COLLEGE OF PHYSICIANS AND SURGEONS PAKISTAN

FELLOWSHIP PROGRAMME

ORTHODONTICS

IMM AND POST-IMM TRAINING: TOTAL DURATION 4 YEARS

NOTE: THE CURRICULUM IS APPLICABLE TO BATCHES ENTERING ORTHODONTICS TRAINING PROGRAM IN JULY 2025 AND ONWARDS

2025

THIS IS AN EVOLVING DOCUMENT

The College of Physicians and Surgeons Pakistan would appreciate any criticism, suggestions, advice from the readers and users of this document. Comments may be sent in writing or by e-mail to the CPSP at:

DIRECTORATE OF NATIONAL RESIDENCY PROGRAM (DNRP)
College of Physicians and Surgeons Pakistan (CPSP)
7th Central Street, Defence Housing Authority, Karachi-75500.
nrp@cpsp.edu.pk

CONTENTS

ABOUT THE COLLEGE

The College was established in 1962 through an ordinance of the Federal Government. The objectives/functions of the College include promoting specialist practice of Medicine, Obstetrics & Gynaecology, Surgery and other specialties by securing improvement of teaching and training, arranging postgraduate medical, surgical and other specialists training, providing opportunities for research, holding and conducting examinations for awarding College diplomas and admission to the Fellowship of the College.

Since its inception, the College has taken great strides in improving postgraduate medical and dental education in Pakistan. Competency-based structured Residency Programs have now been developed, along with criteria for accreditation of training institutions, and for the appointment of supervisors and examiners. The format of examinations has evolved over the years to achieve greater objectivity and reliability in methods of assessment. The recognition of the standards of College qualifications nationally & internationally, particularly of its Fellowship, has enormously increased the number of trainees and consequently the number of training institutions and the supervisors. The rapid increase in knowledge base of medical sciences and consequent emergence of new sub-specialties have gradually increased the number of CPSP fellowship disciplines to eighty nine including specialties in dentistry.

After completing two years of core training during IMM, the trainees are allowed to proceed to the advance phase of FCPS training in the specific specialty of choice for 2-3 years. However, it is mandatory to qualify IMM examination before taking the FCPS-II exit examination. The work performed by the trainee is to be recorded in the e-logbook on daily basis. The purpose of the e-log is to ensure that the entries are made on a regular basis and to avoid belated and fabricated entries. It will hence promote accuracy, authenticity and vigilance on the part of trainees and the supervisors.

The average number of candidates taking CPSP examinations each year is to a minimum of 32,000. The College conducts examinations for FCPS-I (11 groups of disciplines), IMM, FCPS-II (89 disciplines), MCPS (22 disciplines), including MCPS in Health Professions Education and Health Care System Management. A large number of Fellows and senior medical teachers from within the country and overseas are involved at various levels of examinations of the College.

The College, in its endeavor to decrease inter-rater variability and increase fairness and transparency, is using TOACS (Task Oriented Assessment of Clinical Skills) in IMM and FCPS-II Clinical examinations. Inclusion of foreign examiners adds to the credibility of its qualification at an international level. It is important to note that in the overall scenario of health delivery over 85% of the total functioning and registered health care specialists of the country have been provided by the CPSP. To coordinate training and examination, and provide assistance to the candidates stationed in cities other than Karachi, the College has established 14 Regional Centers (including five Provincial Headquarter Centers) in the country. The five Provincial Headquarter Centers, in addition to organizing the capacity building workshops/short courses also have facilities of libraries, I.T, and evaluation of synopses along with providing guidance to the trainees in conducting their research work. The training towards Fellowship can be undertaken in more than 362 accredited medical institutions throughout the country and 96 accredited institutions abroad. The total number of trainees in these institutions is over 39,430 who are completing residency programs with around 6,664 supervisors. These continuous efforts of the College have even more importantly developed a credible system of postgraduate medical education for the country. The College strives to make its courses and training programs 'evidence' & 'needs based' so as to meet international standards as well as to cater to the specialist healthcare needs not only for this country but also for the entire region.

Prof. Khalid Masood Gondal
President
College of Physicians and Surgeons Pakistan

FELLOWSHIP DISCIPLINES

The list of fellowship programmes, first & second fellowship, are given below:

DISCIPLINES FOR FIRST FELLOWSHIP

1. Anatomy
2. Anesthesiology
3. Biochemistry
4. Cardiac Surgery
5. Cardiology
6. Cardio Thoracic Anaesthesia
7. Chemical Pathology
8. Clinical Haematology
9. Community Medicine
10. Dermatology
11. Diagnostic Radiology
12. Emergency Medicine
13. Family Medicine
14. Forensic Medicine
15. Haematology
16. Histopathology
17. Immunology
18. Medicine
19. Medical Oncology
20. Microbiology
21. Nephrology
22. Neurology
23. Neurosurgery
24. Nuclear Medicine
25. Obstetrics And Gynaecology
26. Operative Dentistry & Endodontics
27. Ophthalmology
28. Oral & Maxillofacial Surgery
29. Orthodontics
30. Orthopaedic Surgery
31. Otorhinolaryngology (ENT)
32. Paediatric Surgery
33. Paediatrics
34. Periodontology
35. Pharmacology and Therapeutics
36. Physical Medicine & Rehabilitation
37. Physiology
38. Plastic Surgery
39. Prosthodontics
40. Psychiatry
41. Pulmonology
42. Radiation Oncology
43. Surgery
44. Thoracic Surgery
45. Urology
46. Virology

DISCIPLINES FOR SECOND FELLOWSHIP

1. Breast Surgery
2. Child and Adolescent Psychiatry
3. Clinical Cardiac Electrophysiology
4. Community & Preventive Paediatrics
5. Colorectal Surgery
6. Critical Care Medicine
7. Cytopathology
8. Developmental and Behavioural Paediatrics
9. Endocrinology
10. Gastroenterology
11. Glaucoma
12. Gynecological Oncology
13. Hepato-Pancreato-Biliary and Liver Transplant Surgery
14. Infectious Diseases
15. Interventional Cardiology
16. Interventional Radiology
17. Maternal and Fetal Medicine (MFM)
18. Molecular Pathology & Cytogenetics
19. Neonatal Paediatrics
20. Orbit And Oculoplastics
21. Paediatric Cardiology
22. Paediatric Critical Care Medicine
23. Paediatric & Congenital Cardiac Surgery
24. Paediatric Endocrinology & Diabetes
25. Paediatric Dermatology
26. Paediatric Gastroenterology and Hepatology
27. Paediatric Haematology Oncology
28. Paediatric Infectious Diseases
29. Paediatric Nephrology
30. Paediatric Neurology
31. Paediatric Ophthalmology and Strabismus
32. Paediatric Orthopaedic Surgery
33. Paediatric Pulmonology
34. Pain Medicine
35. Palliative Medicine
36. Reproductive Endocrinology & Infertility
37. Rheumatology
38. Spine Surgery
39. Surgical Oncology
40. Transplant Nephrology
41. Urogynaecology
42. Vitreo Retinal Ophthalmology
43. Vascular Surgery

CPSP COMPETENCY MODEL

College of Physicians and Surgeons Pakistan has moved to competency-based medical education and has developed its own competency model shown below. A generic explanation of the model is given below and it is expected that all its residency training programmes follow the components of this model in accordance to the requirements of each specialty.

