreta disposal (Unsewered area/Sewered area) 	25	04
12.	First Aid : <ul style="list-style-type: none"> ▪ Definition / Principles of First Aid ▪ First Aid Box-List of contents and their uses ▪ First Aid of : Cuts, bleeding, burn, shock, dog bite, snake bite 	12	06

Teaching Methods:

Lecture
Tutorial
Practical/ Demonstration

Media:

Multi media,
Laptop,
OHP,
White Board,
Marker,
Wall chart
Models & Samples

Assessment:

Written - SAQ (50%)
Practical (20%), Oral (20%), formative (10%)

Paper VII: Subject -Basic Microbiology & Parasitology

Total hours: 75 hour

Lecture: 35 hour (Lt No = 35)

Practical : 40 hours (Pract No = 20)

Total marks-200

Written-100

Oral & practical- 80

Formative- 20

Objectives: At the end of the course the students will be able to: -

1. Demonstrate basic knowledge about general aspects of different micro organisms including classification and general characteristics of protozoa, bacteria, virus & fungus
2. Perform common methods of identification of different micro organisms particularly bacteria & fungus of medical importance
3. Perform the technique of cleaning, disinfections, decontamination & sterilization in neutron to destruction of micro organisms in laboratory practices.

Course Content of Basic Microbiology & Parasitology

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1.	Introduction to microorganisms : <ul style="list-style-type: none">▪ Definition and classification of microorganisms▪ Microbiological terminology▪ Characteristics of Eukaryotic prokaryotic & sub cellular groups of microorganisms▪ Microbiological articles, equipment's apparatus▪ Microscope: Different parts of microscope, & maintenance of microscope	06	08
2.	Destruction of microorganism : <ul style="list-style-type: none">▪ Cleaning, Washing, decontamination disinfection & procedures▪ Sterilization of different laboratory articles, instruments, glass wares etc.	03	04

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
3.	Bacteria : <ul style="list-style-type: none"> ▪ Anatomy of Bacteria, chemical composition of different structures of bacteria ▪ Bacterial Spore: Definition & function spores, Spores bearing bacteria of medical importance ▪ Bacterial toxin: Definition & types of bacterial toxin, characteristics of endotoxin & exotoxin, Toxin producing organism of medical importance, use of bacterial toxins in diseases prevention ▪ Biology of bacteria: Growth & multiplication of bacteria, bacteria growth curve, bacteria growth requirements. Definition & classification of culture media ▪ Classifying bacteria in terms of morphology, staining, spore, flagella, capsule & Pathogenecity ▪ Staining bacteria: Gram's staining, AFB staining, Albert staining 	15	12
	Virus : <ul style="list-style-type: none"> ▪ General characters of virus ▪ Morphology & classification of virus ▪ List of viruses of medical importance & diseases produced by them 	03	04
	Fungus : <ul style="list-style-type: none"> ▪ General character, Morphology and classification of fungus ▪ List of fungus list medical important and the diseases produced by them 	03	04
	Parasite : <ul style="list-style-type: none"> ▪ Definition /Classification of parasite 	01	02
	Helminth: <ul style="list-style-type: none"> ▪ General characteristics of helminths ▪ Classification /Morphology of helminths 	03	04
	Protozoa : <ul style="list-style-type: none"> ▪ General characteristics of protozoa ▪ Definition /Classification of protozoa 	01	02

Teaching Methods:

Lecture
Tutorial
Practical/ Demonstration

Media:

Multi media,
Laptop,
OHP,
White Board,
Marker,
Wall chart
Models & Samples

Assessment:

Written - SAQ (50%)
Practical (20%), Oral (20%), formative (10%)

Second Year

Paper I: Subject - Chemistry of Dental Materials

Total hours: 300 hours

Lecture : 150 hours (Lt No : 150)

Practical : 150 hours (Pract No : 15)

Total marks : 200

Written : 100

Oral & Practical : 80

Formative : 20

Objectives: At the end of the course the students will acquire knowledge of definition, classification, composition, properties, uses and also performs manipulation of the following dental materials:

- Impression and model materials.
- Different dental waxes and separating media.
- Denture base materials.
- Filling materials (metallic/ non-metallic) used in dentistry
- Dental porcelain.
- Investment materials.
- Metals and alloys used in dentistry such as gold, silver, chrome-cobalt, stainless steel.
- Different soldering and casting materials used in dentistry.

