



## **JAMMU AND KASHMIR PUBLIC SERVICE COMMISSION**

**Resham Ghar Colony, Bakshi Nagar, Jammu-180001**

**Subject:** Syllabus for the written test for the post of Medical Officer in Health & Family Welfare Department.

**Notice**  
**Dated: 27.03.2017**

In continuation to notification no. 01-PSC (DR-P) of 2017 dated:27.03.2017 whereunder posts of Medical Officer in Health & Family Welfare Department were advertised for inviting applications through online mode, the Commission hereby notifies the syllabus for the said posts for the purpose of the written examination(MCQ type);-

### **Syllabus for Medical Officer**

#### **1. General Surgery Including Orthopaedics:**

1. Wound healing
2. Fluid and electrolytes
3. Nutritional Support
4. Wound infection, special infections, AIDS
5. Sterilization, methods and precautions
6. Transplantation
7. Tumors
8. Skin diseases and Plastic surgery. Burns.
9. Arterial disorders and venous disorders, Lymphatics
10. Accident and emergency Surgery
11. Cleft lip and palate
12. Disorders of salivary gland
13. Sutures
14. Thyroid
15. Parathyroid and Adernal glands
16. Breast
17. Thorax - Injuries and diseases of Lung, Diaphragm
18. Heart
19. Liver
20. Spleen
21. Gall bladder and Bileducts
22. Pancreas
23. Peritoneum, Omentum, Mesentery and Retroperitoneal spaces.
24. Small and large intestine
25. Intestinal obstruction
26. Appendix
27. Rectum
28. Anus and Anal Canal
29. Hernias
30. Urology
31. Fractures
32. Tumors of Bone, Benign and Malignant
33. Metabolic and Non infection disorders of bones and joints.
34. Infection of Joints, Pyogenic, Tuberculosis

**1. Medicine:**

1. Cardinal manifestations and presentation of diseases.
2. Genetics.
3. Nutritional diseases
4. Hematology
5. Infectious diseases
6. Disease of Cardio Vascular system
7. Diseases of Respiratory system
8. Diseases of Kidney and Urinary tract
9. Diseases of Gastro Intestinal system.
10. Diseases of Immune system, connective tissue and joints
11. Endocrinology & Metabolism.
12. Neurologic disorders.
13. Environment and occupational hazards.

**3. Obstetrics And Gynaecology:**

1. Introduction to Obstetrics
2. Development of human placenta and embryo, anomalies of placenta and coord.
3. Formation of liquor amni and its circulation.
4. Anatatomical and physiological changes during pregnancy.
5. Diagnosis of pregnancy
6. Methods of Obstetrical and Pelvic examination and special investigations.
7. Role of USG and Radiology in Obstetrics.
8. Antenatal care including use of drugs during pregnancy.
9. Antepartum, foetal surveillance in high risk pregnancies.
10. Social Obstetrics
11. Anemia in pregnancy
12. Heart diseases in pregnancy.
13. Diabetes, prediabetic state, glycosuria in pregnancy
14. Respiratory diseases in pregnancy.
15. Psychiatric disorders in pregnancy and purperium
16. Jaundice in pregnancy
17. Skin diseases in pregnancy
18. Urinary Tract infection in pregnancy including Asymptomaticbacteruria, chronic renal infection in pregnancy, renal failure in pregnancy.
19. Hypertensive disorders in pregnancy.
20. APH-placenta previa accidental haemorrhage and extra placental causeshypofibrinogenemis, diagnosis and management, DUC annuria.
21. Rh factor Pathology Rh testing and management of pregnancy and new born.
22. Multiple pregnancy
23. Postmaturity
24. Intrauterine growth retardation
25. Intrauterine death.
26. Recurrent pregnancy - wastages
27. Surgical Gynecological conditions with pregnancy
28. Abnormal position and presentations
29. Special cases
30. Normal Labour
31. Preterm Labour
32. Abnormal Uterine action
33. Prolonged labour
34. Normal Pelvis and foetal skull
35. Contracted Pelvis, CPD, Pelvic assessment
36. Obstructed Labour
37. Injuries of Genital Tract
38. Injury of the Urinary System
39. Obstetrical Palsy
40. Postpartum Collapse.
41. Normal Puerperium
42. Puerperal infection
43. Neonatology