Patient or population care occupies the pivotal center. Patient care includes all clinical skills such as history taking, physical examination, ordering investigations, making diagnoses and managing the care. The inner leaves of the model represent the five major competencies directly related to patient care, while the three competencies in the outer circle are mega-competencies related to patient care and also incorporate education, professionalism, leadership, advocacy and population health.

By the end of the Residency Programme, residents are expected to acquire these competencies and their constituent learning outcomes, and provide promotive, preventive, curative and rehabilitative patient-centered (or population-centered) care.

Inner Leaves:

1. Knowledge and Critical Thinking
2. Technical Skills
3. Communication Skills
4. Teamwork
5. Research

Outer Leaves:

6. Professionalism
7. Pedagogy
8. Advocacy

1. Knowledge and Critical Thinking

- Demonstrate application of wide and current readings to critical thinking and problem solving
- Relate the alteration of body function to the presenting condition
- Interpret and integrate history and examination findings to arrive at an appropriate provisional and credible differential diagnoses
- Sequentially order, justify and interpret appropriate investigations
- Apply knowledge and reasoning skills to
    - Analyze data for problem identification and to rule in and rule out contending conditions
    - Synthesize and evaluate solutions for decision-making in solving familiar and less familiar problems based on best current evidence
    - Prioritize different problems within a time frame
    - Select, outline and provide, with evidence-based justifications, appropriate pharmacological and non-pharmacological management strategies
    - Assess new medical knowledge and apply it to resolve patient problems (Evidence-based practice)
    - Apply quality assurance procedures in daily work (Professionalism)
    - Demonstrate shared-decision-making with the patient or family
    - Provide cost-effective care while ordering investigations and in management
    - Use resources appropriately
    - Demonstrate awareness of bio-psycho-social factors in assessment and management of a patient

2. Technical Skills

- Demonstrate International Patient Safety Goals (IPSG)
- Demonstrate competent performance of all required technical skills and procedures in the specialty, including:
  - Obtaining informed consent
  - Preoperative planning
  - Pre-interventional care and preparation
  - Intra-Intervention techniques including exposure and closure, global & task specific items, and communication and teamwork skills
  - Post-interventional care
  - Follow-up care

3. Communication Skills

Written Communication Skills:

- Maintain clear, concise, accurate & updated medical records
- Write:
  - Cogent, clear progress notes documenting working diagnosis & status of diagnostic evaluation
  - Clear, focused, evidence-based & logical management plans and discharge summaries
  - Respectful, clear & focused letters and referrals to other colleagues

Verbal and other Non-verbal Communication Skills:

- Clear, focused and logical presentation of cases
- Demonstrate:
  - Effective interpersonal communication skills by being clear, considerate and sensitive towards patients, their relatives, other physicians, health professionals, team members, colleagues, students and the public
  - Empathy & respect towards patients & their relatives
  - Effective counseling of the patient and the family with cultural sensitivity by explaining options, educating them & promoting joint decision-making
  - Appropriate verbal & body language on the campus and all work situations including seminars, bedside sessions, outpatient sessions and others
  - Respect and tolerance for all health care professionals, including peers, juniors and seniors
  - Appropriate conflict resolution & management skills

4. Teamwork

- Demonstrate constructive team-communication skills
- Facilitate collaborative group interaction as a team member to build strong teams demonstrating respect, tolerance and interdependence
- Support other team members to grow
- Demonstrate willingness to assume responsibility and leadership as needed

5. Research

- Conduct a research study individually or in a group by using appropriate
    - Selection of research question(s) and objectives
    - Research design and statistical methods to answer the research question
    - REU approval of the synopsis
- Demonstrate competence in academic writing by publishing research article(s) as a step towards resolving issues or concerns in their specialty
- Guide others in conducting research by advising about research methodology including study designs and statistical methods
- Demonstrate clear, focused & logical presentations of their research
- Interpret & use results of various research studies (critical appraisal)

6. Professionalism

- Demonstrate the highest level of personal integrity: honesty, punctuality, regularity, timely task completion
- Deal with all patients in a non-discriminatory, prejudice-free manner, demonstrating the same level of care for every human being irrespective of gender, age, ethnic background, culture, socioeconomic status & religion
- Establish a trusting relationship with patients, their relatives and care-givers
- Deal with all patients with honesty, empathy & compassion, putting patients' needs first (altruism)
- Facilitate transfer of information important for promotion of health, prevention and management of disease

- Encourage questioning by the patient and be receptive to feedback
- Pursue self-directed and life-long learning. Keep abreast of medical literature and assess new knowledge and apply it to resolve patient problems
- Know one's limitations and ask for help as needed from colleagues, consultations or referrals
- Apply quality assurance procedures for improvement in daily work
- Be a role model for others

Ethics
- Maintain patient autonomy by demonstrating shared-decision-making with the patient and/or family
- Obtain informed consent, maintain patient confidentiality and do no harm
- Provide cost-effective care while ordering investigations and in management and use resources appropriately

Leadership
- Demonstrate accountability for their decisions and actions, and that of their team
- Demonstrate willingness to assume leadership role(s) when needed in given situations or events (rush call/code)
- Change and bring about change as necessary, as a leader or supportive leader

7. Pedagogy
- Demonstrate effective teaching skills, including clinical and community-based teaching, using diverse strategies
- Apply theories regarding learning & education in teaching practices
- Practice effective teaching methods, including the use of technology and multimedia tools to enhance learning experiences
- Mentor junior colleagues and residents, providing guidance and support
- Provide constructive feedback to resident learners
- Participate in continuous professional development through workshops and courses

- Reflect on teaching experiences for personal growth and improvement
- Lead educational initiatives & foster an inclusive learning environment

8. Advocacy

Advocacy is needed at multiple levels.

- Advocacy for the Patient:
  - Act as advocates for patients to ensure they are not lost in the system
  - Deliver timely care, prioritizing the patient's needs first
- Advocacy for the Practice:
  - Highlight limitations & issues within the service or practice
  - Identify solutions to problems and recommend and implement improvements for the practice(s) and institutional system(s)
- Advocacy for the Health System and Society:
  - Describe one's role in the health system(s) & contribute to building strong referral systems
  - Prioritize patient and community interests above personal or professional interests
  - Advocate for the elimination of social determinants of ill health
  - Advocate for the prevention of serious illnesses within one's specialty/sub-specialty
- Advocacy for the Profession:
  - Strive to build public trust in the medical & dental profession
  - Demonstrate efforts to improve and enhance the profession, specialty, and sub-specialty
  - Serve as conscientious gatekeepers of one's profession, specialty, and sub-specialty

GENERAL REGULATIONS

Candidates will be admitted in training & examinations in the name (surname and other names) as given in the BDS degree. CPSP will not entertain any application for change of name on the basis of marriage/divorce/deed.

