

ANNEXURE-II**SCHEME AND SYLLABUS FOR THE POST OF CIVIL ASSISTANT SURGEONS IN
A.P. INSURANCE MEDICAL SERVICE****SCHEME:**

a) WRITTEN EXAMINATION (Objective type)				
1	GENERAL STUDIES	150 Marks	150 Questions	150 Minutes
2	SUBJECT: (Medical Science & General Medicine)	300 Marks	150 Questions	150 Minutes
b) INTERVIEW (Oral Test)		50 Marks		

SYLLABUS**1 - GENERAL STUDIES**

1. General Science – Contemporary developments in Science and Technology and their implications including matters of every day observation and experience, as may be expected of a well-educated person who has not made a special study of any scientific discipline.
2. Current events of national and international importance.
3. History of India – emphasis will be on broad general understanding of the subject in its social, economic, cultural and political aspects with a focus on AP Indian National Movement.
4. World Geography and Geography of India with a focus on AP.
5. Indian polity and Economy – including the country's political system- rural development – Planning and economic reforms in India.
6. Mental ability – reasoning and inferences.

2 - Subject: (MEDICAL SCIENCE & GENERAL MEDICINE)

HUMAN ANATOMY: Gross and microscopic anatomy and movements of shoulder hip and knee joints – Gross and microscopic anatomy and blood supply of lungs, heart, kidneys, liver, testis and uterus – Gross anatomy of pelvis, perineus and inguinal region, Cross sectional anatomy of the body at mid-thoracic, upper abdominal, mid-abdominal and pelvic regions. Major steps in the development of lung, heart, kidney, urinary bladder, uterus, ovary, testis and their common congenital abnormalities – Placenta and placental barrier – Neural pathways for cutaneous sensations and vision cranial nerves iii, iv,v, vi, vii, x; distribution and clinical significance - Anatomy of the automatic control of gastrointestinal respiratory and reproductive systems.

HUMAN PHYSIOLOGY: Nerve and muscle excitation, conduction and transmission of impulse; mechanism of contraction; neuromuscular transmission - Synaptic transmission, reflexes, control of equilibrium posture and muscle tone. Descending pathways; functions of cerebellum, basal ganglia, reticular formation, hypothalamus limbic system and cerebral cortex – Physiology of sleep and consciousness: E.E.G. – Higher functions of the brain – Vision and hearing – Mechanism of action of hormones; formation, secretion, transport, metabolism, functions and regulation of secretion of pancreas and pituitary glands – Menstrual cycle; lactation, pregnancy – Development regulation and fate of blood cells – Cardiac excitation; spread of cardiac impulse, E.C.G. cardiac output, blood pressure, Regulation of Cardiovascular functions – Mechanics of respiration and regulation of respiration – Digestion and absorption of food, regulation of secretion and motility of gastrointestinal tract – Glomerular and tubular functions of kidney – Blood groups, Rh grouping, blood transfusion, and Blood volume.

BIOCHEMISTRY: PH and PK Henderson – Hasselbalch equation – Properties and regulation of enzyme activity; role of high energy phosphates in bioenergetics – Sources, daily requirements, action and toxicity of vitamins – Metabolism of Lipids, carbohydrates, proteins; disorders of their metabolism – Chemical nature, structure, synthesis and functions of nucleic acids and proteins – distribution and regulation of body water and minerals including trace elements – Acid base balance – Clinical importance of enzymes. **PATHOLOGY:** Reaction of cell and tissue of injury; inflammation and repair, disturbances of growth and cancer; genetic diseases – Pathogenesis and histo-pathology of; rheumatic and ischaemic heart disease – bronchogenic carcinoma, carcinoma breast, oral cancer, cancer colon – Etiology,