- 44. Obstetrical procedure.
- 45. Anatomy of Uro Genital tract
- 46. Development of Urogenital tract.
- 47. Physiology of Menstruation, ovulation and Normal Control.
- 48. Gynaecological History taking, examination and investigation.
- 49. Sex differentiation, asexuality & Intersexuality.
- 50. Amenorrhoea causes, Diagnosis and Management.
- 51. Infertility Male & Female causes, Diagnosis with investigation and management with newer modalities.
- 52. Dysmenorrhoea
- 53. Abnormal uterine bleeding
- 54. Abortions.
- 55. Trophoblastic tumors
- 56. Ectopic pregnancy
- 57. Infections of Genital tract.
- 58. Genital prolapse Retroversion
- 59. Urinary Incontinence
- 60. Rectal incontinence
- 61. Endometriosis and Adenomyosis.
- 62. Benign conditions and benign tumors.
- 63. Pruritis
- 64. Chronic Vulval Dystrophies
- 65. Tumors of Uterus
- 66. Ovarian Tumors
- 67. Genital Cancers
- 68. Menopause
- 69. Role of USG & Radiology in Gynae
- 70. Preoperative and postoperative management & complications of major Gynae surgery.
- 71. Gynaecological surgery
- 72. MTP 1<sup>st</sup> and 2<sup>nd</sup> Trimester
- 73. Contraceptions including Voluntary surgical contraception.
- 74. Demography

#### **4. Pediatrics:**

- 1. Basic sciences as applied to paediatrics
- 2. Growth and development.
- 3. Adolescence
- 4. Clinical biostatistics
- 5. Community paediatrics, including National Programmes.
- 6. Immunization
- 7. Nutritional requirements and nutritional disorders.
- 8. Infectious disease, including parasitic infestations
- 9. Infections- Respiratory, G.I, CNS, Genito-Urinary, Hematopoietic infections in neonates, infants, children and adolescents.
- 10. Systemic diseases.
- 11. Neonatology including antenatal paediatrics.

#### **5. Preventive and Social Medicine:**

- 1. History of Preventive and Social Medicine.
- 2. Concepts of Health and Diseases.
- 3. Nutrition and Health
- 4. Social Science and Health
- 5. Environment & Health
- 6. Occupational Health
- 7. Genetics and Health
- 8. Public Health Administration
- 9. Demography and Family Planning
- 10. Maternal and Child Health
- 11. Immunity and Immunization
- 12. Epidemiology of communicable and non-communicable diseases.
- 13. National Control/Eradication programmes relevant to specific diseases.
- 14. Health Information systems for the routine and vital health statistics
- 15. Primary Health care-Principles, components and levels of practice in the health care



infrastructure.

16. Health Education

17. International Health.

## 6. Forensic Medicine & Toxicology:

1. Medicolegal examination of injured person
2. Medicolegal examination of Rape victim
3. Medicolegal examination of Sodomy
4. Examination of accused of Rape
5. Medicolegal Examination of Intoxicated person
6. Procedure for conducting Medicolegal Post-mortem
7. Essential requirements for conduct of Medicolegal Post-mortem
8. Autopsy of Fœtus
9. To calculate time since death on post-mortem
10. Examination of Skeletal remains
11. Technique of Viscera Preservation on post-mortem examination
12. Exhumation & Post-mortem
13. Medicolegal duties of Doctor in Poisoned Patients
14. Duties of a R.M.P
15. Procedure of recording Evidence
16. Recording of Firearm injuries
17. Forensic Science Laboratory
18. Post-mortem in case of Hanging and strangulation
19. Age Certification
20. Medical Jurisprudence
21. Forensic psychiatry
22. Thanatology
23. Deliriant poisons
24. Fire arm & bomb blast injury

## 7. Anatomy:

- a. Cardiovascular system and lymphatic system-Blood supply of heart +lymphatic drainage of heart
- b. Thoracic outlet syndrome
- c. Abdominal quadrants
- d. Vermiform appendix-Positions of appendix
- e. Difference between male and female pelvis
- f. Layers of Scalp
- g. Triangles of neck, contents of anterior triangle
- h. Paranasal sinuses with applied anatomy
- i. Cartilages of larynx
- j. Names of Cranial Nerves
- k. Pharyngal arches
- l. History of cardiac muscles
- m. Difference between thick and thin Skin
- n. Annual pancreas

## 8. Physiology:

### Nerve Muscles

- a. Neuromuscular transmission
- b. Muscle proteins(Biochemistry)
- c. Excitation-contraction coupling