ELIGIBILITY REQUIREMENT FOR ENTERING INTO FELLOWSHIP PROGRAM IN ORTHODONTICS

- Passed FCPS-I in Dentistry or granted exemption

DURATION OF TRAINING

Total duration of training is four years, divided into following two phases:

- Intermediate Module (IMM) in orthodontics for first two years, after which the trainee becomes eligible to appear in the Intermediate Module Examination.
- Post IMM or Advance phase of training for two years.

APPROVED TRAINING CENTRES

Training must be undertaken in units/departments/institutions approved by the College. A current list of approved centres is available from the College and its regional offices as well as on the College website.

REGISTRATION AND SUPERVISION

All training must be supervised and residents are required to register with the RTMC and submit the name of their supervisor(s) by the date indicated on the registration form. The supervisor will normally be a Fellow of the College.

RESEARCH

Vide notification numbers CPSP/Sec/2024/45 dated 15th March, 2024, F-1/Exam-24/CPS/3008-A dated 30th August, 2024, and CPSP/Sec/2024/454 dated 09th September, 2024.

- Residents inducted in the CPSP 1st fellowship programs from January 2025 and onwards, will be required to provide evidence of publication of one research paper in a CPSP approved journal, for appearing in final fellowship examination
- Synopsis duly approved by the supervisor must be submitted to the REU of CPSP before six (06) months of scheduled IMM examination
- Synopsis of the research paper must be approved by the Research & Evaluation Unit (REU) of CPSP before starting the research work
- The evidence of publication of one research paper in a CPSP approved journal must be submitted along with the final FCPS-II examination form

MANDATORY WORKSHOPS AND COURSE

It is mandatory for all residents to attend the following CPSP certified workshops & course in the first two years of training (IMM):

- Introduction to Computer and Internet
- Research Methodology, Biostatistics & Article Writing
- Skills for Communication, Orientation, Professionalism & Ethics (SCoPE)
- Primary Surgical Skills
- BLS (Basic Life Support) Course

However, if not attended earlier for any reason, they have to be completed during this phase of training. The trainee may also be required to attend any other workshop as may be introduced by the CPSP.

E-LOGBOOK

The CPSP council has made e-logbook system mandatory for all Residency programme trainees inducted from July 2011. Upon registration with RTMC each trainee is allotted a registration number and a password to log on and make entries of all work performed and the academic activities undertaken in e-logbook on a daily basis. The concerned supervisor is required to verify the entries made by the trainee. This system ensures timely entries by the trainee and prompt verification by the supervisor. It also helps in monitoring the progress of trainees and the vigilance of the supervisors.

AWARD OF FELLOWSHIP

Fellowship of the College of Physicians and Surgeons Pakistan is awarded to those applicants who have:

- A recognized dental degree
- Completed one year house job in an institution recognized by PMDC/PMC
- Passed the relevant FCPS Part-I in Dentistry examination or granted exemption
- Registered with the Research & Training Monitoring Cell (RTMC)
- Undergone specified years of supervised accredited training on whole time basis
- Passed IMM examination in Orthodontics
- Declared successful in final fellowship examinations carried out by the examination department of the CPSP
- Submitted evidence of publication of one research paper in a CPSP approved journal
- Elected by the college council

TRAINING ENQUIRES AND REGISTRATION

All residents should notify the College in writing of any change of address and proposed changes in training (such as change of supervisor, change of department, break in training etc.) as soon as possible.

ROLES AND RESPONSIBILITIES
SUPERVISOR

Supervision of a resident is a multifaceted job. Arbitrarily the task is divided into the following components for the sake of convenience. This division is by no means exhaustive or rigid. It is merely meant to give semblance to this abstract and versatile role.

EXPERT TRAINER

- This is the most fundamental role of a supervisor. S/he has to not only ensure and monitor adequate training but also provide continuous helpful feedback (formative) regarding the progress of the training
- This would entail observing the resident's performance and rapport with all the people within his/her work environment
- S/he should teach the residents and help them overcome the hurdles during the learning process
- It is the job of the supervisor to make the residents develop the ability to interpret findings in their patients and act suitably in response
- The supervisor must be adept at providing guidance in writing a research article (which is an essential component of training)
- Every supervisor is required to participate actively in Supervisors' workshops, conducted regularly by CPSP, and do his/her best to implement the newly acquired information/skills in the training. It is his/her basic duty to keep abreast of the innovations in the field of expertise and ensure that this information percolates to residents of all years under him/her

RELIABLE LIAISON

- The supervisor must maintain regular contact with the College regarding training and the conduct of various mandatory workshops and courses
- It is expected that the supervisor will establish direct contact with relevant quarters of CPSP if any problem arises during the training process, including the suitability of resident
- S/he must be able to coordinate with the administration of his/her institution/organization in order to ensure that his/her residents do not have administrative problems hampering their training

PROFICIENT ADMINISTRATOR

- The supervisor must ensure that the residents regularly fill their e-logbook
- S/he must provide quarterly feedback regarding each resident through e-log system
- S/he might be required to submit confidential reports on resident's progress to the College
- The supervisor should notify the College of any change in the proposed approved training program
- In case the supervisor plans to be away for more than two months, he/she must arrange satisfactory alternate supervision during the period

ROLES AND RESPONSIBILITIES
RESIDENT

Given the provision of adequate resources by the institution, residents should

- Accept responsibility for their own learning and ensure that it is in accord with the requirements of the particular discipline
- Play an informed role in the selection of the supervisor
- Seek reasonable infrastructure support from their Institution and supervisor, and use this support effectively
- Ensure that all outlined aspects of training are covered during the defined training period
- Work with their supervisors in writing the synopsis and submit the synopsis duly approved by the supervisor with the REU department before six (06) months of their scheduled IMM examination
- Accept responsibility for the research and plan to execute it within the time limits defined
- Be responsible for arranging regular meetings with the supervisor to discuss and document progress. If the supervisor is not able/willing to meet with the resident on a regular basis, he/she must notify the college
- Provide the supervisor with word processed updated synopsis subsequent research paper draft (ensure it has been checked for spelling, grammar and typographical errors, prior to submission) and provide the raw data to the supervisor if required
- Submit evidence of publication of one research paper in a CPSP approved journal, along with examination form
- Follow the College complaint procedure if serious problem arises

INTERMEDIATE MODULE (IMM)

CURRICULUM: AIM & SPECIALTY SPECIFIC OUTCOMES

The aim of the fellowship in Orthodontics is to produce specialists and academicians who have attained the required competencies.

By the end of the initial two years' training in FCPS Orthodontics, the resident will be able to:

- Apply principles of craniofacial growth and development, including genetic and physiological factors, to assess developmental stages, identify deviations, and support early clinical decisions in orthodontic care.
- Apply principles of dental development and occlusion to assess occlusal changes and patterns of attrition across eruptive phases, evaluate space relationships using established methods, and identify factors contributing to normal occlusion during growth.
- Identify types, causes, and clinical implications of malocclusion, using classification systems and basic epidemiological understanding to assess its effects on function, including speech and temporomandibular joint health.
- Perform orthodontic diagnosis by taking clinical history, conducting examination, fabricating study models, documenting diagnostic records, and applying basic methods of space assessment and skeletal maturity evaluation to support early treatment planning.
- Apply basic concepts of orthodontic tooth movement, including bone physiology, tissue response, biological principles, and the effect of drugs, to understand treatment effects and guide clinical decisions during early appliance therapy.

