# Syllabus for the Preliminary Test

**જગ્યાનું નામ- નિયામકશ્રી, આયષુ (આયુર્વેદ, યોગા અને નેચરોથેરાપી, યુનાની, સિધ્ધા અને હોમીયોપેથી પધ્ધતિ)ની કચેરી હસ્તક હોમિયોપેથીના પેથોલોજી એન્ડ માઇક્રોબાયોલોજી વિષયના એસોસિયેટ પ્રોફેસર / રીડર, ગુજરાત રાજય સેવા, વર્ગ-૧ (જાહેરાત ક્રમાંક-૫૯/૨૦૧૮-૧૯)**

| **કુલ પ્રશ્નો:૩૦૦** | **પ્રાથમિક કસોટીનો અભ્યાસક્રમ** | **કુલ ગુણ -૩૦૦** |
|---|---|---|
| | **Part-I** | |
| **માધ્યમ: ગુજરાતી** | **સામાન્ય અભ્યાસ** | **ગુણ -૧૦૦** |
| ૧ | ભારતની ભૂગોળ- ભૌગોલિક, આર્થિક, સામાજિક, કુદરતી સંસાધન અને વસ્તી અંગેની બાબતો- ગુજરાતના ખાસ સંદર્ભ સાથે | |
| ૨ | ભારતનો સાંસ્કૃતિક વારસો- સાહિત્ય, કલા, ધર્મ અને સ્થાપત્યો- ગુજરાતના ખાસ સંદર્ભ સાથે | |
| ૩ | ભારતનો ઈતિહાસ- ગુજરાતના ખાસ સંદર્ભ સાથે | |
| ૪ | ભારતની અર્થવ્યવસ્થા અને આયોજન | |
| ૫ | <u>ભારતીય રાજનીતિ અને ભારતનું બંધારણ:</u><br>**(૧)** આમુખ<br>**(૨)** મૂળભૂત અધિકારો અને ફરજો<br>**(૩)** રાજ્યનીતિના માર્ગદર્શક સિદ્ધાંતો<br>**(૪)** સંસદની રચના<br>**(૫)** રાષ્ટ્રપતિની સત્તા<br>**(૬)** રાજ્યપાલની સત્તા<br>**(૭)** ન્યાયતંત્ર<br>**(૮)** અનુસૂચિત જાતિ, અનુસૂચિત જનજાતિ અને સમાજના પછાત વર્ગો માટેની જોગવાઈઓ<br>**(૯)** એટર્ની જનરલ<br>**(૧૦)** નીતિ આયોગ<br>**(૧૧)** પંચાયતી રાજ<br>**(૧૨)** નાણા પંચ<br>**(૧૩)** બંધારણીય તથા વૈધનિક સંસ્થાઓ- ભારતનું ચૂંટણી પંચ, સંઘ લોક સેવા આયોગ, રાજ્ય લોક સેવા આયોગ, કોમ્પ્ટ્રોલર એન્ડ ઓડિટર જનરલ; કેન્દ્રીય સતર્કતા આયોગ, લોકપાલ તથા લોકાયુક્ત અને કેન્દ્રીય માહિતી આયોગ | |
| ૬ | સામાન્ય બૌદ્ધિક ક્ષમતા કસોટી | |
| ૭ | સામાન્ય વિજ્ઞાન, પર્યાવરણ અને ઈન્ફર્મેશન એન્ડ કોમ્યુનિકેશન ટેકનોલોજી | |
| ૮ | ખેલ જગત સહિત રોજબરોજના પ્રાદેશિક, રાષ્ટ્રીય અને આંતરરાષ્ટ્રીય મહત્વના બનાવો | |

