MEENAKSHIACADEMYOFHIGHEREDUCATIONANDRESEARCH

(DeemedToBeUniversityU/S3OFUGCACT,1956)

12, VembuliammanKoil Street, West K.K. Nagar, Chennai – 600 078

FACULTYOFDENTISTRY

DEPARTMENT OF DENTAL MECHANICS

REGULATION AND SYLLABUS (REGULATION–2008)

Effectivefromthe Academic Year2019– 2020

MEENAKSHI AMMAL DENTAL COLLEGE ★ PRINCIPAL

Prof. Dr. R. Arunpoorni, M.D.S,
Professor & Head,
Department of Prosthodontics and Implantology

MEENAKSHIACADEMYOFHIGHEREDUCATIONANDRESEARCH

MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL

DENTAL MECHANICS

REGULATION -2019

VISION AND MISSION OF

MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL

VISION

To create a center of excellence in all dental specialties by imparting quality education to undergraduate and postgraduate students and to deliver a quality dental care to the public. To raise the standard of dental education on par with the global standards and to perform high quality dental research that will benefit the public.

MISSION

- To enhance the quality of dental education to world class standards
- To train the students in basic and advanced techniques used in delivering dental care
- To provide high quality dental treatment at affordable cost
- To motivate the students to do ethical clinical practice

Prof. Dr. H. Annapoorni, M.D.S.,
Professor & Head,
Department of Prosthodontics and Implantology

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MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL

DENTAL MECHANICS

REGULATION -2008

VISIONANDMISSIONOF
DEPARTMENT OF DENTAL MECHANICS

VISION

Department of Dental Mechanics aimsforexcellenceinteaching,learning and to create a center of excellence by imparting quality dental education to students and to deliver a quality dental service to the population.

MISSION

- Toachievereasonablelevelofperfectionin providing quality dental service efficiently and effectively, backed by scientific knowledge and skill;
- Toattaincomprehensive knowledge about various dental instruments and machines used in fabrication of dental prostheses.
- To train students with well equipped laboratory skills.
- To motivate the graduates to effectively communicate with dental professionals
- Toachieveexcellencetomeetglobalstandards

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MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL

DENTAL MECHANICS

REGULATION -2008

PROGRAMOUTCOMES(PO's)

PO1. Critical Thinking Skills: Students can use their knowledge of dental science with good communication skills and leadership qualities.

PO2. Technical Skills: To gain specialized knowledge and expertise from dental school in using different dental instruments and machines as well as materials and adopt new techniques and materials in dental mechanic field from time to time.

PO3. Entrepreneurial and Management Skills: To help students to develop skills and work efficiently as a dental mechanic in hospitals, in their private practice or as a faculty member in colleges and universities.

PO4. Ethics: To train students to effectively communicate with dental professionals and follow appropriate code of conduct and ethics during work for the patient's best interest.

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MEENAKSHIACADEMYOFHIGHEREDUCATIONANDRESEARCH
MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL
MASTER OF DENTAL SURGERY (MDS)
REGULATION -2019

PROGRAMSPECIFICOUTCOMES(PSO's)

PSO 1	Attaining a wide range of skills and knowledge about prosthodontic and orthodontic appliances, lab procedures and other tooth restoration procedures etc by preclinical exercises.
PSO 2	To achieve understanding and knowledge about various dental instruments and machinery used in the laboratory.
PSO 3	To attain communication skills with the dental professionals regarding various laboratory procedures related to the specific clinical cases.

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MEENAKSHI AMMAL DENTAL COLLEGE AND HOSPITAL

DENTAL MECHANICS
REGULATION -2008

In exercise of the powers conferred by the Board of Management, Meenakshi academy ofhigher education and research, deemed to be University, Chennai hereby makes the followingRegulations:

1. SHORTTITLE

These Regulations shall be called **"THE REGULATIONS FOR THE DENTAL MECHANICSDIPLOMACOURSEOFMEENAKSHIACADEMYOFHIGHER EDUCATIONANDRESEARCH"**deemedtobeUniversity.