- Apply basic principles of biomechanics and orthodontic force systems to differentiate types of tooth movement, evaluate anchorage and friction, and relate timing and magnitude of force to expected clinical effects during early orthodontic treatment.
- Implement preventive and interceptive orthodontic strategies by identifying developing malocclusions, managing habits, and using appliances such as space maintainers and habit breakers, along with basic space management techniques, to preserve arch integrity during early dentition stages.
- Initiate orthodontic treatment for selected malocclusions using removable appliances by applying basic design principles, selecting materials appropriately, and ensuring patient cooperation, while gaining familiarity with functional and fixed appliance components and their clinical use.
- Select appropriate biomaterials, including impression materials, bonding agents, and basic components such as bands and brackets, as well as orthodontic instruments required for appliance fabrication and delivery during early orthodontic care.
- Recognize periodontal risks associated with orthodontic treatment and apply basic preventive measures to support periodontal health during early appliance therapy.
- Describe principles of retention, differentiate types of retainers, and relate common causes of relapse to preventive strategies during early orthodontic treatment planning.
- Critically evaluate and interpret published orthodontic literature to support evidence-based clinical decision-making and develop familiarity with research methodology and statistical reasoning.

SYLLABUS

The following outline provides guidance on the essential knowledge application areas deemed important for residents:

Growth and Development

- Myology, osteology, embryology, histology and physiology of stomatognathic system
- Clinical implications of timing, pattern, and variability of growth
- Methods of studying growth
- Genetic influence, nature, site and type of growth in craniofacial complex
- Theories of growth control and the concept of jaw rotations
- Clinical applications of maturational and aging changes

Development & Physiology of Supporting Structures of Teeth

- Development of dentition and occlusion
- Ideal occlusion
- Pattern of attrition
- Occlusal changes during facial growth
- Changes in occlusion during different eruptive phases
- Occlusal changes during adolescence and adulthood and its implications
- Principles and methods of space analysis
- Bolton analysis
- Factors influencing the development of normal occlusion

Malocclusion

- Different systems of malocclusion classification
- Role of genetics in the development of malocclusion
- Causes of malocclusion, including oral habits and embryological disturbances
- Epidemiology of malocclusion
- Clinical implications of malocclusion, including effects on speech and the temporomandibular joint (TMJ)

Principles of Diagnosis and Treatment Planning

- Systematic history taking and clinical examination for accurate diagnosis
- Fabrication and analysis of dental study casts
- Standardized orthodontic photography
- Use of conventional and digital radiographic techniques
- Orthodontic problem list formulation
- Skeletal maturity indicators (hand–wrist radiographs and cervical vertebral maturation stages) and their clinical application in orthodontic diagnosis and treatment planning
- Cephalometric analyses and diagnosis
- Use of prediction tracings (growth and surgical) for treatment planning
- Application of computerized systems for orthodontic diagnosis and planning

Biology and Biomechanics of Tooth Movement

- Theories of orthodontic tooth movement
- Bone physiology, tissue reaction and biological basis of orthodontic therapy
- Effect of drugs in orthodontic tooth movement

Biomechanics and Mechanics

- Types of orthodontic forces
- Types of orthodontic tooth movements
- Anchorage and friction including TADs
- Mechanical basis of force systems
- Relation of force and time with tooth movement
- Skeletal effects of orthodontic forces (ideal timing and rate of movement)
- Types of expansions, their timings and effects on bone

Preventive and Interceptive Orthodontics

- Preventive measures
- Early correction measures
- Habit-breaking appliances
- Space maintainers
- Space management

Treatment of Malocclusion

- With removable orthodontic appliances:
  - Indications
  - Contraindications
  - Materials
  - Principles of action
  - Classification and patient's compliance
- With functional appliances (removable & fixed):
  - Indications
  - Contraindications
  - Materials
  - Principles of action
  - Classification and patient's compliance
- With fixed orthodontic appliances:
  - Indications
  - Contraindications
  - Different types of bracket systems
  - Direct and indirect bonding methods, their advantages and disadvantages
  - Fabrication of appliances
- Recognition of cases for orthognathic surgery

Orthodontic Materials and Instruments: Types and Clinical Implications

- Orthodontic instruments
- Impression materials
- Luting and bonding materials
- Bands, brackets, arch wires, and auxiliaries

Perio-ortho Relationship

- Orthodontic risks associated with periodontal conditions
- Prevention and management of periodontal complications during orthodontic treatment

Retention and Relapse

- Fixed and removable retainers
- Indications and contraindications of various retention strategies
- Relapse following orthodontic treatment
- Post-relapse management strategies

Biostatistics and Epidemiology

- Critical evaluation and interpretation of orthodontic literature using basic principles of research methodology and statistical analysis

Cross Infection Control

- Principles and protocols of cross infection control in orthodontic clinical settings

CLINICAL AND PROCEDURAL COMPETENCIES

The level of competencies to be achieved each year is specified according to the key, as follows:

1. Observer Status
2. Assistant Status
3. Performed Under Supervision
4. Performed Under Indirect Supervision
5. Performed Independently

COMPETENCIES	FIRST YEAR								TOTAL NO. OF CASES
	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER		
	Level	Cases	Level	Cases	Level	Cases	Level	Cases	
PATIENT MANAGEMENT									
HISTORY TAKING	3	7	4	7	5	8	5	8	30
TMJ EVALUATION	1	2	2	6	3	6	4	6	20
DIAGNOSTIC/RETAINER IMPRESSIONS	3	5	4	5	5	5	5	5	20
STUDY MODELS/BASE FORMING	3	5	4	5	5	5	5	5	20
CEPHALOMETRIC/PANORAMIC X-RAYS TAKING	3	5	4	5	-	-	-	-	10
CEPHALOMETRIC TRACINGS AND ANALYSIS	3	5	4	5	5	5	5	5	20
GROWTH PREDICTION ON CEPHALOMETRIC X -RAYS	-	-	2	2	3	2	4	2	6
SURGICAL/PREDICTION TRACING	-	-	2	2	3	2	4	2	6
EXTRA ORAL AND INTRA ORAL PHOTOGRAPHS	3	5	4	5	-	-	-	-	10
PATIENT CASE PRESENTATIONS	3	7	4	7	5	8	5	8	30
TREATMENT PLANNING	3	7	4	7	5	8	5	8	30
FABRICATION OF SPLINTS	-	-	3	1	4	1	-	-	2
INTERCEPTIVE ORTHODONTICS (SPACE MANAGEMENT, GROWTH MODIFICATION ETC.)	2	2	3	2	5	2	-	-	6
ARCH EXPANSION	-	-	2	2	3	2	5	2	6
BANDING	2	3	3	3	4	7	5	7	20
BONDING	2	3	3	3	4	7	5	7	20
WIRE BENDING SKILLS	2	1	3	2	4	3	5	4	10
SOLDERING AND WELDING	2	1	3	1	4	1	5	1	4
ANCHORAGE (HEADGEAR, TADS)	-	-	-	-	2	2	3	2	4
ORTHODONTIC TREATMENT WITH FUNCTIONAL APPLIANCES WITH APPLIANCE FABRICATION	-	-	2	1	3	1	4	1	3

