



GUJARAT PUBLIC SERVICE COMMISSION

NEAR CHH-3 CIRCLE, CHH ROAD, SECTOR-10/A,
GANDHINAGAR-382010

ADVT NO: 135/2020-21

ASSOCIATE PROFESSOR-FAMILY MEDICINE, CLASS-1

Syllabus of Concerned Subject for Preliminary Test

Marks: 200

Questions: 200

Medium: English

1. Applied Basic Science (as relevant to Family Medicine)

- **Anatomy:** Gross applied anatomy of the upper and lower limb, musculoskeletal system, brain, heart, lungs, abdominal and pelvic organs and embryology.
- **Physiology:** Clinically relevant physiology of heart, lungs, endocrine, gastro-intestinal, genito-urinary, and CNS reproductive physiology
- **Biochemistry:** Carbohydrate, lipid, protein, bone and renal metabolism
- **Pharmacology:** Mode of action and therapeutic uses of drugs commonly used in clinical practice in common diseases.
- **Pathology/microbiology:** Review of clinical pathology of common diseases relevant to Family Medicine and an understanding of the basis of common investigations.
- **Radiological and imaging:** Interpretation of conventional X-rays, and ultrasound reports in making clinical decision making. Knowledge of the indications for CT scan and MRI scan in various clinical contexts.
- **Electrocardiographic interpretation:** Understanding on the utility of treadmill and ECHO reports

2. Accident and Emergency medicine (Common emergencies including shock, acute respiratory distress, status epilepticus, acute myocardial infarction, trauma, poisonings, acute renal failure, spine injury, disaster management, triaging).

3. Surgical conditions: (diagnosis and treatment or stabilisation and referral of common surgical conditions including acute abdomen, burns, ulcers, superficial soft tissue trauma, abscess, wound and ulcer management, electrolyte and fluid requirements, blood transfusion, suture methods and materials, universal precautions. Cancer screening, disorders of thyroid, diseases of the breast; neck swellings, varicose veins, deep vein thrombosis, peripheral vascular disease; abdominal pain, dysphagia, nausea, vomiting, haematemesis and melena, peptic ulcer, GERD, gastritis, disorders of gall bladder and pancreas. intestinal obstruction, specific and non specific infections. Common cysts, swellings, sinuses, fistulae, abscess, ulcers and tumours. Lymphadenopathy. Hernia, inguino-scrotal swellings, hydrocoele, prostate diseases, renal and genitor-urinary tract disorders; anorectal disorders including fissure in ano, haemorrhoids, pilonidal sinus, phimosis, paraphimosis, ingrowing toe nail, diabetic foot.

4. Child health: Care of new born, growth and development, nutrition including protein energy malnutrition and obesity; vitamin deficiency diseases; immunization; recognition and referral of common birth anomalies; common childhood infections including measles, mumps, rubella, poliomyelitis, diphtheria, pertussis, acute respiratory infections, tuberculosis, H. Influenza, hepatitis, meningitis, chicken pox, acute diarrhoeal diseases, cholera, food poisoning, worm infestations; Bronchial asthma, congenital heart disease, rheumatic fever, hypothyroidism, nephritic syndrome, glomerulonephritis; Behaviour disorders, mental retardation, learning disabilities, child abuse issues, sudden infant death syndrome (SIDS), genetic disorders, school health programme, breast feeding; National Immunisation Programme; Integrated Management of Childhood and Neonatal Illnesses (IMNCI) Guidelines.

5. Adolescent health

Puberty: male and female, adolescents and the law, behavioural problems/stress/psychosocial problems, nutrition and exercise.

6. Gender specific and sexual health: Menopausal woman, reproductive and sexual health, domestic violence/gender-related health issues, erectile dysfunction, sexual abuse and rape.

7. Community health:

Aspects of community medicine relevant for Family Medicine

Concept of health and disease, primary health care and its implementation, principles of epidemiology and epidemiological methods. Epidemiology of communicable diseases, hospital acquired infections, emerging and reemerging infectious diseases, epidemiology of chronic non-communicable diseases and conditions. Environment and health, basic principles of household waste management, sanitation, safety and availability of drinking water. Health care of the community, health services at centre, state and district levels National health programmes and policies; Demography and family planning; Health information and basic medical statistics, health education; Principles of health education and methods; Health planning and five year plans; National Health insurance schemes and other private schemes; School health programmes; Management of epidemics and national disasters; Role of NGOs; Research in community medicine and interaction with other fields of medicine; Preventive medicine in Obstetrics, Paediatrics and Geriatrics, medical sociology, genetics and health, international health, public health aspects of disaster management; Hospital waste management.