2. COMMENCEMENT

Theyshallcomeintoforce fromthe academicyear2008onwards.

The Regulations and the Syllabus are subject to modification by the Academic council and board ofstudiesfromtimetotime.

3. TITLEOFTHEPROGRAM

The program shallbecalled Dental Mechanics.

4. SYLLABUS

The syllabus for Dental Mechanics course includes Applied Physics, Chemistry and Mechanics, Dental Materials and Basic knowledge of

Computer.

5. ELIGIBILITYFORADMISSION

a. A candidate should be at least 17 years of age at the time of admission or within 3 months of it and should be medically fit to pursue the course.

b. The candidate must have passed 10+2 or two years intermediate or equivalent course thereof with Science subjects (i.e.) Physics, Chemistry and Biology from a recognized Indian University or Pre-University/Intermediate Board.

6. CRITERIAFORSELECTION

Criteria for selection include 40%.marks in 10+2 or two years intermediate or equivalent course thereof with Science subjects (i.e.) Physics, Chemistry and Biology from a recognized Indian University or Pre-University/Intermediate Board.

7. AGE LIMIT FOR ADMISSION

A candidate should be at least 17 years of age at the time of admission or within 3 months of it and should be medically fit to pursue the course.

8.ADMISSIONPROCEDURE

AdmissionshallbemadeaspertheGovernmentandUniversitynorms.

9. COMMENCEMENTOFTHEPROGRAM

The academic session shall be commenced from 1st of November every year.

Academic term: 1st November to 31st October

10. DURATIONOFTHEPROGRAM

The period of training for the award of the Dental Mechanics course shall be of two years duration for diploma full time candidates in theinstitution

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including the period of examination.

11. FEES

The institution shall charge only such a fee as prescribed by the university.

12. WORKING DAYS IN AN ACADEMIC YEAR

There shall be minimum of 240 working days in a year exclusive of the period of admission and examination etc.

13. ATTENDANCE REQUIRED FOR ADMISSION TO EXAMINATIONS

a) A candidate is required to put in minimum of 75% of attendance in both theory and practical / clinical separately in each subject before admission to the examination.

c) A candidate, who has not completed the course in any subject and not submitted the course completion certificate from the Head of the Department, will not be permitted to appear for that 10 particular subject alone. If the candidate has got adequate attendance in other subjects he / she will be permitted to appear for examination in those subjects.

14. SUBMISSION OF LABORATORY RECORD NOTE BOOK /PROJECT WORK

At the time of practical examination each candidate shall submit to the Examiners his / her laboratory and theoretical log book duly certified by the Head of the Department as a bonafide record of the work done by the candidate.

The practical record shall be evaluated by the concerned member of the faculty and the external examiner (Internal and external Evaluation during the theory examinations.

15. MINIMUM REQUIREMENTS FOR INSTITUTIONS IMPARTING TRAINING FOR DENTAL MECHANICS

1. The minimum hours devoted to the under mentioned subjects shall. be as follows:-

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FIRST YEAR:

SUBJECT	LECTURES	PRACTICALS LABORATORY/ DEMONSTRATIONS	TOTAL
Applied Physics & Mechanics	**30**	**20**	**50**
Applied Chemistry	**30**	**20**	**50**
Applied Oral Anatomy	**20**	**90**	**110**
Dental Materials	**20**	**40**	**60**
and Metallurgy	**15**	**15**	**30**
Dental Mechanics (Primary)	**30**	**600**	**630**
Total	**60**	**835**	**895**

2. The classes in different subjects of the curriculum should be taught exclusively for this course.
3. There should be at least one instructor for every 10 students working in Technical Laboratories at any given time.
4. For the teaching of dental subjects, no person except those holding recognized dentalqualification shall be employed as_ instructors. For Practicals Lab. / Demonstrations, persons holding recognised Dental Mechanics Diploma shall also be eligible as Tutor.

