be compulsory. This is usually given once every year and attedence at these courses will be essential.

7. Concurrent clinical training – each student will be required to undergo compulsory concurrent clinical training for this purpose in paediatric Surgery, Plastic Surgery, Otolaryngology and Radio-diagnosis.
8. Training in methodology of teaching – the postgraduate will attend the undergraduate classes to learn the methodology of teaching and they will be encourage to teach the undergraduate students after preparing lectures and getting it corrected by a faculty members under whom he will work.
9. The candidate will get training in various aspects of Orthodontics during the three year course.
10. Internal assessment examination will be conducted after every 6 months.
11. The candidate must submit thesis protocol within 4 months of their joining the course i.e. 30th April and 31 st October for the January and July session respectively.
12. The candidate must submit thesis six months prior to final examination for the January and July session i.e. by 30th November and 30th June respectively.

SYLLABUS OF COURSE IN ORTHODONTICS

1. Applied Anatomy : Applied anatomy of oro-dental tissues with special reference to the jaws, teeth, TMJ, muscles of mastication, deglutition, speech, occlusion and dental morphology.
2. Histology : Normal histology of the teeth, peridontium and oral tissues.
3. Development : Growth and development of the jaws, teeth, supporting structures, TMJ and dentofacial anomalies.
4. Physical anthropology : Evolution of jaws and teeth, study of anthropometric and landmarks.
5. Applied physiology : Physiology of investing tissues arch forms and occlusion, physiology of mastication, deglutition and speech.
6. Nutrition : Study of nutritional factors, vitamins, carbohydrates, fats, proteins, minerals and their individual dental implications.
7. Applied pathology : Development anomalies affecting tooth form and number. Disease of teeth and jaws, heredity and anomalies of the jaws. Effects of endocrine and nutritional deficiencies affecting the development of TMJ teeth & jaws.
8. Applied dental materials : Applications of dental cements, stainless steel wires, band material, solders, impression materials, plaster of Paris, stone plaster, acrylic resins and other materials used in Orthodontics.
9. Applied radiology : Dental radiology including cephlometrics and panoramic.
10. Child psychology from birth to adolescence.
11. Genetics – heredity with special reference to dental and other facial anomalies.
12. Study of biostatics as applied to dentistry and research.

ORTHODONTICS

1. History of Orthodontics, scope & limitations
2. Principles of Orthodontics
3. Normal occlusion

4. Recognition of malocclusion, incidence, etiology and classification.
5. Importance of orthodontic records.
6. Cephalometrics, models and photographic analysis.
7. Growth prediction by computers
8. Diagnostic aids.
9. Treatment planning by computer.
10. Preventive and Interceptive orthodontics.
11. Role of extractions
12. Serial extractions.
13. Corrective Orthodontics by removal appliances.
14. Corrective orthodontics by fixed appliances (techniques).
15. Myofunctional appliances
16. Analysis of forces, applied in orthodontic treatment.
17. Biomechanical principles of Orthodontics tooth movement and tissue changes.
18. Anchorage
19. Retention and relapse.
20. Cleft palate Orthodontics, presurgical, mixed dentition and permanent dentition.
21. Surgical Orthodontics
22. Slow & rapid max. expansion.

II. Clinical and laboratory techniques

1. Model preparation
2. Cast trimming
3. Wire bending techniques
4. Soldering
5. Manipulation of cold & hot cure acrylic resins
6. Spot welding
7. Impression taking
8. Bite registration
9. Radiographic and cephalometric analysis, tracing digitization.
10. Conventional & prefabricated bands, cementation and arch fixation on the patient.
11. Clinical demonstrations of treatment planning by different methods & techniques.
12. Typodont exercises by both techniques
13. Removable and functional appliances.
14. Direct bonding.

