
PROSPECTUS

FCPS PART-I COMMUNITY MEDICINE



COLLEGE OF
PHYSICIANS AND
SURGEONS
PAKISTAN

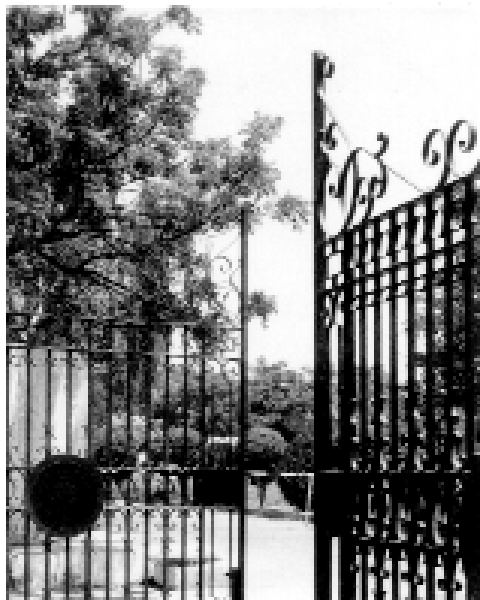


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The College of Physicians and Surgeons Pakistan

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advice from the readers and users of this document.

Comments may be sent in writing or by
e-mail to the CPSP at:

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THE COLLEGE

The College was established in 1962 through an ordinance of the Federal Government. The objectives/functions of the College include: promotion of specialist practice by securing improvement of teaching and training; arranging postgraduate medical, surgical and other specialists training; holding and conducting examinations for awarding College diploma and admission to the Fellowships of the Colleges; and promotion of research.

Since its inception the College has actively pursued improvements in postgraduate medical education in Pakistan. Currently, the College offers Fellowships in fifty three (53) disciplines compared to the initial few in Medicine, Surgery, Paediatrics and Obstetrics and Gynecology in 1963. Structured training programs have been developed, criteria for recognition of training institutes have been laid down, and format of examinations has been improved with unbiased objective, reliable and candidate friendly methods of assessment. Fellowship training can be undertaken in over 130 accredited medical institutions throughout the country and 106 accredited institutions abroad. Over 2000 supervisors are involved in the CPSP training programs.

The entry to the fellowship training is after passing FCPS-I examination, which is a written entry/screening examination in eleven (11) groups of disciplines conducted three times a year. The examination consists of two papers, each comprising of 100 MCQs of single-best type. The first paper tests the core knowledge of basic medical sciences common to all disciplines while the second paper assesses discipline specific knowledge of basic sciences.

Success in FCPS-I examination qualifies the candidate to enter the first phase of Residency Program called Inter Mediate Module (IMM) of the basic discipline of choice.

The registration to the program can be made only during January or July each year, on submission of duly filled Registration Form to the Research & Training Monitoring Cell (RTMC). These forms are sent to all successful candidates in FCPS-I examination. After completing IMM training, the trainees proceed to the advance phase of training in the specific specialty of choice for 2-3 years. This phase is termed FCPS-II and ends with FCPS-II exit examination. However, the candidate must qualify IMM examination before appearing in FCPS-II examination.

The prospectuses of IMM and FCPS-II phases of each discipline have been extensively revised so as to delineate well defined competencies to be achieved in each phase of training along with their levels. These prospectuses have been complemented with color coded Structured Visual Curriculum Display (SVCD) charts placed at the most prominent place of each training site, which at a glance help reminding the trainees and the supervisors about the competencies and their levels to be achieved within a given time period through a minimum number of cases to work upon for practice. They also briefly describe the rotations to be performed along with their duration and objectives, mandatory workshops to be attended, and the requirements and deadlines for submitting research synopsis and dissertation or the research articles.

The work performed by the trainee is also to be recorded in the e-logbook in addition to the Manual Logbook. The purpose of e-logbook is to ensure entries to be made on daily basis and to avoid belated and false entries. It will thus promote vigilance both on the part of trainees and the supervisors. The format of examinations too has been improved with greater objectivity and transparency. 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 has added to the credibility of its qualifications at international level. The average number of candidates taking CPSP examinations is about 15,000 every year. The College conducts examinations for FCPS I, IMM, FCPS II and DCPS (2 non-clinical disciplines). The logistics involved in organizing and conducting these examinations are complex and a large number of Fellows and senior medical teachers from within the country and overseas are involved in this endeavor.