16. METHOD OF TRAINING

The Candidates shall do the following Pre-clinical work:-

a. Preparation of plaster blocks, edentulous models, shellac and auto-polymerizingbase plates, occlusal rims-Class-1 ideal teeth set-up, wax-up and curing.

b. Model and die preparation

c. Preparation of inlay/ crown on prepared models

d. RPD model duplication and wax pattern preparation followed by casting.

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e. Orthodontic wire exercises (straightening/circle/triangle/square)

f. Fabrication of Orthodontic clasps and appliances

g. Single unit crown on Implant Analogue.

7. The minimum amount of practical work that has to be completed by each student duringhis/her two years course:-

a. COMPLETE DENTURES

Acrylic	…….. 20
Metallic	……. 05

(At least 2 Dentures against natural teeth in the opposing jaw)

b. PARTIAL DENTURES

Acrylic	…….. 15
Metallic	…….. 05

c. REPAIRING/RELINING OF DENTURES 20

d. INLAYS:

Indirect Composite	……. 05
Metallic	……10
Ceramic	……..05

e. CROWNS:

Acrylic	……..05
PFM	……..05
Metallic	…….. 05
Pressable ceramic	…….. 05
Zirconia/CAD-CAM	…….. 01(Atleast demonstration)

f. BRIDGE WORK (VARIOUS TYPES)

Provisional	…… 10
3 unit Metal	……15
3 unit PFM	……... 15
3 unit Resin Bonded	……03

g. SPLINTS

Acrylic Cap Splint	……... 03
Night guard (Vacuum formed)	……. 03
Bleaching trays	……. 02
h. OBTURATORS and other , Maxillofacial appliances	…… 10

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ORTHODONTIC STUDY CASTS 06

j. ORTHODONTIC APPLIANCES 12

k. IMPLANT PROSTHESES FABRICATION 05

(if facilities available) .

1. LAMINATES AND VENEERS 05

NOTE: Appropriate Department to teach the *Dental Mechanic Course.*

In view Of the difficulties experienced by dental departments and dental teachers of dentalcollege, the teaching of Dental Mechanics Course be entrusted to the Department of Prosthodontics or to the faculty where above mentioned staff are available.

17. REQUIREMENTSFORADMISSIONTOEXAMINATIONS

The following requirements shall be fulfilled by the candidate to become eligible for the final examination.

(i) **Attendance:**Every candidate shall secure (75% attendance during each academic year).

(ii) **Work diary and log book:** Every candidate shall maintain a theoretical work diary and laboratory log book for recording his or her participation in the training programs conducted by the department. The work diary and log book shall be verified and certified by the Head of the Department of the institution. The certification of satisfactory progress is based on the theoretical work diary and laboratory log book.

18. EXAMINATION

1. An examination for the grant of Diploma of Dental Mechanics shall be conducted by aBoard of three Examiners imparting training for qualification of Dental Mechanic Courseapproved by the Dental Council of India. One of the Examiners must be external (from outsidethe institution).and one internal (from the institution)

Note: Qualification/eligibility to appointment as Examiners for Dental MechanicExaminations.

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Department of Prosthodontics and Implantology

1. Out of 3 members of Examining Board, the external examiner should be a reader in Prosthodontics (MDS) and internal examiner can be a tutor (Dental Mechanics) involved in practical teaching of the course.
2. The external examiner should be an active teacher of the Prosthodontic specialty at the level ofReader in the department of Prosthodontics in a recognized dental institution.
3. The examination shall be held on such dates as may be fixed. The examination shall consist of two parts; (1) Primary and (2) Final Examination.

THE PRIMARY EXAMINATION (FIRST YEAR)

1. The examination shall be opened to any students who

(a) Has been enrolled during one academic year preceding the examination in aninstitution approved/recognized by the Dental Council of India for this purpose.