EXAMINATION

I. Theory

a) Paper I

Basic & Applied subjects

(Applied Anatomy, Physiology, pathology, Nutrition, Biostatics & Dental Materials)

b) Paper II

(Orthodontics – Basic Principles)

c) Paper III

(Clinical Orthodontics)

d) Paper IV

(Essay on basic, applied advanced Orthodontics

II. Practical, Clinical and Viva Voce Examination will consists of :-

a) Presentation of laboratory techniques, exercises.

b) Clinical examination – case presentations (20 completed cases , at least 5 debonded).

c) Taking working bite on the patient, preparation and fitting of a functional appliance.

d) Making of a set of U/L arch wires, auxiliaries and fixing them on the patient.

e) Making a cast analysis, cephalometric, photographic diagnosis and treatment planning of a given cases.

f) Viva voce examination will consists of :-

i) Oral examination

ii) Case discussion

iii) Thesis discussion

PROSTHODONTICS — M D S

The course shall comprise of a minimum of three years during which the student will be deemed to have acquired.

a) An updated knowledge of Prosthodontics including Removable, Fixed, Maxillofacial Prosthodontics and Implantology, growth and development of teeth, jaws, Periodontics, T.M.J. and occlusion.

b) Competence at running independently Prosthodontics service and Maxillofacial Prosthodontics.

c) Working knowledge of some of the important instruments, equipment in the scientific investigations of Dental Materials, Prosthodontic rehabilitation including masticatory efficiency, TMJ dysfunction syndromes & craniofacial anomalies.

d) Familiarity with the modern methods and assessment strategies for teaching of undergraduate students.

e) Clinical training in major disciplines including Oral Cancer and Plastic Surgery.

The student shall be rotated for training in different sections i.e. Radiodiagnosis (roentgeno-cephalometric, panoramic), Paediatric Surgery(cleft lip and palate repair) and Head & Neck Cancer. The student shall write at least two papers and a thesis on a research project under the perceptorship of the guide.

The course shall be given in the following forms

1. Didactic lectures, seminars, demonstrations & Laboratory techniques thrice a week.
2. The lectures will be so arranged that the student joining either in January or July will rotate without difficulty. A good number of lectures / demonstrations will be necessary in order to cover the entire field of dentistry and its subspeciality of Prosthodontics.
3. There will be Journal Club once a week. Each student will be assigned a Journal of Prosthetic Dentistry, the International Journal of Prosthodontics, Oral Rehabilitation or of allied sciences to review the most important articles that have appeared in the Journals irrespective of topic to give practice to the student in comprehension and presentation of the data and his own views before a group.
4. Clinical case conference once a week - the student will present all data including case records, models, radiographs and photographs.

5. The students will work on patients in the clinics, both in the mornings and in the afternoons under the supervision of teachers.
6. The students will undertake the laboratory work for the patients who are under their treatment.
7. Lectures in basic sciences-attendance at this course given by the basic science disciplines will be compulsory. This is usually given once every year and attendance at these courses will be essential.
8. Concurrent clinical training - each student will be required to undergo compulsory concurrent clinical training for this purpose in Plastic Surgery, Otolaryngology and Radio diagnosis.
9. Training in methodology of teaching - the postgraduate will attend the undergraduate classes to learn the methodology of teaching and they will be encouraged to teach the undergraduate students after preparing lectures and getting it corrected by a faculty member under whom he will work.
10. The candidate will get training in various aspects of Prosthodontics during the three years both in the clinics and laboratory.
11. Internal assessment examination will be conducted every 6 months.
12. The candidate must submit thesis protocol within 4 months of their joining the course i.e. by 30th April and 31st Oct. for the January and July session respectively.
13. The candidate must submit thesis six months prior to final examination for the January and July session i.e. by 30th November and 30th June respectively.

SYLLABUS OF COURSE IN PROSTHODONTICS

A. Applied Anatomy, Physiology, Pathology and Biostatistics

1. Anthropology as applied to craniofacial region.
2. Genetics in Dentistry.
3. Endocrine glands in particular reference to Pituitary, Parathyroid and Thyroid glands.
4. Normal occlusion, development of occlusion in deciduous, mixed and permanent dentitions.
5. Anatomy of T.M.J., its movements and Myofacial pain dysfunction syndrome.
6. Role of Vit A, C and B complex in oral mucosal and periodontal health.
7. Role of Calcium and Vit D in growth and development of teeth and jaws.
8. Growth and development of face, jaws and teeth.
9. Oral pre-cancerous lesions.
10. Malignant lesions of the oral cavity and head and neck region.
11. Histology of enamel, dentin, cement, periodontal ligament and alveolar bone.
12. Pulpal anatomy, histology and biological considerations.
13. Anatomy, physiology and function of the masticator system.
14. Speech Mechanism.
15. Mastication, swallowing and deglutition mechanism.
16. Salivary glands and saliva.
17. Anatomy and histology of oral mucous membrane.
18. Congenital abnormalities of face and oral cavity.