COMPETENCIES	SECOND YEAR								TOTAL NO. OF CASES
	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER		
	Level	Cases	Level	Cases	Level	Cases	Level	Cases	
PATIENT MANAGEMENT									
DIAGNOSTIC/RETAINER IMPRESSIONS	-	-	-	-	5	5	5	5	10
STUDY MODELS/BASE FORMING	-	-	-	-	5	5	5	5	10
CEPHALOMETRIC TRACINGS AND ANALYSIS	-	-	-	-	5	5	5	5	10
GROWTH PREDICTION ON CEPHALOMETRIC X -RAYS	5	2	5	2	-	-	-	-	4
SURGICAL/PREDICTION TRACING	4	2	4	2	-	-	-	-	4
ANCHORAGE (HEADGEAR, TADS)	4	2	5	4	-	-	-	-	6
TREATMENT TRANSFERS	3	2	5	2	-	-	-	-	4
APPLIANCE REMOVAL	-	-	2	2	3	4	5	4	10
MINOR ORTHODONTIC SURGICAL PROCEDURES (CSF, PAPILLA SPLIT, MINI-IMPLANT PLACEMENT AND MICRO OSTEOPERFORATION [MOP])	-	-	3	1	4	1	4	1	3
ORTHODONTIC TREATMENT WITH REMOVABLE APPLIANCES/RETAINERS	-	-	3	2	4	2	5	8	12
ORTHODONTIC TREATMENT WITH FUNCTIONAL APPLIANCES WITH APPLIANCE FABRICATION	4	1	5	1	-	-	-	-	2

ASSESSMENT

FORMATIVE ASSESSMENT

College of Physicians and Surgeons Pakistan, in order to implement competency based education in letter and spirit, is introducing Work Placed Based Assessment (WPBA) in addition to institutional/ departmental assessments. To begin with college is introducing Mini-CEX and DOPS to ensure that the graduates are fully equipped with the clinical competencies.

- Workplace-Based Assessment (WPBA) tools are entirely formative and should be accompanied by constructive feedback
- Each Mini-Clinical Evaluation Exercise (Mini-CEX) or Direct Observation of Procedural Skills (DOPS) encounter lasts approximately 20 minutes, with an additional 5 minutes allocated for feedback and further action planning
- Depending on the availability of cases, any of the topics/ areas/procedures may be covered in the WPBA sessions. However, each time focus should be on a different area/ topic/procedure
- The resident has the onus to report to the Parent Supervisor when they are prepared to appear for either a Mini-CEX or DOPS session
- The Resident will schedule and arrange for the WPBA session in consultation with the Parent Supervisor. The assessment may either be conducted by the Parent Supervisor or delegated (by the parent supervisor) to another qualified faculty member or assessor within the department
- Direct observation of the encounter by the Assessor is a must, followed immediately by specific and constructive feedback to the resident
- The prescribed assessment forms are available on the e-portals of both the Parent Supervisors and the residents. If the Parent Supervisor conducts the assessment, they are responsible for completing the form and making digital entries via their e-portal. Digital entries can be made directly via a mobile phone or other digital device without the need to first fill out a hard copy. If the assessment is conducted by another assessor, the resident must retrieve

the online form from their e-portal and provide it to the assessor. After completing the assessment, the assessor will coordinate with the Parent Supervisor and hand over the filled form for digital entry

- Once the Parent Supervisor has entered the assessment details, the resident must provide their reflection and indicate their satisfaction with the encounter through their e-portal
- Entries from both the supervisor and the resident are saved in the e-portal database and are visible to both parties
- In case of unsatisfactory performance of the resident on any of the prescribed WPBAs, a remedial has to be completed within the stipulated time frame
- Non-compliance by the resident has to be reported in the quarterly feedback

Guidelines/Topics/Forms for Mini-CEX and DOPS are available on Orthodontics residents' and supervisors' e-portal.

SUMMATIVE ASSESSMENT

The eligibility requirements for residents appearing in IMM examination are:

- Passed FCPS Part-I in Dentistry or have been granted exemption by CPSP
- Completed two years of RTMC registered IMM training in orthodontics under an approved supervisor in an institution recognized by the CPSP. A certificate of completion of training must be submitted
- Submitted a completed and attested e-logbook
- Completed CPSP mandated Mini-CEX & DOPS in e-logbook
- Submitted certificates of attendance of mandatory workshops
- Submitted synopsis for one research paper

Examination Schedule

- The Intermediate Module theory examination will be held twice a year.
- Theory examinations are held in various cities of the country usually at Abbottabad, Bahawalpur, Faisalabad, Hyderabad, Islamabad, Karachi, Nawabshah, Larkana, Lahore, Multan, Peshawar, Rawalpindi and Quetta centres. The college shall decide where to hold TOACS examination depending on the number of candidates in a city and shall inform the candidates accordingly.
- English is the medium of all examinations for theory, practical and viva.
- The college will notify of any change in the centres, the dates and format of the examination.
- A competent authority appointed by the college has the power to debar any candidate from any examination if it is satisfied that such a candidate is not a fit person to take the college examination because of using unfair means in the examination, misconduct or other disciplinary reasons.

Examination Fee

- Applications along with the prescribed examination fee and required documents must be submitted by the last date notified for this purpose before each examination.
- The details of examination fee and fee for change of centre, subject, etc shall be notified before each examination.
- Fee deposited for a particular examination shall not be carried over to the next examination in case of withdrawal, absence or exclusion.

Refund of Fees

If after submitting an application for examination, a candidate decides not to appear, a written request for a refund must be submitted before the last date for withdrawal with the receipt of applications. In such cases a refund is admissible to the extent of 75% of fees only. No request for refund will be accepted after the closing date for receipt of applications for refund.

If an application is rejected by the CPSP, 75% of the examination fee will be refunded, the remaining 25% being retained as a processing charge.No refund will be made for fees paid for any other reason, e.g late fee, change of centre/subject fee, etc

Format of Examination

Intermediate Module examination consists of the following two components:

Theory Examination:

It consists of:

Paper-I: 10 Short Answer Questions
Paper-II: 100 Single Best Type of MCQs

Only those candidates who qualify in the theory will be eligible to take the TOACS examination.

Clinical Examination:

To test basic, clinical and other skills (research, critical thinking, reasoning, etc).

TOACS

TOACS will comprise of 10 to 15 stations of 7 minutes each with a change over time of one minute for the candidate to move from one station to the other. All stations are to be interactive. Structured clinical tasks will be set at each station. For the Interactive stations the candidates must bring a case record of their patient, either treated or under-treatment, and also have to demonstrate a competency, for example, taking history, performing a clinical examination, counseling, assembling an appliance, etc. One examiner will be present at each interactive station and will either rate the performance of the candidate or ask questions testing reasoning and problem solving skills.