2. Every candidate shall forward his/her application to the Examining Body by a date fixedby that Body, accompanied by the prescribed fee. A candidate who fails to pass orpresent himself/herself for examination shall not be entitled to claim a refund of the fee

3. Every candidate shall be examined in the following subjects comprising of three papers as follows:-

Marks for each of the papers shall be as under:-

PAPER	SUBJECTS	WRITTEN	ORAL	PRACTICAL	TOTAL
Paper I	Applied Physics,Chemistry and Mechanics	75	25	.....	100
Paper II	Dental Mechanics	75	25	100	200
Paper III	Applied Oral Anatomy	75	25	100	200

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Each written paper shall be of three hours.

Every candidate shall be required to take up all subjects of the examination. A candidatefailing in any paper or papera of this examination before being permitted to reappear atthe subsequent examination, shall produce evidence of having pursued such a course oftraining **as** the Head of the institution may determine.

A candidate, who passes in any one or more papers of the examination shall be exemptedfrom appearing in that paper which he/she has ,p assed and shall be allowed to re-appearin the rest in which he/she has failed in any subsequent examination within a period of

two years. Thereafter the candidate will have to appear in all the papers of thisexamination.

6. The minimum number of marks required to pass the examination shall be fifty percent ineach paper both in the (i) written with oral and (ii) practical parts of the examination. Candidates who obtain minimum of seventy five percent marks in any paper underexamination and passes in all three subjects in first attempt shall be declared to havepassed with distinction in a particular subject/s. Candidates who do not pass in all thepapers in the first attempt and later obtains the distinction marks shall be declared aspassed but without distinction.

7 As soon as possible after the examination, the Board of Examiners shall publish a list ofthe candidates who have passed. Each successful candidate shall be granted a PRIMARYDIPLOMA.

THE FINAL EXAMINATION (SECOND YEAR)

8. This examination shall be open to any student who-

a)Has been enrolled for Primary academic year (first year) preceding the finalexamination in an Institution approved by the Dental Council of India for thepurpose.

b) Has previously passed the Primary Examination for the Diploma of DentalMechanics.

c) Has his/her name submitted to the Board of Examiners by the Head of theInstitution in which he/she is enrolled.

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d) Produces the following certificates signed by the Head of the Institution:-

i) Of good character,

ii) Of having attended not less than seventy five percent of the full course of lectures delivered and practical/demonstration/ clinical conducted in each of the subjects of the examination.

iii) Of having passed the Primary Examination in all papers.

iv) There shall not be a gap of more than two academic years between Primary and Final Diploma Exams.

9. Every candidate shall forward his/her application to the Examining Body by a date fixed by that Body, accompanied by the prescribed fee. A candidate who fails to pass or present himself/herself for examination shall not be entitled to claim a refund of the fee.

10. Every candidate shall be examined in the following subjects comprising of three papers as follows:-

Marks for each of the papers shall be as under:-

PAPERS	SUBJECTS	WRITTEN	ORAL	PRACTICAL	TOTAL
Paper I	Dental Mechanics (Final)	75	25	100	200
Paper II	Dental Materials &Mettalurgy	75	25	.....	100
Paper III	Basic knowledge of computer & Medical Records Management	75	25	.....	100

Each written: paper shall be of three hours.

11. Each candidate shall be required to take up all papers of the examination. A candidate failing in any paper or papers of the examination before being permitted to re-appear at the subsequent examination, shall produce evidence of having pursued such a course of training as the Head of the institution may determine.

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Department of Prosthodontics and Implantology

A candidate, who passes in any one or more papers under examination shall be exempted from appearing in which he/she has passed and shall be allowed to reappear in the rest in which he/she has failed in any subsequent examination within a period of two years. Thereafter the candidate will have to appear in all the papers of this examination.

12. The minimum number of marks required to pass the examination shall be fifty percent in each paper both in the (i) written with oral and (ii) practical parts of the examination. Candidates who obtain minimum of seventy five percent of the marks in any paper under examination shall be declared to have passed with distinction in that particular subject provided he/she passes all subjects of examination in first attempt. Candidate who does not pass in all the papers- of the FINAL EXAMINATION at one and the same time shall not be declared to have passed with distinction.