8. Maternal and Women's Health: Physiological changes in pregnancy, antenatal care, normal labour and post natal care, Common problems during pregnancy including hyperemesis gravidarum, urinary tract infections, low back ache; Obstetric complications including hypertensive disorders, obstetric hemorrhage, anaemia in pregnancy, gestational diabetes, multiple pregnancy; Antenatal care, preconception counselling, prenatal care, ectopic pregnancy, gestational trophoblastic diseases, abortion, teratology, medications during pregnancy,

intrapartum assessment; Medical termination of pregnancy; Family planning; Physiology of menstruation and its deviations; Common problems in Gynaecology including genital tract infections; Dysfunctional uterine bleeding; Common disorders of uterus and ovary including fibroid uterus, genital prolapse, ovarian tumours, polycystic ovarian disease; Sexually transmitted diseases including HIV, gonorrhoea, chlamydia, bacterial vaginosis, trichomonas, candidiasis, human papilloma virus, herpes infection; Genital tract malignancies; Preventive oncology-screening and early diagnosis of genital tract malignancies.

9. Otorhinolaryngology: Anatomy of ear, nose and throat, recognition and first line management of common diseases of ear, nose and throat like acute and chronic otitis media, otalgia, rhinitis, sinusitis, pharyngitis, tonsillitis, laryngitis, foreign body, epistaxis, nasal polyps, vertigo, tinnitus, hoarseness of voice, stridor, deafness, ear wax, dysphagia,, snoring, allergic disorders, temporomandibular joint disorders, otitis externa, facial nerve paralysis, hearing loss, hearing assessment, tumours. Emergencies in ENT

10. Oral cavity and dental: Oral hygiene, oral ulcers, gingivitis, stomatitis, premalignant lesions.

11. Ophthalmology: Common eye diseases including conjunctivitis, corneal ulcer, inflammatory disorders of eyelids, allergic conditions of eye, red eye, dry eye, painful eye, cataract, glaucoma, diabetic retinopathy, hypertensive retinopathy; Emergencies in eye including eye injuries; National Programme for Prevention of Blindness, Vitamin A deficiency; Refractive errors, indications, contraindications and advantages of contact lens and Intra Ocular Lenses (IOL); Ocular side effects of commonly used pharmacological agents.

12. Geriatrics: Common health problems and diseases in the old age & their management eg. vascular, musculoskeletal, oncological, psychological, neurological, hearing and vision problems; Special attention to nutrition, falls in

elderly, incontinence, constipation, delirium, dementia, aches and pains, pruritus; Drug therapy in elderly; Rehabilitation, management of terminally ill patients; Communication skills in bereavement, problems of the family after death; Caregiver support, care of elderly, social and psychological problems in elderly, elderly abuse.

13. Physical medicine and rehabilitation: Basics of rehabilitation and basic physiotherapy advice; Role of Family Physician in management of patients with disabilities; Bladder care; Team concept in rehabilitation; Management of the bed ridden patient; Bed sores; Community based rehabilitation.

14. Pain and palliative care: Common symptoms in terminally ill patients and its management; Management of pain, opioid analgesics, Co-analgesics, hospice care; End of life care; Management of grief; Breaking bad news.

15. Anaesthesia: Basic principles of local anaesthesia, regional anaesthesia, intravenous sedation, relaxants in anaesthesia, spinal anaesthesia, epidural anaesthesia, pre-anaesthetic health check up.

16. Medical jurisprudence: Knowledge of health legislation and duties of doctor attending to cases; Knowledge of medical ethics and principles of good practice; Medical negligence; Medical certificates; Examination of injury cases and its medico-legal importance; Legal certification and documentation.

➤ **Common diseases in the community**

17. Infections: ((Tropical diseases and common infections (including viral, bacterial rickettsial, mycobacterial, protozoal etc..) like malaria, filariasis, rabies, leptospirosis, dengue fever, enteric fever, hepatitis, poliomyelitis, meningitis, encephalitis, HIV/AIDS, sexually transmitted infections, common fungal infections, skin infections, varicella, herpes zoster, rickettsia, measles, mumps, tetanus, Chikungunya fever, newer emerging infections (avian influenza and Zika virus)

18. Cardiovascular diseases: (hypertension, ischemic heart disease, rheumatic fever & rheumatic heart disease, cardiac failure, pulmonary edema, infective endocarditis, pericardial diseases, cerebrovascular disorders, peripheral vascular diseases, common cardiac arrhythmias, valvular heart disease, ischemic heart disease and common congenital heart diseases)