Course contents

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
	<i>Definition/ Classification/ Composition/ Manipulation/ Properties / Uses of :</i>		
	1. Impression materials	15	15
	2. Gypsum product	15	15
	3. Separating Media	05	05
	4. Dental waxes	15	10
	5. Dental base materials	15	15
	6. Filling materials	15	15
	7. Dental porcelain	10	10
	8. Metallurgy	10	05
	9. Solder and Fluxes	05	10
	10. Soldering and welding	05	10
	11. Alloys used in dentistry	10	05
	12. Metals used in dentistry : Silver, Gold, Copper, Stainless steel, Chromic Cobalt	05	05
	13. Amalgum : Silver and Copper	15	10
	14. Investment material : Gypsum, Silica & Phosphate bonded investment	05	10
	15. Casting and swaging: Definition, General principle, Defects of casting	05	10
	TOTAL = 300 HOURS	150	150

Teaching Methods:

Lecture
Practical Demonstration

Media :

Multi media
Laptop
OHP
White Board
Marker
Laboratory
Clinical ward

Assessment:

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
2nd Year

Class Performance Records: *Chemistry Of Dental Materials*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Impression materials			
2	Gypsum product			
3	Dental waxes			
4	Separating Media			
5	Dental base materials			
6	Filling materials			
7	Solder, Fluxes, Soldering and welding			
8	Alloys & Amalgam used in dentistry			
9	Investment material			
10	Casting and swaging			
11	Dental Metallurgy			
	<i>Average marks secured 20% =</i>			

Paper II: Subject - Technique of Partial Denture Prosthesis & Orthodontics

Total hours: 370 hours

Lecture : 150 hours (Lt No: 150)

Practical: 220 hours (Pact: 17)

Total marks : 200

Written : 100

Oral & Practical : 80

Formative : 20

Objectives: A) At the end of the course of *Partial Denture Prosthesis* the students should be able to :

1. State the classification of partial denture with its different components.
2. Perform the technique of taking impression for partial dentures, inlays, crowns, bridge work etc.
3. Construct partial denture, inlays, crowns, bridges and immediate denture.
4. Perform pattern making, flasking, dewaxing, packing, deflasking, grinding and polishing of partial denture, crown, bridge, inlay and immediate denture.
5. Do cementing of inlays, crowns, bridge work properly.

Objectives: B) At the end of the course of *Orthodontics* the students should be able to :

1. Definition, Aims, Objects and scope of orthodontics.
2. Describe growth and development of jaws, teeth, face and skull.
3. Narrate normal occlusion and its characteristics, factors responsible for establishment and Maintenance of normal occlusion.
4. Discuss soft tissue morphology and behavior.
5. Describe malocclusion, mention types-Arch and skeleton, classifications.
6. Describe orthodontic appliances- Removable and Fixed appliances.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1	<i>Definitions:</i> □ Removable and fixed partial denture/ Abutment support bracing / Retention/ Reciprocation/ Direct & indirect retainers etc	10	10
2	<i>Classification and parts of partial denture</i>	05	05
3	<i>Differences between partial denture, immediate denture, inlay, crown and bridge works.</i>	10	10
4	<i>Clasp: Types and requirements of clasp and technique.</i>	05	10
5	<i>Operating dental units:</i> □ Motivation of patient and technique of sitting the patient	10	05
6	<i>Impression:</i> □ Definition/ Types/ Care/ Technique of taking impression	10	20
7	<i>Boxing of impression and making a cast</i>	15	20
8	<i>Methods of making base plate and occlusal rims</i>	05	20
9	<i>Technique of surveying & designing of the denture</i>	10	10
10	<i>Technique of articulation in an articulator</i>	05	10