13. The college authority will apply two months in- advance along with practical examination date sheet to the DCI for recognition of the Diploma Course.

14. As soon as possible after the examination, the Board of Examiners shall publish a list of those candidates who have passed. Each successful candidate shall be granted a Diploma subject to the approval by DCI.

19. VIVA-VOCE EXAMINATION

Viva voce examination aims at assessing the depth of knowledge, logical reasoning, and confidence and communication skill of the students.

20.SCHEME OF EXAMINATION

The University examination for Dental Mechanics Diploma courses will be held at the end of the first and second academic years.The university shall conduct two examinations in a year, a Regular and an Arrear Examinations in the month of November and April respectively.

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21. PATTERN OF EXAMINATION& SUBJECTS OF STUDY

THE PRI MARY EXAMINATION (FIRST YEAR)

1. APPLIED PHYSICS:

Specific gravity, density, properties of matter, including cohesion, capillarity, surface tension viscosity, elasticity, diffusion and osmosis.

Heat: Temperature and its measurements Thermometers and Pyrometers. General account of expansion by heat of solids, liquids and gases, Thermostats, Pressure gas and hydraulic. Boyle's and Charles Laws. Unit of heat, thermal capacity and specific Heat, Change of State; Latent heat; Melting Point. Properties of vapours, conduction, convection and radiation.

2. APPLIED MECHANICS:

Forces, Parallelogram and triangle of forces. Moments, Couples, Centre of gravity,Principles of lever and cantilever work, Energy; P-ower, Friction, Inclined plane, Screw Stress,Strain, Sheating Strain, Torsion, Bending movements, Strength. and stiffness of materials.

3. APPLIED CHEMISTRY:

Distinction between physical and chemical change; elements, mixtures, and compounds; composition of the atmosphere; Oxygen oxides, burning and rusting; water solvent properties and crystallization; action of water on metals; composition of water hydrogen; Laws of chemical

Combination; meaning of chemical symbols valency; simple chemical equations; acids, bases and salts. .

Electrolysis, The ionic theory of solution, Theelectro potential series, electroplating,

General characteristics of the metals including an elementary study of the common metals and their alloys with special reference to those used in the dental work room.

Alcohol, ethers, aldehydes and ketones, fatty acids and their more important derivatives, amines. Simple treatment of carbohydrates, fats and proteins, Benzenes and its homologues.

General characteristics of aromatic substances. Synthetic resins and plastics used in Dentistry.

4. APPLIED ORAL ANATOMY:

- Elementary anatomy and structure of denture/bearing area.
- Human dentition and occlusion.
- Functions of teeth and morphology of Crowns of teeth.
- Muscles of mastication and facial expression.
- Mastication deglutition and phonation.
- Movements of tempera-mandibular joint.
- Exercise/Demonstrations
- Tooth Carving in wax and plaster. (Crown and root, scale and enlarged models

5. DENTAL MECHANICS (PRIMARY):

- Infection control measures for impressions and models
- Impression Preservation and Boxing-in.
- Cast: Preparation, Trimming, including Orthodontic casts.
- Cast duplication - various methods.
- Construction of special trays – spacers
- Bite blocks- base plates and wax rims.
- Articulators: Classification, daily uses, and care of articulators.
- Adjustments, mounting of casts.
- Articulation, Occlusal plane, protrusive balance, working bite, balancing bite,curve of space, compensating curve, lateral curve.
- Principles of selection of teeth
- Setting of teeth and wax fmishing.
- Flasking, Dewaxing, Packing, curing and Deflasking
- Finishing and polishing of dentures.
- Additions, repairs, relining and revasing of dentures.
- Immediate denture construction.
- Making of acrylic teeth.
- Kennedy's classification of partial dentures. •

- Principles of partial denture, design, clasp surveyor, surveying, path of insertionand removal. Establishment of clasp seat. Clasp's parts, classification, function and reciprocation.