POST INTERMEDIATE MODULE (FCPS-II)

CURRICULUM: AIM & SPECIALTY SPECIFIC OUTCOMES

The aim of the fellowship in Orthodontics is to produce specialists and academicians who have attained the required competencies.

By the end of the four years of training in FCPS Orthodontics, the resident will be able to:

- Integrate knowledge of craniofacial growth and development, including genetic influences, growth patterns, theories, and assessment methods, to diagnose, plan, and deliver comprehensive orthodontic care, with consideration of individual variability, maturational changes, and long-term treatment outcomes.
- Integrate knowledge of dental development, occlusal physiology, space analysis, and attrition patterns to diagnose complex occlusal discrepancies, plan orthodontic interventions, and manage occlusal variations across adolescence and adulthood.
- Diagnose malocclusions using established classification systems, synthesize etiological factors including genetic and developmental influences, and plan appropriate orthodontic interventions addressing functional, structural, and epidemiological aspects.
- Formulate comprehensive orthodontic treatment plans by integrating clinical findings, radiographic interpretation, cephalometric analysis, growth prediction techniques, and computerized diagnostic tools to address complex dentofacial problems.
- Integrate biological principles, including theories of tooth movement, tissue response, and pharmacological influences, to plan and modify orthodontic interventions for safe and effective tooth movement in complex cases.

- Integrate biomechanical principles with clinical knowledge to design and adjust complex force systems, select appropriate anchorage strategies including temporary anchorage devices, and plan skeletal modifications using expansion techniques based on timing, force characteristics, and tissue response.
- Implement individualized preventive and interceptive treatments by integrating clinical findings, growth considerations, and space management techniques to modify developing malocclusions and optimize long-term occlusal outcomes.
- Plan and deliver comprehensive orthodontic treatment for a range of malocclusions using removable, functional, and fixed appliances by selecting appropriate systems, applying bonding techniques, customizing appliance design, and managing patient-specific biomechanical and compliance considerations.
- Apply clinical knowledge of orthodontic biomaterials, including impression materials, bonding systems, brackets, arch wires, and auxiliaries, to construct, modify, and evaluate appliances for effective and individualized orthodontic treatment.
- Assess and manage periodontal risks in orthodontic patients by integrating clinical findings and coordinating preventive and corrective strategies to maintain periodontal health throughout treatment.
- Implement individualized retention protocols, monitor post-treatment stability, and manage relapse risks to support long-term orthodontic outcomes.
- Diagnose and manage temporomandibular joint (TMJ) disorders by integrating clinical and biomechanical findings to guide appropriate orthodontic interventions that maintain joint function and patient comfort.
- Plan and deliver the orthodontic phases of complex treatments including orthognathic surgery, distraction osteogenesis, and cleft lip and palate by coordinating interdisciplinary care, optimizing treatment timing, and providing pre and post surgical orthodontic management to achieve functional and aesthetic goals.

- Collaborate effectively with specialists in periodontics, prosthodontics, operative dentistry and oral and maxillofacial surgery to plan and deliver comprehensive orthodontic care that addresses complex functional and aesthetic needs.
- Conduct structured follow-up of orthodontic patients and maintain accurate clinical records to support continuity of care, monitor treatment stability, and inform future clinical decision-making.
- Engage in orthodontic research by applying biostatistical and epidemiological principles, critically evaluating literature, and utilizing computerized systems for data analysis, interpretation, and storage to support evidence-based practice.

SYLLABUS

The following outline provides guidance on the essential knowledge application areas deemed important for residents:

Growth and Development

- Myology, osteology, embryology, histology and physiology of stomatognathic system
- Clinical implications of timing, pattern, and variability of growth
- Methods of studying growth
- Genetic influence, nature, site and type of growth in craniofacial complex
- Theories of growth control and the concept of jaw rotations
- Clinical applications of maturational and aging changes

Development & Physiology of Supporting Structures of Teeth

- Development of dentition and occlusion
- Ideal occlusion
- Pattern of attrition
- Occlusal changes during facial growth
- Changes in occlusion during different eruptive phases
- Occlusal changes during adolescence and adulthood and its implications
- Principles and methods of space analysis
- Bolton analysis
- Factors influencing the development of normal occlusion

Malocclusion

- Different systems of malocclusion classification
- Role of genetics in the development of malocclusion
- Causes of malocclusion, including oral habits and embryological disturbances
- Epidemiology of malocclusion
- Clinical implications of malocclusion, including effects on speech and the temporomandibular joint (TMJ)

Principles of Diagnosis and Treatment Planning

- Systematic history taking and clinical examination for accurate diagnosis
- Fabrication and analysis of dental study casts
- Standardized orthodontic photography
- Use of conventional and digital radiographic techniques
- Orthodontic problem list formulation
- Skeletal maturity indicators (hand–wrist radiographs and cervical vertebral maturation stages) and their clinical application in orthodontic diagnosis and treatment planning
- Cephalometric analyses and diagnosis
- Use of prediction tracings (growth and surgical) for treatment planning
- Application of computerized systems for orthodontic diagnosis and planning

Biology and Biomechanics of Tooth Movement

- Theories of orthodontic tooth movement
- Bone physiology, tissue reaction and biological basis of orthodontic therapy
- Effect of drugs in orthodontic tooth movement

Biomechanics and Mechanics

- Types of orthodontic forces
- Types of orthodontic tooth movements
- Anchorage and friction including TADs
- Mechanical basis of force systems
- Relation of force and time with tooth movement
- Skeletal effects of orthodontic forces (ideal timing and rate of movement)
- Types of expansions, their timings and effects on bone

Preventive and Interceptive Orthodontics

- Preventive measures
- Early correction measures
- Habit-breaking appliances
- Space maintainers
- Space management

Treatment of Malocclusion

- With removable orthodontic appliances:
  - Indications
  - Contraindications
  - Materials
  - Principles of action
  - Classification and patient's compliance
- With functional appliances (removable & fixed):
  - Indications
  - Contraindications
  - Materials
  - Principles of action
  - Classification and patient's compliance
- With fixed orthodontic appliances:
  - Indications
  - Contraindications
  - Different types of bracket systems
  - Direct and indirect bonding methods, their advantages and disadvantages
  - Fabrication of appliances
- Recognition of cases for orthognathic surgery

Orthodontic Materials and Instruments: Types and Clinical Implications

- Orthodontic instruments
- Impression materials
- Luting and bonding materials
- Bands, brackets, arch wires, and auxiliaries

Perio-ortho Relationship

- Orthodontic risks associated with periodontal conditions
- Prevention and management of periodontal complications during orthodontic treatment

Retention and Relapse

- Fixed and removable retainers
- Indications and contraindications of various retention strategies
- Relapse following orthodontic treatment
- Post-relapse management strategies

Biostatistics and Epidemiology
- Critical evaluation and interpretation of orthodontic literature using basic principles of research methodology and statistical analysis

Cross Infection Control
- Principles and protocols of cross infection control in orthodontic clinical settings

