NOTICE (Syllabi)

WRITTEN TEST & SYLLABI for the Posts - Advt. no. 04 of 2016 (Part-I)

It is notified for the information of all concerned that:

1. J&KSSB intends to conduct WRITTEN-TEST (objective-type) for various posts advertised under Notification No. 04 of 2016 dated 21.10.2016 in future.

2. Six (06) different posts have been notified vide above advertisement notification and therefore grouped into six (06) groups / BATCHES for the purpose of notification of SYLLABI. (Refer table provided hereunder in Annexure “A”).

3. SYLLABI related to the first four (04) BATCHES are already available (as published / notified for the similar posts in the past). Hence, these SYLLABI are hereby applied to these posts of 04 of 2016 as well. (Refer SYLLABI annexed hereunder as Annexure “A”, “1”, “13”, “24”, and “26”).

4. SYLLABI related to the last 02 posts are still under FORMULATION and shall be notified later (as syllabus notification Part-II).

(In addition to this, hereby the SYLLABI for the similar posts of Electrician / FMPHW / MMPHW, advertised in advertisement notification no. 07 of 2015 dated 02.12.2015, have also been applied, appropriately).

Hence notified for the information of all concerned.

Sd/-
(Munib-Ul-Hassan), KAS,
Secretary,
J&K Services Selection Board,
Jammu.


Copy for information to the:-
1. Principal Secretary to Hon’ble Chief Minister, J&K, C.M Secretariat, Civil Secretariat, Jammu.
2. Principal Secretary to the Hon’ble Governor, J&K, Rajbhawan, Jammu.
3. Director Information, J&K Government Jammu with the request to publish the above notification in at least three leading local newspaper of Jammu/Srinagar on three consecutive dates.
4. Director, Radio Kashmir, Jammu / Srinagar. He is requested to kindly broadcast the above said notification appropriately.
5. Director, Doordarshan Kashmir, Jammu / Srinagar. He is requested to kindly telecast the above said notification appropriately.
6. Additional Secretary Law, J&K S.S.B., Jammu
7. Administrative Officer, Service Selection Board, Jammu / Srinagar.
8. Private Secretary to Ld. Chairperson, J&KSSB for information of Ld. Chairperson.
9. Incharge Website, SSB. He shall upload the notice on the official website of the Board.
Annexure “A”

(To the above Notice no. SSB/ Sel/ Secy/ 2016/ 20217-25 Dated: 18-11-2016)

SYLLABUS for the posts advertised vide advertisement notification no. 04 of 2016 dated 21.10.2016

<table>
<thead>
<tr>
<th>S. No</th>
<th>Post</th>
<th>Department</th>
<th>Batch</th>
<th>Syllabus Type</th>
<th>Appended at</th>
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<tbody>
<tr>
<td>1</td>
<td>Jr Grade Nurse</td>
<td>Health and Med. Edu. Deptt.</td>
<td>1</td>
<td>Specific</td>
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<tr>
<td>2</td>
<td>FMPHW</td>
<td>Health and Med. Edu. Deptt.</td>
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<td>Specific</td>
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<td>4</td>
<td>Electrician</td>
<td>Health and Med. Edu. Deptt.</td>
<td>26</td>
<td>Specific</td>
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<tr>
<td>5</td>
<td>Assistant Public Analyst</td>
<td>Health and Med. Edu. Deptt.</td>
<td></td>
<td>Under FORMULATION</td>
<td>and will be notified later</td>
</tr>
</tbody>
</table>

Also :-

1. The Syllabus (herby applied for the above posts of FMPHW and appended as Annexure 13) shall also apply to the similar posts of Female Multipurpose Health Worker (FMPHW) and Male Multipurpose Health Worker (MMPHW) in Health & Med. Edu. Deptt. advertised vide advertisement notification no. 07 of 2015 dated 02.12.2015, and

2. The Syllabus (herby applied for the above posts of Electrician and appended as Annexure 26) shall also apply to the similar posts of Electrician, in Health & Med. Edu. Deptt. advertised vide advertisement notification no. 07 of 2015 dated 02.12.2015.