To coordinate the training and examination, and provide assistance to the candidates stationed in cities other than Karachi, College has established 12 Regional Centers, with Five Provincial Headquarter Centres, all over the country. The Provincial Headquarter Centers in addition to organizing capacity building workshops/short courses have facilities of libraries, I.T, and evaluation of synopses and dissertations along with providing guidance to the candidates in improving their research work.

These continuous efforts of the College have thus contributed to over 90% of specialist medical manpower of Pakistan and even more importantly has given a credible system of postgraduate medical education to the country comparable to those in vogue in any of the developed countries. The College strives to continue its efforts in making its courses and training programs evidence and 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.

FCPS-I EXAMINATIONS

The College conducts FCPS I examinations in the following disciplines:

1. Anaesthesia	7. Otorhinolaryngology
2. Dentistry	8. Pathology
3. Diagnostic Radiology	9. Psychiatry
4. Medicine & Allied	10. Surgery and Allied
5. Obstetrics & Gynaecology	11. Community Medicine
6. Ophthalmology	

GENERAL REGULATIONS

Following regulations apply to all candidates taking FCPS Part-I examinations.

Candidate will be admitted to the examination in the name (surname and other names) as given in the MBBS degree. CPSP will not entertain any application for change of name on the basis of marriage / divorce / deed.

ELIGIBILITY

- MBBS or equivalent qualifications registered with the PMDC.
- One year house job in an institution recognized by the CPSP / PMDC, which should have been completed at least two months before the date of examination.
- Deficiency of house job could be compensated by an equal period of residency in an institution recognized by the CPSP.

EXEMPTION

An application for exemption from FCPS Part-I must be submitted to the College with all the relevant documents and a **bank draft** of prescribed fee (non-refundable processing fee).

After due verification and payment of the prescribed fee, College shall grant exemption from FCPS Part-I to those applicants who have acquired the following qualifications in Community Medicine:

- Diplomate American Board of Specialities.
- FCPS Part-I, Bangladesh.

In all other cases after proper scrutiny and processing, the College will decide acceptance or rejection of the request for exemption from FCPS Part-I on case-to-case basis.

All applicants who are allowed exemption will be issued an Exemption Certificate on payment of prescribed fee (exemption certificate fee). A copy of this certificate will have to be attached with the application to the Research & Training Monitoring Cell (RTMC) of the CPSP, for registration as FCPS Part-II trainee and later with the application for appearing in FCPS Part-II examinations.

The exemption from FCPS-I shall be valid for a period of three years plus the period of training in the concerned discipline.

EXAMINATION

Examination schedule

The FCPS Part-I examinations will be held thrice a year as per schedule notified on yearly basis.

- Theory examinations are held in different cities of the country. At present, the centres are Karachi, Quetta, Hyderabad, Larkana, Bahawalpur, Multan, Lahore, Faisalabad, Islamabad, Peshawar, Abbottabad and Muzzafarabad (AJK).

Overseas Centres are Riyadh in Saudia Arabia and Kathmandu in Nepal.

- Medium of examinations is English.
- Any change in the dates and format of the examinations will be notified by the College before the examinations.
- Every successful candidate in FCPS Part-I examinations will be issued a letter to enable him/her to seek placement for training in a recognized training institute after which he/she will have to register with RTMC.
- 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 examinations because of using unfair means/misconduct or other disciplinary reasons.

EXAMINATION FEES

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

ALL FEES ARE PAYABLE BY **CASH AT CPSP DESIGNATED BANKS OR BANK DRAFT / PAY ORDER** MADE OUT IN FAVOUR OF “COLLEGE OF PHYSICIANS AND SURGEONS PAKISTAN”. PERSONAL CHEQUES AND POSTAL ORDERS ARE NOT ACCEPTED. HOWEVER FEES/DUES CAN BE PAID AT THE IDENTIFIED BRANCHES OF UNITED BANK IN 9 CITIES OF THE COUNTRY. CANDIDATES FROM BAHAWALPUR, ABBOTTABAD AND MUZZAFARABAD ARE REQUIRED TO SEND A DEMAND DRAFT OF THE FEES AMOUNT DIRECTLY TO THE CPSP HEAD OFFICE KARACHI. (ANY FURTHER INFORMATION CAN BE OBTAINED FROM THE REGIONAL OFFICE).