Temporomandibular Joint and Its Disorders

Orthognathic Surgery
- Complex cases
- Facial asymmetries
- Cleft lip and palate

Obstructive Sleep Apnoea

Distraction Osteogenesis

Treatment of Adult Patients
- Special considerations in orthodontic treatment planning for adult patients
- Adjunctive versus comprehensive orthodontic treatment approaches
- Combined orthodontic and surgical treatment modalities in adult cases

Speech Physiology, Pathology and Treatment

Multi-disciplinary Treatment Approach
- Roles of periodontics, prosthodontics, operative dentistry, and oral and maxillofacial surgery (OMFS) in multidisciplinary orthodontic treatment planning
- Principles of interdisciplinary coordination in orthodontic care

Record Keeping
- Principles of computerized orthodontic data processing and storage

CLINICAL AND PROCEDURAL COMPETENCIES

The level of competencies to be achieved each year is specified according to the key, as follows:

1. Observer Status
2. Assistant Status
3. Performed Under Supervision
4. Performed Under Indirect Supervision
5. Performed Independently

COMPETENCIES	THIRD YEAR								TOTAL NO. OF CASES
	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER		
	Level	Cases	Level	Cases	Level	Cases	Level	Cases	
PATIENT MANAGEMENT									
DIAGNOSTIC/RETAINER IMPRESSIONS	5	3	5	2	5	3	5	2	10
EXTRA ORAL AND INTRA ORAL PHOTOGRAPHS	5	3	5	2	5	3	5	2	10
STUDY MODELS/BASE FORMING	5	3	5	2	5	3	5	2	10
CEPHALOMETRIC/PANORAMIC X-RAYS TAKING	-	-	-	-	5	1	5	1	2
CEPHALOMETRIC TRACINGS AND ANALYSIS	5	3	5	2	5	3	5	2	10
PATIENT CASE PRESENTATIONS	5	3	5	2	5	3	5	2	10
TREATMENT PLANNING	4	3	4	2	5	3	5	2	10
TREATMENT TRANSFERS	4	2	5	2	-	-	-	-	4
APPLIANCE REMOVAL	5	4	5	4	5	6	5	6	20
ORTHODONTIC TREATMENT WITH REMOVABLE APPLIANCES/RETAINERS	4	4	4	4	5	6	5	6	20
MINOR ORTHODONTIC SURGICAL PROCEDURES (CSF, PAPILLA SPLIT, MINI-IMPLANT PLACEMENT AND MICRO OSTEOPERFORATION [MOP])	3	4	5	4	5	6	5	6	20
MANAGEMENT OF TMD & OSA	3	1	4	1	4	1	5	1	4
RELAPSE MANAGEMENT	3	1	4	1	4	1	5	1	4

COMPETENCIES	FOURTH YEAR								TOTAL NO. OF CASES
	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER		
	Level	Cases	Level	Cases	Level	Cases	Level	Cases	
PATIENT MANAGEMENT									
DIAGNOSTIC/RETAINER IMPRESSIONS	5	3	5	2	5	3	5	2	10
EXTRA ORAL AND INTRA ORAL PHOTOGRAPHS	5	3	5	2	5	3	5	2	10
STUDY MODELS/BASE FORMING	5	3	5	2	5	3	5	2	10
CEPHALOMETRIC/PANORAMIC X-RAYS TAKING	-	-	-	-	5	1	5	1	2
CEPHALOMETRIC TRACINGS AND ANALYSIS	5	3	5	2	5	3	5	2	10
SURGICAL/PREDICTION TRACING	4	1	4	1	5	1	5	1	4
FABRICATION OF SPLINTS	3	2	3	2	4	2	5	2	8
PATIENT CASE PRESENTATIONS	5	3	5	2	5	3	5	2	10
TREATMENT PLANNING	4	3	4	2	4	3	4	2	10

ASSESSMENT

FORMATIVE ASSESSMENT

College of Physicians and Surgeons Pakistan, in order to implement competency based education in letter and spirit, is introducing Work Placed Based Assessment (WPBA) in addition to institutional/ departmental assessments. To begin with college is introducing Mini-CEX and DOPS to ensure that the graduates are fully equipped with the clinical competencies.

- Workplace-Based Assessment (WPBA) tools are entirely formative and should be accompanied by constructive feedback
- Each Mini-Clinical Evaluation Exercise (Mini-CEX) or Direct Observation of Procedural Skills (DOPS) encounter lasts approximately 20 minutes, with an additional 5 minutes allocated for feedback and further action planning
- Depending on the availability of cases, any of the topics/ areas/procedures may be covered in the WPBA sessions. However, each time focus should be on a different area/ topic/procedure
- The resident has the onus to report to the Parent Supervisor when they are prepared to appear for either a Mini-CEX or DOPS session
- The Resident will schedule and arrange for the WPBA session in consultation with the Parent Supervisor. The assessment may either be conducted by the Parent Supervisor or delegated (by the parent supervisor) to another qualified faculty member or assessor within the department
- Direct observation of the encounter by the Assessor is a must, followed immediately by specific and constructive feedback to the resident
- The prescribed assessment forms are available on the e-portals of both the Parent Supervisors and the residents. If the Parent Supervisor conducts the assessment, they are responsible for completing the form and making digital entries via their e-portal. Digital entries can be made directly via a mobile phone or other digital device without the need to first fill out a hard copy. If the assessment is

conducted by another assessor, the resident must retrieve the online form from their e-portal and provide it to the assessor. After completing the assessment, the assessor will coordinate with the Parent Supervisor and hand over the filled form for digital entry

- Once the Parent Supervisor has entered the assessment details, the resident must provide their reflection and indicate their satisfaction with the encounter through their e-portal
- Entries from both the supervisor and the resident are saved in the e-portal database and are visible to both parties
- In case of unsatisfactory performance of the resident on any of the prescribed WPBAs, a remedial has to be completed within the stipulated time frame
- Non-compliance by the resident has to be reported in the quarterly feedback

Guidelines/Topics/Forms for Mini-CEX and DOPS are available on Orthodontics residents' and supervisors' e-portal.

SUMMATIVE ASSESSMENT

The eligibility requirements for residents appearing in FCPS-II examination are:

- To have passed FCPS Part-I in Dentistry, or been granted official exemption
- To have undertaken two years of RTMC registered training of Intermediate Module in Orthodontics
- To have undertaken further two years of advanced training in Orthodontics
- To provide certificate of having passed the Intermediate Mediate Module (IMM) in Orthodontics
- Submitted a completed and attested e-logbook
- Completed CPSP mandated Mini-CEX & DOPS in e-logbook
- Provided certificate of attendance of mandatory workshops
- Provided evidence of publication of one research paper in a CPSP approved journal, along with the application form

EXAMINATION SCHEDULE

- CPSP theory examinations are held twice a year provided the number of candidates is five or more. In case, the number of candidates is less than five, the examination shall be held once a year.
- Theory examinations are held in various cities of the country usually at Abbottabad, Bahawalpur, Faisalabad, Hyderabad, Islamabad, Karachi, Larkana, Lahore, Multan, Peshawar, Quetta and Rawalpindi centres. The College shall decide where to hold oral/practical examination depending on the number of candidates in a city and shall inform the candidates accordingly.
- English shall be the medium of examination for the theory/ practical/ clinical and viva examinations.
- The College will notify of any change in the centres, the dates and format of the examination.
- A competent authority appointed by the College has the power to debar any candidate from any examination if it is satisfied that such a candidate is not a fit person to take the College examination because of using unfair means in the examination, misconduct or other disciplinary reasons.