Sd/-
(Munib-Ul-Hassan), KAS,
Secretary,
J & K Services Selection Board,
Jammu.
Sub: Syllabus for written test (Objective Type) for the above the posts of JUNIOR GRADE NURSE / JUNIOR NURSE / JUNIOR STAFF NURSE

Marks :-150
Time :- 2.30 Hours

ANATOMY PHYSIOLOGY

- Cell, various parts and its function.
- Skeletal System – Bones
- Muscular System- Types Structure and Function.
- Digestive System- Structure, Function of Organs, Process of digestion.
- Respiratory System. Structure, Function of organs, Physiology of Respiration
- Cardio Vascular System- Heart Blood Vessels/ Position, Structure, and Function
- Blood Circulation - Blood Pressure, Pulse Systemic and Pulamanary
- Blood Composition - Function Clottong Type
- Nervious System - Structure and Function of :
  (a) Central Nervious System.
  (b) Autonomic Nervious System.
- Endoerine System - Structure, Function of Pituitary Glands.
- Sense Organs - Ear, Eye, Nose, Structure and Function.
- Female Reproductive System- Structure, Functions, Accessory Organs, Menstural Cycle, Menopause and process of Reproduction
- Male Reproductive System- Structure and Functions.

MICROBIOLOGY

- Bacteriology, Microbiology usefulness in Nursing.
  - Common disease caused by different types of organisons.
  - Sources of infection, made of exit and transmission of disease,
  - Immunity and Immunization schedule.
  - Disinfection
  - Sterilization.
  - Asepsis.

PSYCHOLOGY

- Definition of Psychology scope and its importance for Nurses.
- Behavious-Nature of behavior classification, dynamics types behavior. Motivation.
- Function, Emotions.
- Habits-Meaning, Principals inhabit formation. Frastration and conflicts
- Learning laws, types, factors of learning. Intelligence.
- Personality, meaning, types, development, characterists.
- Mental health characterists, national mental health program.

SOCIOLOGY

- 03 Marks
NURSING ARTS NUTRITION

35 Marks

- Fundamentals of Nursing
  - Nurses qualities, def, nursing principals, scope of Nursing.
    - History of Nursing.
    - Role and responsibility of a Nurse.
    - Components of Basic Nursing.
    - Health Agencies.

- Admission and discharge of patient.
- Signs and symptoms of approaching death.
- Nurses role in maintaining good personal hygiene.
- Bed making, various types of beds, nurses procedure for bed making.
  - Vitals - Temperature, pulse, respiration, B.P (def, type) equipments procedure
  - Mouth care - purposes, equipment, procedure complication sol used,
  - Bed sore - Def signs and symptoms, causes pressure points prevention,
  - Back care. Def. purposes, equipment, procedure.
  - Bed bath. Def. types purpose, equipment, procedure different patients uses for different procedure.
  - Ryles tube feeding - Indication equipments procedure suction,
  - Stomach wash or gastric lavage Def. indication procedure purpose, equipments.
  - Catherization - Indication purpose, procedure articles, types of catheter,
  - Enema-Def types, indication, procedure, equipments,
  - Flatus tube - Def. purpose, procedure, equipments,
  - Gaginal douche - Def. purposes, Sol, used, procedure equipments. Local hot application - Def purpose, types, equipments procedure precautions,
  - Local cold application - Def. purposes types equipment procedure.
  - Inhalations - Def. types purpose equipment precautions procedure post of care for surgery.
  - Care of patient fever (Unconscious patient) Dyspnoea.
  - Barrier Nursing - Isolation, technique, Control of infection diseases, immunization.
  - First Aid of Burns, Accident, Haemorrhage, Fractions.

- Various Bandages.
  - Blood Transfusions - Grouping Crossmating
- Recording and Reporting
- Collection of Specimen.
- Drugs route of Administration of drugs.

NUTRITION

10 Marks

- Constituents of food and its function
  - Protene, EHO, fats, minerals, vitamins, water then sources, function daily requirement, deficiencies.
  - Applied nutrition programmes.
  - Community nutrition programmes.
  - Diet - types of diet, balanced diet.
  - Diet for different diseases.
  - Planning and preparation of menu.
Factors effecting coming.

Presentation of mal nutrition.

Health problems in India (Nutritional problems)
- Communicable disease prob.
- Population Prob.
- Environmental suction Prob.
- Medical care Prob.

Community Health Nursing:
- Definition and concept of health ad elements.
- Principles Primary Health care.
- Qualities and functions of a Community Health Nurse.
- National Health Problems and Programmes.

Hygiene-Personal and Environmental-Safe Water, Sanitation.
- Building of good health, habits, Immunization.
- Physical health including menstrual hygiene.
- Mental health.

First Aid in Emergency.
- Importance of First Aid and its rules:
- Bandaging and splinting.