11	<i>Definition, designing and technique of Master cast.</i>	10	15
12	<i>Wax pattern</i> □ Attachment of teeth/ flasking/ dewaxing/ packing/ curing/ deflasking/ grinding/ finishing & polishing	10	20
13	<i>Immediate denture:</i> □ Definition/ Indication/ Contraindication/ Advantage/ Disadvantage & Technique of Immediate denture	10	15
14	<i>Inlay, crown & bridge works:</i> □ Definition/ Indication/ Contraindication/ Advantage/ Disadvantage etc of Inlay, crown & bridge works	10	10
15	<i>Techniques of Inlay, crown & bridge works.</i>	10	15
16	<i>Relining, rebasing, and repairing of partial denture.</i>	05	10
17	<i>Removable appliances of Orthodontics</i>	10	10
TOTAL = 370 HOURS		150	220

Teaching Methods:

Lecture
Practical Demonstration

Media :

Multi media
Laptop
OHP
White Board
Marker
Laboratory
Clinical ward

Assessment :

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
2nd Year

Class Performance Records: *Technique of Partial Denture Prosthesis*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Partial denture: Definition, Classification and description of parts			
2	Clasp: Types and requirements			
3	Impression for partial denture			
4	Surveying of partial denture			
5	Wax patterns for partial denture			
6	Articulation			
7	Selection & alignment of artificial teeth			
8	Flasking, dewaxing, packing and curing of partial denture			
9	Immediate denture			
10	Inlay, crown and bridge			
11	Repairing, relining and rebasing			
	<i>Average marks secured 20% =</i>			

Paper III: Subject - Technique of Complete Denture Prosthesis

Total hours: 350 hours

Lecture : 150 hours (Lt No: 150)

Practical: 200 hours (Pract no: 18)

Total marks : 200

Written: 100

Oral & Practical : 80

Formative: 20

Objectives: At the end of the course the students should be able to:

1. State the classification of complete denture with its different components.
2. Construct a complete denture.
3. Construct diagnostic cast with base, special trays, occlusal rims & articulation of models.
4. Select and align artificial teeth and the art and technique of curving of complete denture.
5. Perform flasking, dewaxing, packing, curing and deflasking, smoothing and polishing of complete denture.
6. Repair, relining and rebasing of complete denture.
7. Describe orthodontic appliances and their components immediate denture.
8. Construct orthodontic appliances.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1	<i>Complete denture:</i> Definition and description of parts of complete denture, indication, contraindication, advantage and disadvantage	10	10
2	<i>Method of taking impression</i>	15	10
3	<i>Construction of primary model(cast)</i>	15	10
4	<i>Technique of construction of base plate for model and other base plates</i>	15	10
5	<i>Construction of occlusal rims with all components</i>	15	10
6	□ <i>Definition and importance of : Articulation/ occlusal rim/ centric occlusion/ free way space/ occlusalplane/ high lip line/ low lip line/ canine etc</i>	05	10
7	<i>Technique of articulation</i>	05	10
8	<i>Selection of artificial teeth</i>	10	-
9	<i>Alignment of teeth:</i> □ Normal alignment in centric occlusion □ Alignment in cross bite case □ Arch of different face form	10	30
10	<i>Curving: Technique and finishing</i>	10	10
11	□ Technique of flasking, dewaxing, packing and curing of complete denture □ Technique of overcoming porosity during the procedure	05	20
12	<i>Grinding, trimming & polishing of complete denture</i>	05	15
13	<i>Complains of complete denture</i>	05	05
14	<i>Repairing, relining & rebasing of complete denture</i>	05	20
15	<i>Complete denture with metallic base in detail</i>	05	05