Refund of fees

On a written request for not appearing in the examination, submitted upto the last date of withdrawal of application, the refund is admissible to the extent of 75% of fees only. No request for refund will be accepted after the last date of withdrawal of the application.

- 1 In case the application of a candidate is rejected by the CPSP, 75% of the examination fee will be refunded, after deducting 25% as processing charges. 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

The examinations will have two theory papers.

PAPER I will contain 100 Single Best Type of MCQs on core knowledge of the following subjects:

- Anatomy
- Physiology and Biochemistry
- Pathology and Microbiology
- Pharmacology
- Research and Biostatics
- Behavioural Sciences and Medical Ethics

PAPER II will contain 10 short essay questions SEQs on speciality topics

VALIDITY OF FCPS-I

The validity of a pass in FCPS-I examination will be for a period of three years plus the period of training in the concerned discipline.

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.

SYLLABUS

Candidates for the Fellowship of the College are expected to have a sound working knowledge of the structure and functions of the human body and the various mechanisms whereby these structures and functions are altered leading to diseased states. The emphasis in the FCPS Part-I examinations is on comprehension of the various mechanisms by which the body works and adjusts to external and internal changes. Concepts of the integration and interrelationship of various parts of the body are to be given more importance than finer details of structure and function.

The outline of various topics given in this syllabus is a guide to what at the moment are considered to be important topics which the candidate is expected to know. This is to help both the candidate and the examiner in defining the minimum boundaries of FCPS Part-I examination.

PAPER I

I. ANATOMY

1. General Features:
 - Muscles
 - Joints
 - Blood vessels
2. General Embryology - General aspects
3. Histology - General Features:
 - Epithelia
 - Muscles
 - Nerves
 - Blood vessels
 - Connective tissue
 - Lymphoid tissue

4. Brain and spinal cord - General Features:
 - Spinal nerves
 - Cranial nerves
 - Vertebral Column
5. Head and Neck - General Features:
 - Major blood vessels
6. Viscera: General Features: Blood and Nerve Supply:
 - Heart
 - Lung
 - Kidney
 - Liver
7. Endocrine glands – Gross structure and important relations of Pituitary, Thyroid, parathyroid and adrenal glands

II. PHYSIOLOGY, BIOCHEMISTRY AND PHARMACOLOGY

1. General Physiology:
 - Components of cell with their major functions.
Transport across cell membrane
 - Action Potential, Muscle contraction
 - Classification and properties of nerve fibres
 - Receptors: types and functions
 - Somatic sensations, transmission of pain
 - Function of motor and sensory areas
 - Cerebrospinal fluid (CSF) - formation, functions, drainage
 - Autonomic nervous system: parts and their functions
 - General properties and composition of blood including Normal Cell counts and functions of RBCs, WBCs and platelets

- Mechanism of homeostatic coagulation factors and their actions
- Blood groups
- Conducting tissues of heart: generation and propagation of cardiac impulse
- Cardiac cycle (pressure, volumes, valvular changes).
- Blood pressure and its regulations
- Respiration: Ventilation, transport of gases and regulation of respiration
- Body fluids: compartments and regulation of osmotic equilibrium
- Regulation of E.C.F, blood volume and flow
- Peripheral circulation.
- General functions of kidney.
- Regulation of body temperature.

2. Biochemistry:

- Requisites of a balanced diet
- General principles of electrolyte balance
- Role and function of endocrine hormones - feed back mechanism.
- Metabolism of carbohydrates, proteins, fats and vitamins

3. Pharmacology:

- Clinical Pharmacokinetics
- Adverse reactions of common drugs
- General principles of rational drug therapy

III. PATHOLOGY INCLUDING MICROBIOLOGY

1. Effects of injury on cell by physical, chemical and biological agents
 2. Inflammation
 - Acute
 - Chronic including granulomatous
 3. Regeneration and Repair
 4. Metabolic Response to Trauma
 5. Disturbance of homeostatic mechanism
 - Haemorrhage and Shock - mechanism and types
 - Oedema
 - Disturbance of fluids and electrolytes
 6. Thrombosis and embolism, Infarction and gangrene
 7. Disorders of growth - Atrophy, hypertrophy, hyperplasia
 8. Carcinogens and pre-malignant lesions
 9. Neoplasia: Types and spread of tumor
 10. General characteristics of bacteria, viruses, parasites and fungi
 11. Immune system: General principle
 12. Medical genetics - basic concept
 13. Interpretation of routine Biochemical tests e.g. liver function tests, glucose, urea, creatinine
 14. Nutritional diseases, disorders due to deficiency of vitamins and minerals
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IV. RESEARCH AND BIostatISTICS BASIC CONCEPTS