- Each successful candidate in the Fellowship examination shall be entitled to the award of a College Diploma after being elected by the College Council and payment of registration fees and other dues shall be entitled to the award of a College Diploma after being elected by the College Council and payment of registration fees and other dues.

EXAMINATION FEES

- Applications along with the prescribed examination fees and required documents must be submitted by the last date notified for this purpose before each examination.
- The details of examination fee & fees for change of centre, subject, etc. shall be notified before each examination.

REFUND OF FEES

If, after submitting an application for examination, a candidate decides not to appear, a written request for a refund must be submitted before the last date for withdrawal with the receipt of applications. In such cases a refund is admissible to the extent of 75% of fees only. No request for refund will be accepted after the closing date for receipt of applications.

If an application is rejected by the CPSP, 75% of the examination fee will be refunded, the remaining 25% being retained as a processing charge. No refund will be made for fees paid for any other reason, e.g. late fee, change of center/subject fee, etc.

FORMAT OF EXAMINATION

Every candidate applying for the fellowship of the College of Physicians and Surgeons Pakistan must pass both parts of the Fellowship examination unless exemption is approved. Since the College is continually seeking to improve its examinations, changes are likely from time to time and candidates will be notified in advance of such changes.

THEORY EXAMINATION

The written examination consisting of two papers:

Paper- I: 10 Short Answer Questions

Paper- II: 100 Single Best Type of MCQs

Only those candidates who pass through the written examination will be allowed to appear in clinical examination.

CLINICAL EXAMINATION

Only those candidates who qualify in theory will be called for Practical and Clinical examination. Detailed instructions will be sent out to all candidates who pass the theory exam regarding the date & particulars of the clinical exam. The Clinical section comprises of two components. First component comprises of TOACS. The Long Case & Short Cases (candidate's own treated cases) are included in the second component.

It consists of:

- 12-15 TOACS
- One Long Case
- Short Cases in the form of fully documented case histories of candidates' own treated cases (all uploaded 8 cases will be assessed) ***[Applicable from July 2027 examinations and onwards, irrespective of the year of induction of the residents]***

Only those candidates who pass through TOACS examination will be allowed to appear in the remaining components of clinical examination.

TOACS

TOACS will comprise of 12 to 15 stations of 7 minutes each with a change over time of one minute for the candidate to move from one station to the other. All stations are to be interactive. Structured clinical tasks will be set at these station and candidate will also have to demonstrate a competency, for example, taking history, performing a clinical examination, counselling, assembling an appliance, etc. One examiner will be present at each interactive station and will either rate the performance of the candidate or ask questions testing reasoning & problem solving skills. TOACS stations of diagnosis & treatment planning & wire work will be done at two adjoining

stations. Station A will comprise of candidates own performance, while at station B questioning will be done about the same.

FORMAT OF LONG CASE

Each candidate will be allotted one long case. Candidates should take a careful history from the patient (or relative) and after a thorough physical examination identify the problems which the patient presents with. During the period a pair of examiners will observe the candidate. In this section the candidates will be assessed on the following areas:

INTERVIEWING SKILLS

- Introduces one self. Listens patiently and is polite with the patient
- Is able to extract relevant information

CLINICAL EXAMINATION SKILLS

- Takes informed consent
- Uses correct clinical methods systematically

CASE PRESENTATION/DISCUSSION

- Gives correct findings
- Presents skill fully
- Gives logical interpretations of findings and discusses differential diagnosis
- Enumerates and justifies relevant investigations
- Outlines and justifies treatment plan (including rehabilitation)
- Discusses prevention and prognosis
- Has knowledge of recent advances relevant to the case

During case discussion, the candidate may ask the examiners for relevant investigations which shall be provided, if available. Even if they are not available and are relevant, candidates will receive credit for the suggestion.

FORMAT OF SHORT (CANDIDATES' OWN TREATED) CASES

The candidate will present 8 treated cases in exam with fully documented case histories (as per the template available on CPSP website). The difficulty index for 4 cases shall range between scores of 17 or above and for other 4 cases should be above 10. ABO OGS Index must be applied for each case after completion. ***All the 8 cases will be examined.***

The cases shall be from the listed categories and must be documented in the same numerical order as given below.

- Case No.1 from Category-1
- Case No.2 from Category-2
- Case No.3 from Category-3
- Case No.4 from Category-4
- Case No.5, 6, 7 and 8 can be from any category but should not be class-I

Category-1:

- Orthognathic Surgical Cases/CLAP/Medical disorder e.g., Syndromic problems/Distraction Osteogenesis/ Interdisciplinary (e.g. Management of Periodontal Compromised Cases, Hypodontia, Oligodontia)

Category 2:

- Growth Modification with Removable or Fixed Functional or Orthopaedic Appliances/Non-surgical Vertical Skeletal Reduction

Category-3:

- Class II Molar Distalization /Class III Lower Arch Distalization/CO-CR Discrepancy/Rapid Maxillary Expansion (Conventional/SARPE/MARPE)/Impacted Teeth (Canines/Molars/Multiple Impacted)

Category-4:

- Class II/Class III Camouflage/Alveolar Distraction etc./ A-typical Extraction Pattern Cases/ Innovative Mechanics/Adult/Adjunctive/Treatment Cases

The candidate will be assessed by a pair of Examiners as per following criteria:

- Quality of records including documentation of case histories
- Treatment Mechanics
- Finishing
- Defence of Treated cases and answers of the questions posed by the Examiners

RECOMMENDED READING LIST

Course Books (Latest Edition Available in Pakistan)

- Contemporary Orthodontics (Proffit)
- Current Principles and Techniques (Graber)
- Contemporary Treatment of Dentofacial Deformity (Surgical Proffit)
- Esthetics and Biomechanics (Nanda)
- Systemized Orthodontic Treatment Mechanics (MBT)
- Management of Temporomandibular Disorders & Occlusion (Okeson)
- Orthodontic Treatment of Impacted Teeth (Adrian Becker)
- Handbook of Orthodontics (Coubourne)

Journals

- Seminars in Orthodontics
- American Journal of Orthodontics and Dentofacial Orthopedics (except case reports).
- Cochrane Reviews

NOTE: The resident is required to fill a self-explanatory 'feedback proforma' at the end of the examination.

THE COLLEGE RESERVES THE RIGHT TO ALTER/AMEND ANY RULES/REGULATIONS

Any decision taken by the College on the interpretation of these regulations will be binding on the applicant.

Published: 12 November 2025

COLLEGE OF PHYSICIANS AND SURGEONS PAKISTAN
7th Central Street, Defence Housing Authority, Karachi-75500.
Phone No. 9926400-10, UAN: 111-606-606, Fax No. 99266432