*************

# Syllabus for the Preliminary Test

| | |
|---|---|
| **Post: Associate Professor / Reader (Pathology and Microbiology), Class-1 in Homoeopathy College (Advt.No.59/2018-19)** | |
| Total Questions: 300 Syllabus of Preliminary Test Total Marks- 300 | |
| **Part-I** | |
| Medium: Gujarati General Study Marks- 100 | |
| 1 | Geography of India**-** Physical, Economic, Social, Natural Resources and population related topics- with special reference to Gujarat |
| 2 | Cultural heritage of India**-**Literature, Art, Religion and Architecture- with special reference to Gujarat |
| 3 | History of India with special reference to Gujarat |
| 4 | Indian Economy and Planning |
| 5 | Indian Polity and the Constitution of India:<br>(1) Preamble<br>(2) Fundamental Rights and Fundamental Duties<br>(3) Directive Principles of State Policy<br>(4) Composition of Parliament<br>(5) Powers of the President of India<br>(6) Powers of Governor<br>(7) Judiciary<br>(8) Provisions for Scheduled Castes, Scheduled Tribes and backward classes of the society<br>(9) Attorney General<br>(10) NITI Aayog<br>(11) Panchayati Raj Institutions<br>(12) Finance Commission<br>(13) Constitutional and Statutory Bodies: Election Commission of India, Union Public Service Commission, State Public Service Commission, Comptroller and Auditor General; Central Vigilance Commission, Lokpal and Lokayukta, Central Information Commission |
| 6 | General Mental Ability |
| 7 | General Science, Environment and Information & Communication Technology |
| 8 | Daily events of Regional, National and International Importance including Sports |

*********

# Syllabus for the Preliminary Test

**Post: Associate Professor / Reader (Pathology and Microbiology), Class-1 in Homoeopathy College (Advt.No.59/2018-19)**

**Part-II Syllabus Of Concerned Subject**

## (Homeopathy) (Pathology and Microbiology)

**Marks – 200 Questions-200 Medium: English**

### 1. Anatomy

General Anatomy: Modern concepts of cell and its components, cell division, types with their significance, Tissues, Genetics. Development Anatomy. Regional anatomy.

### 2. Physiology

General physiology. Body Fluids. Cardio-vascular system. Respiratory system and environmental physiology. Digestive system. Renal physiology and skin. Endocrinology. Reproductive system. Central nervous system. Special senses. Nerve muscle physiology. Bio-physical sciences.

### 3. Pathology

Pathology in relation with Homoeopathic Materia Medica, Correlation of miasms and pathology, Characteristic expressions of each miasms., Classification of symptoms and diseases according to pathology, Pathological findings of diseases; their interpretation, correlation and usage in the management of patients under homoeopathic treatment.

### 4. General Pathology

Cell Injury and cellular adaptation, Inflammation and repair (Healing), Immunity, Degeneration, Thrombosis and embolism, Oedema, Disorders of metabolism, Hyperplasia and hypertrophy, Anaplasia, Metaplasia, Ischaemia, HaemotThage, Shock, Atrophy, Regeneration, Hyperemia, Infection, Pyrexia, Necrosis, Gangrene, Infarction, Amyloidosis, Hyperlipidaemia and lipidosis, Disorders of pigmentation, Neoplasia (Definition, variation in cell growth,

nomenclature and taxonomy, characteristics of neoplastic cells, aetiology and pathogenesis, grading and staging, diagnostic approaches, interrelationship of tumor and host, course and management), Calcification, Effects of radiation, Hospital infection.

## 5. Systemic pathology

Mal-nutrition and deficiency diseases, Diseases of Cardiovascular system, Diseases of blood vessels and lymphatics, Diseases of kidney and lower urinary tract, Diseases of male reproductive system and prostate, Diseases of the female genitalia and breast., Diseases of eye, ENT and neck, Diseases of the respiratory system, Diseases of the oral cavity and salivary glands, Diseases of the G.I. system, Diseases of liver, gall bladder, and biliary ducts, Diseases of the pancreas (including diabetes mellitus), Diseases of the haemopoetic system, bone marrow and blood, Diseases of glands-thymus, pituitary, thyroid , and parathyroid, adrenals, parotid., Diseases of the skin and soft tissue, Diseases of the musculo-skeletal system, Diseases of the nervous system, Leprosy