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
16	<i>Orthodontic appliances:</i> Definition, classification, components, indication, contraindication, advantage and disadvantage	05	05
17	<i>Technique of making orthodontic appliances</i>	05	15
18	<i>Abutments:</i> Definition, indication, contraindication, advantage, disadvantage & techniques	05	05
	TOTAL = 350 HOURS	150	200

Teaching Methods :

Lecture
Practical Demonstration

Media :

Multi media
Laptop
OHP
White Board
Marker
Laboratory
Clinical ward

Assessment :

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
2nd Year

Class Performance Records: Technique of Complete Denture Prosthesis

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Complete denture: Definition, Classification and description of parts			
2	Impression for partial denture			
3	Models and temporary trays			
4	Wax patterns and wax rims			
5	Articulation of complete denture			
6	Alignment for complete denture			
7	Flasking, dewaxing, packing and curing of complete denture			
8	Grinding, trimming, polishing of complete denture			
9	Repairing, relining and rebasing			
10	Orthodontic appliances			
11	Obturators			
	<i>Average marks secured 20% =</i>			

Paper IV: Subject - Introduction to Oral & Dental Anatomy

Total hours : 300 hours

Lecture : 150 hours (Lt No : 150)

Practical : 150 hours (Pract No : 11)

Total marks : 200

Written : 100

Oral & Practical : 80

Formative : 20

Objectives: At the end of the course the students should be able to:

1. Acquire the knowledge of oral anatomy, which includes the following
 - Able to identify different types of bones, muscles, nerves and vessels surrounding the Oro-facial muscles
2. Acquire the knowledge of dental anatomy, which includes the following
 - Able to identify histological structures and function of different tooth tissue and supporting structures.
 - State morphology, chronology of deciduous and permanent tooth in details.
3. Describe the normal occlusion, centric rotation, free-way space and natural and artificial teeth alignment.
4. State the blood supply and nerve supply of teeth and oral cavity.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
	A. Oral Anatomy		
1	<i>Bones of face: Maxilla and Mandible</i>	15	20
2	<i>Muscles of Mastication and Expression:</i> □ Position, origin, insertion, blood supply, nerve supply and action	15	20
3	<i>Temporo-mandibular joint:</i> □ General idea, muscle attachment, blood supply, nerve supply and movements	10	20
4	<i>Major Salivary :</i> □ Definition, classification, location and function	10	10
	B. Dental Anatomy		
5	<i>Deciduous and permanent teeth:</i> □ Name/ parts/ morphology/ number/ function & time of eruption	20	15
6	<i>Histological structure of tooth tissue:</i> □ Enamel/ dentin/ pulp/ cementum and periodontal ligament	20	15
7	<i>Morphology of tooth</i> □ Anterior segment/ Upper and lower – right and left segments	20	30
8	<i>Nerve and blood vessel of face, teeth and oral cavity</i>	20	10
10	<i>Mucous membrane of oral cavity</i>	15	10
11	<i>12 pairs of cranial nerves</i>	10	10
	TOTAL = 300 HOURS	150	150

Teaching Methods:

Lecture
Practical Demonstration

Media:

Multi media
Laptop
OHP
White Board
Marker
Laboratory
Clinical ward

Assessment:

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
2nd Year

Class Performance Records: *Introduction to Oral & Dental Anatomy*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Maxilla and mandible			
2	Muscles of mastication and expression			
3	Temporo- mandibular joint			
4	Major salivary glands			
5	Deciduous and permanent teeth			
6	Tooth tissue			
7	Morphology of tooth: Anterior segment/ Upper and lower – right and left segments			
8	Nerve and blood supply of face and oral cavity			
9	Mucous membrane of oral cavity			
10	Twelve pairs of cranial nerves			
	<i>Average marks secured 20% =</i>			

Paper V: Subject - Basic Computer Science

Total hours: 100 hour

Lecture: 25hour (Lt No = 25)