19. Common skin diseases: (Prevention, diagnosis and management of common dermatological conditions including acne vulgaris, dermatitis, fungal infections, skin diseases due to bacterial infection, scabies, pediculosis, wart, corn, pityriasis rosea, lichen planus, psoriasis, H. zoster; principles of dermatological therapy; principles of rehabilitation of chronic dermatological patients; principle of diagnosis and management of sexually transmitted diseases, leprosy, skin disorders in diabetes, urticaria, hypopigmentation and hyperpigmentation, photodermatitis, allergies, eczema's, nutritional skin disorders skin manifestations of systemic diseases and autoimmune disorders)

20. Gastro-intestinal diseases: (Jaundice, hHepatitis, cirrhosis of liver, portal hypertension, hepatic encephalopathy, hematemesis, non-alcoholic fatty liver disease, cholecystitis, pancreatitis, peptic ulcer disease, non-ulcer dyspepsia, gastrointestinal bleeding, gastritis, dyspepsia, GOERD, inflammatory bowel disease, irritable bowel syndrome, malabsorption syndromes, acute and chronic diarrhea, acute infectious diarrhoeal diseases, food poisoning, parasitology including amebiasis/ giardiasis/worm infestations, and investigations in gastrointestinal diseases)

21. Neruological diseases: (headache, memory loss, peripheral neuropathy, seizures, dizziness, vertigo, syncope, migraine, transient loss of consciousness, cerebro-vascular accidents, hemiparesis, hemiplegia, paraplegia, quadriparesis, strokes, Parkinsons' disease, neuropathies and myopathies)

22. Metabolic and endocrine diseases: (Common endocrine diseases related to pancreas, thyroid, pituitary and adrenal gland, glucose metabolism, glucose tolerance test, diabetes mellitus, dyslipidaemia, iodine metabolism, thyroid function tests, hypothyroidism, hyperthyroidism, metabolic syndrome, obesity, osteoporosis, Vitamin D deficiency and undernutrition).

23. Substance abuse: (alcohol, tobacco, drugs including performance enhancing drugs)

24. Poisoning: (general emergency measures, poisoning caused by paracetamol, organophosphorous compounds, alcohol, kerosene, barbiturates, corrosives, insecticides, organophosphorus compounds, carbon monoxide, sedatives, phosphide, snakebite, scorpion sting and Cerebra Odollum).

25. Haematological diseases: (Anemias, Iron deficiency, B12 and folic deficiency, polycythemia, and common disorders of RBC, WBC and platelets, coagulopathies, leukaemias, lymphomas).

26. Common cancers: (cervical, breast, prostate, haematological, gastro-intestinal, head and neck, lung, cancer screening).

27. Orthopaedic and musculoskeletal diseases: (inflammatory and degenerative arthritis, osteoporosis, common fractures, dislocations, osteomyelitis. Low back ache. Common bone and joint diseases, entrapment neuropathies and neuromuscular disorders including arthritis, cervical spondylosis, intervertebral disc prolapse, bursitis, ganglion, tenosynovitis, plantar fasciitis, carpal tunnel syndrome, tennis elbow, osteomyelitis, degenerative disorders. Volkmans ischemia, bone tumours, fibromyalgia)

28. Common renal disorders: (acute and chronic renal failure, glomerular and tubular renal pathologies, renal replacement therapy. Renal failure, hematuria,

proteinuria, urinary tract infections, glomerulonephritis, pyelonephritis, genitourinary infections)

29. Common mental health problems: (Common psychiatric problems and their management: depression, anxiety, somatization, substance abuse, medically unexplained symptoms, personality disorders, psychosis, delirium, suicide, grief, stress, eating disorders, behavioral disorders in children and adolescents, adjustment disorders, bipolar disorders, dementia, organic disorders presenting with psychiatric symptoms, basic principles of psychotherapy, rational use of psychotherapeutic medication).

30. Common genetic/hereditary diseases: (Haemophilia, Haemoglobinopathies, Down's syndrome, muscular dystrophy).

31. Common respiratory diseases: (Diagnostic methods in pulmonary medicine, principles of the pulmonary function tests, approach to chest pain, bronchial asthma, chronic obstructive pulmonary disease (COPD), acute and chronic bronchitis, pneumonia, pleural effusion, pneumothorax, atelectasis, bronchiectasis, allergic disorders, smoking cessation, occupational lung diseases, tuberculosis, bronchodilators and steroids in respiratory medicine, carcinoma lung, sleep apnoea, management of acute exacerbation of bronchial asthma and COPD, sarcoidosis, interstitial lung diseases, chronic cough)

32. RESEARCH METHODOLOGY.

33. MEDICO LEGAL ASPECTS RELEVANT TO THE DISCIPLINE.

34. INDIAN MEDICAL COUNCIL (PROFESSIONAL CONDUCT, ETIQUETTE AND ETHICS) REGULATIONS, 2002.

35. CURRENT TRENDS AND RECENT ADVANCEMENTS IN THE FIELD OF FAMILY MEDICINE.