- Principles of wire bending, Preparation of wrought clasps, occlusal rests andlingual bars.

THE FINAL EXAMINATION (SECOND YEAR)

1. DENTAL MECHANICS (FINAL)

- Casting machines: Centrifugal and pressure casting machines, Furnaces, Principles of casting..
- Casting techniques of partial denture (Skeletal) Clasps, bars, occlusion rest.
- Setting of teeth and completion of dentures on metal skeletons.
- Mechanical principles of Orthodontic appliances, anchorage, force, tissue changes and retention.
- Stainless steel wire-preparation of clasps, springs and Arch wires for Orthodonticappliances.
- Use of various types of expansion screws.
- **Designing -** Implant supported Prosthesis (if facilities available for DentalImplants
- Ceramic, laminates and Veneers.
- **Fabricating—Maxillofacial** prosthesis such as eye, nose ear, cheek, obturator andsplint

  -Indirect Resin Restoration preparation techniques.

  -Porcelain firing techniques
- Preparation of removable Orthodontic appliances, Activators, Retention appliancesand Oral screen.
- Construction of fixed Orthodontic appliances, bands, tubes and arches.

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- Soldering and spot welding-Soldering of clasps, tags, Strengtheners and lingualbars.
- Inlays and Crowns-classification and construction facing & backings.
- Casting Procedures.
- Principles of bridge work-types of abutments - abutments and ponticsconstructionof bridges using porcelain and acrylic pontics.

2. DENTAL MATERIALS AND METALLURGY:

Dental Materials:

Composition, Properties, Uses, Advantages& Disadvantages of the following materials:-

- Plaster of Paris; Dental Stone, Die Stone
- Investment Materials
- All Impression Materials
- Tray Materials
- Denture Base Materials, both for cold curing and heat curing, Tooth Materials Waxes, Base Plate
- Zinc Oxide,
- Dental Luting Cements
- Dental Ceramics and indirect resin restoration materials.

Dental Metallurgy:

- Metallurgical Terms, General Study of:

  -Metals used in Dentistry particularly Gold, Silver, Copper, Zinc,Tin, Lead and Aluminium.

  - Alloys used in Dentistry particular y, Casting Gold Wrought Gold Silver Alloys,
- Stainless Steel, Chrome Cobalt Alloys.
- Heat treatment-annealing and tempering.
- Solders, Fluxes, Anti Fluxes.
- Tarnish and Corrosion.

- Electric Deposition.
- Dental implant materials

3. BASIC KNOWLEDGE OF COMPUTERS:

- General office routine economics, record-keeping services, Professional referrals and computing skill;
- Record keeping Of materials Indented and Audit of use.
- Receipt and dispatch of work from clinicians

22. PRACTICAL EXAMINATIONS:

The practical examination shall include, but not necessarily limited to the following

I. Primary examination

i. Model preparation, beading, boxing of models

ii. Class I ideal denture setup and wax up

iii. RPD surveying of models and wax pattern preparation

iv. Spotting of dental materials

v. Manipulation of lab dental materials

II. Final examination

1).Three units FPD

Model poring

Die-preparation

- Ditching

Spacer application

Wax pattern

- Casting of all metal bridge

2). Ceramic application on single unit crown (Casted before)

23. EXAMINERS

There shall be one external examiner appointed by the University for evaluating the answer scripts of the same speciality.

Prof. Dr. H. Anbapoorani, M.D.S,
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Department of Prosthodontics and Implantology

24. VALUATION OF ANSWER BOOKS

Answer book/s shall be evaluated by the internal and external examiner/s.

25. CRITERIA FOR PASS CERTIFICATES

To pass the university examination, a candidate shall secure in both theory examination and in practical/clinical including viva voce independently with an aggregate of 50% of total marks allotted.

A candidate securing marks below 50% as mentioned above shall be declared to have failed in the examination.