Practical / Tutorial : 75hours (Practical No = 75)

Total marks-100

Written-50

Oral & practical- 40

Formative - 10

Objectives: At the end of the course the students will be able to: -

1. Acquainted with the modern computer technology
2. Develop skills in MS Word, MS-Excel, Power Point, Internet
3. Prepare reports of various investigations
4. Collect latest information through internet

Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
1.	<p>Detailed Contents :</p> <p>Relevant Instruction for Practical :</p> <ul style="list-style-type: none"> ▪ Information Technology -its concept and scope ▪ Computers for information storage, information seeking, information processing and information transmission ▪ Elements of computer system computer hardware and software: data -numeric data, alpha numeric data; contents of program, processing ▪ Computer organization, block diagram of a computer, CPU, memory ▪ Input devices; keyboard, mouse etc; output devices; VDU and Printer, scanner, Plotter ▪ Electrical requirements, inter-connections between units, connectors and cables ▪ Secondary storage; magnetic disks-tracks and sectors, optical disk (CD and DVD Memory), primary and secondary memory: RAM ROM, PROM etc. ▪ Capacity; device controllers, serial port, parallel port system bus 47 ▪ Exercises on file opening and closing; memory management; device management; device management and input-output (I/O) management with respect of windows ▪ Installation concept and precautions to be observed while installing the system and software ▪ Introduction about Operating systems such as MS-DOS and Windows ▪ Special features, various commands of MS word and MS- Excel, Power -point ▪ About the internet-server types, connectivity (TCOP/IP, shell); applications of internet like: e-mail and browsing ▪ Various Browsers like WWW (World wide web); hyperlinks; HTTP (Hyper Text Transfer Protocol); FTP (File Transfer Protocol) ▪ Basic of Networking -LAN, WAN, Topologies 	25	

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
	<ul style="list-style-type: none"> ▪ Give a PC, name its various components and list their functions ▪ Identification of various parts of a computer and peripherals ▪ Practice in installing a computer system by giving connection and loading the system software and application software ▪ Installation of DOS and simple exercises on TYPE, REN, DEL, CD, MD, COPY, TREE, BACKUP commands ▪ Exercises on entering text and data (Typing Practice) ▪ Installation of Windows 98 or 2000 etc. ▪ Features of windows as an operating system ▪ Start ▪ Shutdown and restore ▪ Creating and operating on the icons ▪ Opening closing and sizing the windows ▪ Using elementary job commands like-creating, saving, modifying, finding and deleting a file ▪ Creating and operating on a folder ▪ Changing setting like, date, time color (back ground and fore ground) ▪ Using short cuts ▪ Using on line help 		

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
	<ul style="list-style-type: none"> ▪ MS-WORD <ul style="list-style-type: none"> ▪ File Management Opening, creating and saving a document, locating files, copying contents in some different file (s), protecting files, Giving password protection for a file ▪ Page set up : Setting margins, tab setting, ruler, indenting ▪ Editing a document : Entering text, Cut, copy, paste using tool-bars ▪ Formatting a document : Using different fonts, changing font size and color, changing the appearance through bold/italic/underlines, highlighting a text, changing case, using subscript and superscript using different underline methods ▪ Aligning of text in document, justification of document, Inserting bullets and numbering : ▪ Formatting paragraph, inserting page breaks and column breaks ▪ Use of headers footers: Inserting footnote, end note, use of comments ▪ Inserting date, time, special symbols, importing graphic images, drawing tolls ▪ Tables and Borders Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting row in a table ▪ Print preview, zoom, page set up, printing options ▪ Using Find, Replace options ▪ Using Tools like: Spell checker, help, use of macros, mail merge, thesaurus word content and statistics, printing envelops and labels ▪ Using shapes and drawing toolbar ▪ Working with more than one window in MS Word, ▪ How to change the version of the document from one window OS to another ▪ Conversion between different text editors, software and MS word 		30