## 6. Microbiology

Introduction, History and scope of medical microbiology, Normal bacterial flora, Pathogenicity of micro-organisms, Diagnostic microbiology. Clinically important microorganisms, Immunoprophylaxis, Antibiotic Sensitivity Test (ABST). Infection and Disease: Pathogenicity, mechanism and control, Disinfection and sterilization, Antimicrobial chemotherapy, Microbial pathogenicity

## 7. Immunology

Development of immune system, the innate immune system, Non-specific defense of the host, Acquired immunity, Cells of immune system; T cells and Cell mediated immunity; B cells and Humoral

immunity, The compliment system, Antigen; Antibody; Antigen - Antibody reactions (Anaphylactic and Atopic); Drug Allergies, Hypersensitivity, lmmuno-deficiency, Auto-immunity, Transplantation, Blood group antigens, Clinical aspect of immuno-pathology.

## 8. **Bacteriology**

Bacterial structure, growth and metabolism, Bacterial genetics and bacteriophage, Identification and cultivation of bacteria, Gram positive aerobic and facultative anaerobic cocci, Gram positive anaerobic cocci, Gram negative aerobic cocci, Gram positive aerobic bacilli, organism of enterobacteriac group, Gram positive anaerobic bacilli, Gram negative anaerobic bacilli. Others like-cholerae vibrio, spirochaetes, Jeptospirae, mycoplasma, chlamydiae, rickettsiae, yersinia and pasturella.

## 9. **Fungi and Parasites**

Fungi - True pathogens (cutaneous, sub-cutaneous and systemic infective agents), Opportunistic pathogens, Protozoa - Intestinal (Entamoeba histolytica, Giardia Iamblia, Cryptosporidum, parvum), Urogenital (Trichomonas vaginalis) Blood and Tissues (Plasmodium species, Toxoplasma gondii, Trypanosoma species, leishmania species), Helminths - Cestodes (tapeworms)- Echinococcus granulosus, Taenia solium, Taenia saginata, Trematodes (Flukes): Paragonimus westermani, Schistosoma mansoni, Schistosoma haematobium, Nematodes- Ancylostoma duodenale, Ascaris lumbricoides, Enterobius vermicularis, Strongyloides, Stercoralis, Trichuris trichiura, Brugia malayi, Dracunculus medinensis, Loaloa, Onchocerca volvulus, Wuchereria bancroftii).

## 10. Viruses

Introduction, Nature and classification of viruses, Morphology and replication of viruses. DNA viruses: parvo virus, herpes virus, varicella virus, CMV, EBV, hepadna virus (hepatitis virus), papova virus, adeno virus, pox virus- variola virus, vaccinia virus, molluscum contagiosum etc. RNA viruses: orthomyxo virus- entero virus, rhino virus, hepato virus., paramyxo virus- rubeola virus, mumps virus, Influenza virus etc. phabdo virus, rubella virus (german measles), corona virus, retro virus, yellow fever virus, dengue, chikungunya virus, Miscellaneous virus: arena virus, corona virus, Rota virus, bacteriophages.

## 11. Research methodology

Research Biomedicine, Need of Research and Research Challenges in Homoeopathy, Types of Research Studies. Planning of Research Studies, Design and control of clinical trials, Data collection and Data management, Assessing and reporting adverse events, Ethical issues in biomedical research, Writing & Publishing research studies.

## 12. Biostatistics

Definition and scope of Biostatistics in clinical research, Types of data methods of data presentation, Descriptive statistics (Mean, Median, Mode, SD and Variance etc.), Correlation and regression, sampling techniques and sample size estimation, Measure of Mortality, Data analysis, Use of statistical software, Organon of Medicine and Homoeopathic philosophy, Homoeopathic material medica, and Repertory.

## 13. Legislations relating to medical profession

The Homoeopathy Central Council Act, 1973 (59 of 1973). The Medical Termination of Pregnancy Act, 1971 (34 of 1971); the

Drugs and Cosmetics Act, 1940 (23 of 1940) and the rules made therein; Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994. Homoeopathic Practitioners (Professional Conduct, Etiquette and Code of Ethics) Regulations, 1982.

## 14. Current Trends and recent Advancements in the field of Homeopathy.