pathogenesis and histopathology of: Peptic ulcer – Cirrhosis liver – Glomerulonephritis – Lobar pneumonia – Acute osteomyelitis – Hepatitis – acute pancreatitis – FINE needle aspiration cytology (FNAC) – MICROBIOLOGY: Growth of micro-organisms; sterilization and disinfection bacterial genetics; virus-cell interactions – Immunological principles; acquired immunity; immunity in infections caused by viruses – Diseases caused by and laboratory diagnosis of staphylococcus Enterococcus; Salmonella; Shigella; E. coli; Pseudomonas, Vibrio; Adenoviruses; Herpes viruses (including Rubella); Fungi Protozoa; Helminths – AIDS – diagnostic procedure – PHARMACOLOGY: Drug receptor interaction, mechanism of drug action – Mechanism of action, dosage, metabolism and side effects of the – Pilocarpine, Terbutaline, Metoprolol, Diazepam, Acetylsalicylic Acid Ibuprofen, Furosemide, Metronidazole, Chloroquin, - Mechanism of action, dosage and toxicity of the antibiotics: Ampicillin, Cephalexin, Doxycycline, Chloramphenicol, Rifampin, Cefotaxime – Indications, dosage, side-effects and contraindications of the following anti-cancer drugs:- Methotrexate, vincristin, Tamoxifen – Classification, route of administration, mechanism of action and side effects of the :- General anaesthetics, Hypnotics, Analgesics – Forensic Medicine and Toxicology: Forensic examination of injuries and wounds – Physical and chemical examination of blood and seminal stains – Details of forensic examination for establishing identification of persons, pregnancy, abortion rape and virginity.

GENERAL MEDICINES:- 1. Disorders of CNS: Meningitis Encephalitis, Cerebrovascular diseases epilepsy, Neoplasms - 2. Disorders of CVS - Rheumatic, Ischaemic and congenital heart diseases, Hypertension - 3. Respiratory diseases – Acute and Chronic infections, bronchial asthma, Neoplasms, Industrial diseases – 4. Excretory systems – Acute glomerulonephritis, Nephrotic syndrome, chronic pyelonephritis and renal failure – 5. Gastro-Intestinal disorders – Acid Peptic diseases, Malabsorption syndromes, viral hepatitis, Cirrhosis of liver pancreatitis - 6. Hematological diseases – Anemias, Coagulation failures, Leukemias, Lymphomas, Hodgkins disease – 7. Metabolic disorders – Diabetes, Thyroid disorders, parathyroid diseases – 8. Miscellaneous – Skin disorders – Allergies, Drug reactions, parasitic infestations, Psychiatric disorders: Schizophrenia and depression – 9. Community Medicine – Malaria, Filariasis and various national Health programmes – Leprosy, T.B., S.T.D. including AIDS – Parasitic infestations – Hook worm, round worm, Guinea worm, Amoebiasis – 10. Nutritional disorders – Normal nutrition, and deficiency diseases in India.

GENERAL SURGERY: 1. Cervical lymph nodes, parotid tumour and oral cancers – 2. Peripheral arterial diseases – varicose veins, Filariasis – 3. Dysfunctions of Thyroid, Parathyroid adrenal tumors and the surgical aspects – 4. Abscess breast and cancer breast – 5. Acute and Chronic Appendicitis including peptic ulcer, T.B. of bowel intestinal obstructions – 6. Renal mass, retention of Urine Benign Prostatic Hypertrophy – 7. Spleno-Megaly, Chronic Cholecystitis portal Hypertension liver abscess peritonitis, Cancer head of Pancreas – 8. Direct and indirect Inguinal Hernias and their complications – 9. Fracture of Femur, Spine Poly trauma and their management.

OBSTETRIC AND GYNECOLOGY + FAMILY PLANNING: 1. Diagnosis of Pregnancy, Antenatal Screening for high-risk pregnancy, Feto-placental development – 2. Labour management, complications of 3rd stage, post partum hemorrhage, Inversion, Resuscitation of the new born and premature baby – 3. Diagnosis and management of Pregnancy – induced – hypertension Eclampsia, anemias – 4. Principles of contraceptive methods – Intrauterine Device oral pills, Tubectomy and Vasectomy. Medical termination of pregnancy including its legal aspects and complications – 5. Etiology, Clinical features, diagnosis and mass screening of cancer cervix leucorrhoea, Infertility, Abnormal Uterine bleeding, Amenorrhoea – 6. Miscellaneous: Objectives, components of National Health and Family Welfare Programmes – Maternal and Child health – Family welfare – Nutrition – Immunisations – Population trends and its effect on health and Development.

Sd/-
SECRETARY