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical
	<p>MS -Excel :</p> <ul style="list-style-type: none"> ▪ Starting excel, open worksheet, enter, edit, data, formulas to calculate values, format data, create chart, printing chart, save worksheet, switching from another spread sheet ▪ Menu Commands : Create, format charts, organize, manage data, solving problem by analyzing data, exchange with other applications. Programming with MS Excel, getting information while working ▪ Work Books : Managing workbooks (create, open, close, save) working in work books, selecting the cells, choosing commands, data entry techniques, formula creation and links, controlling calculations, working with arrays ▪ Editing a worksheet, copying, moving cells, pasting, inserting, deletion cells, rows, columns, find and replace text, numbers of cells, formatting worksheet : ▪ Creating a chart : Working with chart types, changing data in chart, formatting a chart, use chart to analyze data ▪ Using a list to organize data, sorting and filtering data in list ▪ Retrieve data with MS -Query: Create a pivot table, customizing a pivot table. Statistical analysis of data. ▪ Customize MS-Excel: How to change view of worksheet, outlining a worksheet, customize workspace, using templates to create default workbooks, protecting work <p>Exchange data with other application: linking and embedding, embedding objects, linking to other applications, import, export document</p>		20
	<p>Power Point :</p> <ul style="list-style-type: none"> ▪ Making Slide ▪ Slide Projection 		10
	<p>Internet and its Applications :</p> <ul style="list-style-type: none"> ▪ Log -in to internet ▪ Navigation for information seeking on internet ▪ Browsing and down loading of information from internet ▪ Sending and receiving e-mail ▪ Creating a message ▪ Creating and address book ▪ Attaching a file with e-mail message ▪ Receiving a message ▪ Deleting message 		15

Teaching Methods:

Lecture
Practical

Media:

Computer
Multi media
Computer Lab.
Internet connection
White Board
Marker

Assessment: Written - SAQ (50%), Oral and Practical -(40%), Formative - (10%)

Third Year

Paper I: Subject - Community Dentistry including Primary Dental Care & Oral Hygiene

Total hours: 250 hours

Lecture: 100 hours (Lt No : 100)

Practical: 150 hours (Pract No : 75)

Total marks: 200

Written : 100

Oral & Practical : 80

Formative: 20

Objectives: At the end of the course the students should be able to:

1. Describe concept of Community health medicine.
2. Define health, diseases, health education philosophy & principles of Health education Importance, methods, media of community health education, Methods of motivation & communication.
3. Mention Primary health care, principles and components of primary health care.
4. Describe personal hygiene, oral hygiene, essential of healthful living.
5. Narrate food & nutrition, general effect of malnutrition, role of dietary habit on oral health.
6. Discuss primary oral health care - its objects and methods.
7. Mention dental plaque, effect of dental plaque on caries & periodontal diseases.
8. Demonstrate methods of plaque control methods or tooth brushing, proper use of dental floss Tooth picks etc. Use of mouth rinsing & gum massage.
9. List the etiologies of dental caries, prevention of dental caries with fluoride improvement of resistance of tooth, different use of fluoride, fissure sealing etc. Fluoridation of water supply necessity & methods.
10. Describe prevention of periodontal disease and dental caries -individual and mass level.
11. Narrate dental epidemiology, definition of Bio-statistics its methods, importance and Application in oral health care, Preparation of statistical charts, graphs, tables reports etc.
12. Conduct survey of dental diseases, motivation provides dental health education emergency treatment.
13. Describe school health program dental care for school children.
14. Discuss parent counseling & child behavior.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1	<i>Concept of children dentistry and community dentistry</i>	05	05
2	<i>Dental cavities, diagnosis and management</i>	15	10
3	<i>Prevalence, etiology, Classification and management of periodontal diseases</i>	05	10
4	<i>Dental health education</i> □ Definition and role of dental health education □ Philosophy/ principles/ media of community health education	05	10
5	<i>Definition of personal hygiene and essential of healthful living</i>	05	10
6	<i>Prevention of common oral diseases in school children and community</i>	05	10
7	<i>Concept of food, nutrition and role of dietary habit on oral health</i>	05	10