26. AWARD OF DEGREE

A candidate who is declared successful in the examination shall be granted a Diploma in Dental Mechanics in the respective specialty.

Prof. Dr. H. Annapoorni M.D.S.
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DIPLOMA IN DENTAL MECHANICS

SCHEMEOFEXAMINATIONS

MARKDISTRIBUTION

PRIMARY EXAMINATION (FIRST YEAR)

PAPER	SUBJECTS	WRITTEN	ORAL	PRACTICAL	TOTAL
Paper I- 7010	Applied Physics, Chemistry and Mechanics	75	25	.....	100
Paper II- 7011	Dental Mechanics	75	25	100	200
Paper III- 7012	Applied Oral Anatomy	75	25	100	200

A. Practical / Clinical Examination : 100 Marks

FINAL EXAMINATION (SECOND YEAR)

PAPERS	SUBJECTS	WRITTEN	ORAL	PRACTICAL	TOTAL
Paper I- 7110	Dental Mechanics (Final)	75	25	100	200
Paper II- 7111	Dental Materials &Mettalurgy	75	25	.....	100
Paper III- 7112	Basic knowledge of computer & Medical Records Management	75	25	.....	100

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B. Viva Voce : 25 Marks

i. Viva-Voce examination : 25 marks

All examiners will conduct viva-voce conjointly on candidate's comprehension, analytical approach, expression, interpretation of data and communication skills. It includes all components of course contents. It includes presentation and discussion on dissertation also.

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COURSE DESCRIPTION (SUBJECTS)

COURSE OUTCOME(CO)

CO1 :APPLIED PHYSICS, CHEMISTRY AND MECHANICS, Dental Mechanics (Primary) AND BASIC COMPUTER KNOWLEDGE :

CO1.1: The candidate would possess knowledge, necessary about applied basic and sciences.

CO1.2: Application of Physics in construction of the dental prosthesis

CO1.3: Application of Chemistry in developing the knowledge of the dental materials

CO1.4: Acquire adequate knowledge and application of computational skills in fabrication of dental

CO1.5: Should be able to appreciate morphological features of all primary and permanent teeth, to identify oral anatomic structures.

CO2:

CO2.1: To have adequate knowledge in different types of dental casting alloys and its applicatioons.

CO2.2:To have adequate knowledge and skills about the various machinery used in the fabrication of prosthesis.

CO2.3: To be able to communicate with the dentist and professional collegues through various media like Emails, Internet, Video conferencing etc to render the best possible treatment for the patient.

CO2.4: To perform laboratory Procedures with the understanding of the bio materials, tissue conditions, related to the prosthesis and have competent dexterity and skill for performing lab procedures in dentistry

CO2.5: Acquire knowledge of personal hygiene, infection control, prevention of cross infection and safe disposal of waste keeping in view the risks of transmission of hepatitis and hiv.

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Mapping Function of PO's and CO's & PSO's

CO's	PO 's					PSO's		
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO2
CO1.1	3	2	2	2	2	2	3	2
CO1.2	2	3	3	3	2	2	2	2
CO1.3	3	3	3	2	3	3	2	3
CO1.4	2	2	3	2	2	3	2	2
CO1.5	2	2	2	3	2	2	3	2
	2.6	2.6	2.8	2.6	2.2	2.6	2.6	2.2

CO's	PO 's					PSO's		
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO2
CO2.1	2	2	3	2	3	2	2	2
CO2.2	3	3	2	3	2	2	2	2
CO2.3	3	3	3	2	2	3	3	3
CO2.4	3	2	2	2	2	3	3	2
CO2.5	2	2	2	3	3	2	2	2
	2.8	2.6	2.6	2.6	2.6	2.6	2.4	2.2

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CO's	PO 's					PSO's		
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO2
CO1	2.6	2.6	2.8	2.6	2.2	2.6	2.6	2.2
CO2	2.8	2.6	2.6	2.6	2.6	2.6	2.4	2.2
	2.7	2.6	2.7	2.6	2.4	2.6	2.5	2.2

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