Epidemiology:

- An introduction to Epidemiology and its role in understanding distribution and determinants of disease.
- Measures of disease occurrence
- Study designs, their advantages / disadvantages
- Measures of association
- Chances, Bias and Confounding
- Screening

Biostatistics:

- Introduction to Biostatistics
- Data and its kinds
- Summarization of data
- Measures of Central Tendency and Dispersion
- Normal Distribution
- Point and Interval estimation and Probability
- Hypothesis testing, significance level and power
- Sampling and its Techniques

V. BEHAVIOURAL SCIENCE AND MEDICAL ETHICS - GENERAL PRINCIPLES

- Medical Ethics
- Communication skills including Doctor Patient relationship and counseling
- Psycho social aspect of general health care

PAPER-II

COMMUNITY MEDICINE (FCPS-I)

I. BASIC EPIDEMIOLOGY

Basic Concepts:

- Definitions and background
- Measures of disease
- Determinants of disease

Concept of Epidemiological studies:

- Epidemiological Methods
- Clinical trials
- Epidemiologic aspects of communicable and non-communicable/public health surveillance and screening

II. BASIC BIOSTATISTICS/HMIS

Statistical concepts - Tables / Diagrams:

- Measures of central tendency
- Standard deviation and standard error
- Standard error of means & proportions

Normal distribution, skewed distribution:

- Chi-square
- Correlation coefficient
- Student T-Test
- Regression analysis

Public Health informatics:

- Health information system
- Medical care information system
- Steps in planning and management

III. ENVIRONMENT & OCCUPATIONAL HEALTH

Environmental health:

- Environmental and ecological risk assessment
- Principles of toxicology
- Air, water and wastes and hazards related to it
- Physical chemical and biological agents

Occupational health :

- Occupational medicine and hygiene - its history and significance
- Occupational hazards
- Occupational diseases - lungs, skin and other visceral involvement
- Occupational lungs disorders
- Ergonomics
- Noise induced hearing loss
- Occupational safety and health standards

IV. PHC AND HEALTH SYSTEM

Concepts of PHC:

- Alma Ata declaration
- Principles of PHC
- Challenges in PHC 2000 and beyond

Health system:

- Health care delivery system
- District health system
- Health systems in U.K. & U.S.A.
- Public health insurance
- Private sector

V. COMMUNICABLE DISEASES

Principles of disease prevention and control:

- Role of agent, host and environment in disease transmission (ecological triad)
- Droplets, water and vector borne infections
- Emerging microbial threats to health & security
- Sexually transmitted diseases
- HIV and AIDS infection control

Infections spread by close personal contact like ARI, viral hepatitis, aseptic meningitis, TB, leprosy, GIT infections, etc.

Zoonotic diseases

VI. NON-COMMUNICABLE DISEASES

Chronic diseases:

- Cancer
- Heart diseases
- Diabetes
- Respiratory diseases
- Musculo skeletal disorders
- Neurological disorders
- Psychiatric disorders
- Obesity

VII. PREVENTIVE PEDIATRICS AND SOCIAL MEDICINE, AND DISEASES CONTROLLED PRIMARILY BY VACCINATION

Integrated management of childhood diseases
Preventive cardiology.

Intestinal infections; measles; mumps; rubella; pertussis; tetanus; diphtheria; influenzae infections; varicella; herpes zoster; poliomyelitis, pneumococcal infections, nutritional disorders.

Child labour and child abuse.

VIII. NUTRITION AND HEALTH

- Nutritional disorders
- Nutritional assessment
- Food borne diseases
- Vitamin deficiencies

IX. HEALTH EDUCATION AND PROMOTION

- International health behavioral factors affecting health
- Health performance indicators
- Health educational techniques with behavioral change communications affecting health.
- Tobacco - health effects and control
- Alcohol - related health problems
- Prevention of drug abuse and drugs dependence
- Community health promotion and disease prevention
- Risk communication
- Health literacy

X. DEMOGRAPHY AND REPRODUCTIVE HEALTH

- Population statistics
- Trends and transition in population growth
- Demographic transition and trap
- Measures of fertility
- Measures of morbidity and mortality
- Reproductive health
- Safe motherhood
- MCH services
- Family planning
- Violence in the family as public health concern