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
8	<i>Primary oral health care/ Method of both brushing and other oral hygiene</i>	05	10
9	<i>Dental plaque and plaque control/ effect of plaque on caries and periodontal diseases</i>	05	10
10	<i>Dental Calculus: Types and distribution of calculus/ Scaling and polishing</i>	10	10
11	<i>Root Canal treatment:</i> <input type="checkbox"/> Improvement of resistance of tooth by fluoride <input type="checkbox"/> Prophylactic odonectomy <input type="checkbox"/> Definition, indication, contraindication, instruments and complications of root canal treatment	10	20
12	<i>Methods of motivation and communication</i>	05	05
13	<i>Manipulation of temporary and permanent filling materials for deciduous and permanent teeth and cementing materials</i>	10	15
14	<i>Survey of oral and dental diseases in a community</i>	10	10
15	<i>Dental radiography: Classification/ dental film/ technique/ development and processing of film</i>	10	10
	TOTAL = 250 HOURS	100	150

Teaching Methods :

Lecture
 Practical Demonstration

Media :

Multi media
 Laptop
 OHP
 White Board
 Marker
 Laboratory
 Clinical ward

Assessment :

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology,.....
3rd Year

Class Performance Records: *Community Dental Technology Including Primary Dental Care & Oral Hygiene*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Concept of children dentistry and community dentistry			
2	Periodontal diseases			
3	Caries			
4	Dental plaque and calculus			
5	Primary oral health care			
6	Scaling and polishing			
7	Survey of oral and dental diseases in community			
8	Methods of motivation and communication of Primary Oral Health Care			
9	Manipulation of dental materials			
10	Dental radiography			
	<i>Average marks secured 20% =</i>			

Paper II: Subject - Introduction to Drugs Used in Dental Surgery and Dental Surgery Assistance

Total hours : 250 hours

Lecture : 100 hours (Lt No : 100)

Practical : 150 hours (Pract No : 11)

Total marks : 200

Written : 100

Oral & Practical : 80

Formative : 20

Objectives: At the end of the course the students should be able to:

1. Acquire the knowledge of common oral cavity microorganisms and their behaviors.
2. Sterilize and disinfect different dental instruments and equipments.
3. Identify different dental instruments, their maintenance and use in surgery room and laboratory room.
4. Acquire the knowledge of management of shock and other emergency problems like bleeding after extraction.
5. Perform chair side assistance.
6. Perform record keeping/ stock-ledger/ registration of the patient.
7. Acquire knowledge about different drugs and medicaments used in dentistry and shelf-life of drugs and medicaments.
8. Advise the patient after any surgical procedure and dispense of drugs and medicaments.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1	<i>Common oral micro organisms:</i> □ Classification, morphology and pathogenesis	10	15
2	<i>Sterilization and disinfection:</i> □ Definition/ classification/ method and technique of sterilizing different dental instruments and equipments	10	10
3	<i>Instruments used for extraction, apsectomy, cyst operation, impacted tooth operation & surgical preparation for dentures</i>	10	15
4	<i>Instruments used for laboratory work</i>	05	10
5	<i>Management of post extraction complications:</i> □ Shock: Definition, classification, management, □ Bleeding: Causes, management	10	15
6	□ Indication, contraindication, complication and advice after extraction □ Preparation and application of dressing	10	20
7	<i>Operating dental units and technique of sitting the patient</i>	10	15
8	<i>Method of record keeping, indent, stock-ledger, registration of the patient, breakage and missing instruments</i>	10	10
9	<i>Drugs used in dentistry:</i> □ Concept/ classification/ indication/ contra-indication □ Preparation/ collection/ presentation/ manufacturing/ expiry date	10	15

