

ANNEXURE – II
NOTIFICATION NO. 20/2022
SCHEME & SYLLABUS OF EXAMINATION FOR RECRUITMENT TO THE POST OF
CIVIL ASSISTANT SURGEON IN A.P. INSURANCE MEDICAL SERVICES

SCHEME OF THE EXAMINATION

WRITTEN EXAMINATION (Objective Type)				
PAPER	SUBJECT	No. Of Questions	Duration Minutes	Maximum Marks
PAPER-I	GENERAL STUDIES & MENTAL ABILITY (Degree Standard)	150	150	150
PAPER-II	SUBJECT: (Medical Science , General Medicine and General surgery)	150	150	300
Total				450
NEGATIVE MARKS: As per G.O.Ms. No.235, Finance (HR-I, Plg & Policy) Dept., Dt. 06/12/2016, for each wrong answer will be penalized with 1/3rd of the marks prescribed for the question.				

SYLLABUS OF EXAMINATION

PAPER-I: GENERAL STUDIES AND MENTAL ABILITY

1. Events of national and international importance.
2. Current affairs- international, national and regional.
3. General Science and its applications to the day to day life Contemporary developments in Science & Technology and information Technology.
4. Social- economic and political history of modern India with emphasis on Andhra Pradesh.
5. Indian polity and governance: constitutional issues, public policy, reforms and e-governance initiatives with specific reference to Andhra Pradesh.
6. Economic development in India since independence with emphasis on Andhra Pradesh.
7. Physical geography of Indian sub-continent and Andhra Pradesh.
8. Disaster management: vulnerability profile, prevention and mitigation strategies, Application of Remote Sensing and GIS in the assessment of Disaster.
9. Sustainable Development and Environmental Protection
10. Logical reasoning, analytical ability and data interpretation.
11. Data Analysis:
 - a) Tabulation of data
 - b) Visual representation of data
 - c) Basic data analysis (Summary Statistics such as mean, median, mode, variance and coefficient of variation) and Interpretation
12. Bifurcation of Andhra Pradesh and its Administrative, Economic, Social, Cultural, Political, and Legal implications/problems.

PAPER-II

Subject: (MEDICAL SCIENCE , GENERAL MEDICINE AND GENERAL SURGERY)

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, perineum 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 histopathology 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; Escherichia; 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, Cephalixin, 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 lymphnodes, 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 bleeding 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 leucorrhea, 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.