### Blood

- a. Anemia
- b. Hemostasis

### Respiratory System

- a. Mechanics of respiration-I
- b. Mechanics of respiration-II

### Cardiovascular System

- a. ECG
- b. Exercise physiology
- c. Cardiovascular reflexes
- d. Special features of circulation in skeletal muscles and skin

### Gastrointestinal System

- a. Introduction of G.I. Physiology: General organization of G.I. tract
- b. Pathophysiology of diarrhoeal disease



## **Nutrition**

- a. Diet during pregnancy and lactation
- b. Diet during infancy and childhood

## **Environmental Physiology**

- a. Man in cold environment
- b. Man in hot environment

## **Reproduction**

- a. Introduction to reproductive system

## **Kidney**

- a. Renal Tubular function-I
- b. Renal tubular function-II
- c. Micturition

## **General**

- a. CSF
- b. Physiology of pain
- c. Brain stem reflexes, stretch reflexes and tendon reflexes
- d. Basal ganglia
- e. Speech
- f. Functional anatomy of eye
- g. Functional anatomy of ear: impedance matching
- h. Auditory pathway
- i. Olfaction
- j. Physiology of taste

## **9. Biochemistry:**

### **a. Molecular Biology-its role in Clinical Biochemistry**

Structure, biochemical role of DNA and RNA, Genomes, Basic concepts of DNA & RNA metabolism, Replication, Transcription and Translation-importance of their inhibitors, Recombinant DNA technology and polymerase chain reaction-their role in medicine, Gene therapy, Genomics and Bioinformatics, their relevance to medicine.

### **b. Biochemical basis of Hormone action**

Communication among cells and tissues, Molecular mechanism of action of Steroid hormones, hormones of pancreas, thyroid and parathyroid, Signal transduction, G-Proteins coupled receptors and second messengers, Role of leptins and adipocytokines.

### **c. Clinical Biochemistry**

Organ function tests: Liver function tests, Kidney function tests, Thyroid function tests, Adrenal and Pancreatic function tests, Tumor markers and growth factors, Biochemical changes in pregnancy and lactation, Water and electrolytes balance and imbalance, Acid-base balance and disorders. Total Quality Management of Laboratories, Internal quality control, External quality control, Accreditation of laboratories.

## **10. Microbiology:**

### **a. General Bacteriology**

- i. Sterilization/disinfection
- ii. Culture media
- iii. Antimicrobial sensitivity
- iv. Bacterial genetics

### **b. System Bacteriology**

- i. Gram positive bacteria
- ii. Gram Negative bacteria
- iii. Mycobacteria

### **c. Immunology**

- i. Innate and Adaptive immune responses
- ii. Hypersensitivity
- iii. Autoimmunity

### **d. Virology**

- i. DNA/RNA viruses
- ii. HIV
- iii. Herpes viruses

## **11. Pharmacology:**

General Pharmacology  
i. Autonomic nervous system  
ii. Cardiovascular system  
iii. Central Nervous  
iv. Antibiotics and chemotherapy

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## 12. ENT:

1. Complications of Otitis media
2. Otosclerosis and tympanoplasty
3. BERA
4. Acoustic neuroma (tumors of ear)
5. FESS/ESS
6. Neurological affections of larynx
7. Hoarseness and tumors
8. Tracheostomy
9. Diseases and tumors of thyroid
10. ENT manifestation of AIDS

## 13. Ophthalmology:

### 1 Lids:

- I. Entropeon
- II. Ectropeon
- III. Ptosis

### 2. Cornea

- I. Corneal ulcer
- II. Keratoconus
- III. Lasik laser

### 3. Lens

- I. Senile cataract
- II. Subluxlated lens
- III. Multifocal iol

### 4. Retina

- I. Diabetic Retinopathy
- II. Macular hole
- III. Retinal detachment

### 5. Optic nerve

- I. Optic atrophy
- II. Papilledema
- III. Dilated pupil

## 14. Radiology:

- I. Radiation Protection and hazards
- II. Basics of x-ray, ultrasound, CT and MRI
- III. Basics of PET & SPECT
- IV. Clinical indications/contraindications of CT, MRI and PET
- V. Contrast media and their adverse reactions and their management
- VI. Radiological investigations like IVP, HSG, Barium studies
- VII. Ultrasonography and Doppler.