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
10	<i>Anesthesia in dental surgery:</i> □ Local and general anesthesia: Application/ indication/ complication/ management of local an aesthesis	10	15
11	<i>Common diseases encountered in dentistry:</i> □ Concept of general condition of the patient: Hypertension/ Diabetes/ blood dyscrasiasis/ hepatitis/ AIDS etc	05	10
TOTAL = 250 HOURS		100	150

Teaching Methods:

Lecture
Practical Demonstration

Media:

Multi media
Laptop
OHP
White Board
Marker
Laboratory
Clinical ward

Assessment:

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
3rd Year

Class Performance Records: *Introduction to Drugs Used in Dental Surgery and Dental Surgery Assistance*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Micro-organism			
2	Sterilization and disinfection			
3	Instruments used for surgical purposes			
4	Laboratory instruments and equipments			
5	Management of shock and bleeding			
6	Operating dental units and techniques of setting the patient			
7	Drugs used in dentistry			
8	Anesthesia			
9	Concept on general condition of the patient			
	<i>Average marks secured 20% =</i>			

Paper III: Subject - Applied Dental Prosthesis

Total hours : 250 hours

Lecture : 100 hours (Lt No : 100)

Practical : 150 hours (Pract No : 11)

Total marks : 200

Written : 100

Oral & Practical : 80

Formative : 20

Objectives: At the end of the course the students should be able to:

1. Construct a partial denture
2. Construct a complete denture.
3. Construct an immediate denture.
4. Construct inlay, crown and bridge prosthesis
5. Construct obturators.
6. Repair, rebase and reline all types of dental prosthesis.

Course Contents:

Sl. No	Topics/Lessons	Teaching/learning Hours	
		Theory	Practical/ Demonstration
1	<i>Impressions, models, surveying and technique of partial denture</i>	15	20
2	<i>Impressions, models, surveying and technique of complete denture</i>	15	20
3	<i>Impressions, models, surveying and technique of immediate denture</i>	15	20
4	<i>Impressions, models, surveying and technique of inlays, crown and bridge works</i>	15	30
5	<i>Impressions, models, surveying and technique of orthodontic appliances</i>	15	30
6	<i>Impressions, models, surveying and technique of obturator</i>	15	10
7	<i>Repairing, relining and rebasing of dentures</i>	10	20
TOTAL = 250 HOURS		100	150

Teaching Methods :

Lecture

Practical Demonstration

Media :

Multi media

Laptop

OHP

White Board

Marker

Laboratory

Clinical ward

Assessment :

Written - (50%) + Oral (20%) + Practical (20%) + Formative (10%)

Department of Dentistry
Institute of Health Technology.....
3rd Year

Class Performance Records: *Applied Dental Prosthesis*

Sl. No	Topics/Lesson	Date	Marks obtained	Signature of the Teacher
1	Presentation of 5 partial denture			
2	Presentation of 1 complete denture alignment			
3	Presentation of 2 immediate denture			
4	Presentation of 2 obturator			
5	Presentation of porcelain crown or bridge			
6	Presentation of metallic crown or bridge			
	<i>Average marks secured 20% =</i>			

STAFF PATTERN OF DENTISTRY DEPARTMENT

1. Associate Professor of Dentistry.....1
2. Assistant Professor of Dentistry.....2
3. Lecturer of Dentistry.....2
4. Instructor of Dentistry.....2
5. Technologist.(Dentistry).....1
6. Clerk.....1
7. Cleaner.....1

Bibliography:

- Diploma Curriculum for IHT 2001 by SMFB
- Diploma Curriculum for IHT 2004 (Draft) by SMFB
- Certificate Course in Paramedical Subjects by Para Medical Education Board Bangalore, India.
- Senior Registered Nursing Curriculum by BNC
- Everest Institute - Dearborn, All Allied Health School, U.S.A. (2002 - 2008).