Medical Surgical Nursing 25 Marks

Disorders of Respiratory system:-
- Definitions, causes, types, factors, indications, investigations, treatment, NSG, Management, Prevention, Health Education, Complications of:-
  - Asthma/Bronchial.
  - Pneumonia.
  - Lung Abscess.
  - Plaursy.
  - Emphyma.
  - Emphysema.
  - Pulmonary Tuberculosis.
  - Lobectomy.
  - Pneumonectomy.
  - Diet Therapy
  - Drug Therapy.

Cardio Vascular System:
- Cardia Arrhythmias.
- Pericarditis.
- Myocarditis.
- Congestive Heart Failure.
- Myocardial infection.
- Fallots of Tetralogy.
- Hypertension.
- Angina Pectoris.
- Mitral Stenosis.
- Anaemia.
- Lenkaemia.
- Haemophilia.

Gastro Intestinal System:
- Gastritis.
- Peptic Uleer.
- Appendicitis.
- Ca Stomach
- Colostomy, Intestinal Obstruction
- Haemorrhoids.
- Gastrectomy.
- Gastrastomy.
• Hernia.
• Leprotomy.

- Disease of Liver, Spleen, Gall Bladder, Pancreas:
  • Hepatitis.
  • Cirrhosis of Liver.
  • Caliver, Pancreas.
  • Pancreatitis.
  • Tumours.
  • Cholieystities/Cholieysteetomy.
  • Spleeneetomy.

- Genito - Urinary System and Male Reproductive System:
  • Nephritis.
  • Ureamia.
  • Dialysis.
  • Prostate/Prostectomy.
  • Nephrectomy.
  • Hydrocoel.

- Nervious System-Spinal Card, Nervious:
  • Epilepsy.
  • Meningitis.
  • Parkinsonism.
  • Encephalitis.
  • Head Injury.
  • Cerebro - Vascular Accident.
  • Paraplegia.
  • Haemoplegia.
  • Quadriplegia.
  • Sciatica.

- Endrocrine System, Metabolic Disorder:
  • Hypothyrodism.
  • Hyperthyrobism.
  • Thyrodictomy.
  • Diabtes Mellitus.
  • Gouts.
  • Obesity.

- Skin:
  • Burn including radition burns.
  • Allergy.
  • Infections EC Zema.

- Operation and Theatre:
  • Care of unconscious patients/coma.
  • Pre and post operative care > adult, infant.
  • Intensive Care Nursing.
  • Common..........................

- Common Investigation and Advanced Nursing Procedures:
  • USG, OGC, CT, Lithotripsy, LP, MRI, Radiotherapy, Chemotherapy, Catheterization, Bone Marrow, Paracentesis, Thoracynthesis, LFT, Endoscopy, Sigmocolopy, Bronchoscopy, Intercostal Drainage, H20 Drainage, Review of Vitals.

- Communicable Diseases:
  • Measles, Chickenpox, Smallpox, Mumps, Poliomyelitis, Diptheria, Wooping Cough, Telanus, Leprosy, Typhoid, Dysentery, Cholera, Plague, Malaria, Dengu, Fever, AIDS, Pulse Polo, National Health Programme/ Problems.
ORTHOPAEDIC

Disorders and Diseases of Bone and Joints.
(Def. causes, types, preparation, investigations, indications, management).
- Arthritis.
- Osteomyelitis.
- Rheumatoid Arthritis.
- Fractures, Dislocations, Sprains.
- Amputation.
- Traction.
- Casts.

Special senses (Eye, ENT, Ear)
- Conjunctivists.
- Dacro - Cystitis.
- Glaucoma.
- Trachoma.
- Myopia.
- Hypermetropia.
- Cataract.
- Corneal Ulcer.
- Otitis Media.
- Mastoiditis.
- Clift Lip.
- Clift Palate.
- DNS. S
- Sinasitis.
- Adenoids.
- Laiyngitis.
- Tonsilitis/Tonsilectomy.
- Phryngitis.
- Tracheostomy.
- Epistais.
- Psychiatric Nursing
  - Depression.
  - Hallucination.
  - Delusion.
  - Scheziophilsia.
  - Psychosis.
  - Nerosis.
  - Hysteria.
  - Epilpsy.
  - ECT.
- Drugs used in Psychiatric diseases.

Paediatric Nursing:
- Growth and development from Birth to adolescence. Factors responsible for growth and development. Assessment of growth and development.
- Immunity/ Immunization schedule.
- Disorders of infections - Vomitting, Dirrhaea, Convulsions, Distensions.
• Recognition, causes, prevention and management of congenital anomalies.
  • Breast feeding:
    - Importance and principals.
    - Preparation of mother.
    - Difficulties in breast feeding.
    - Factors inhibiting/ promotion lactation.
    - Introduction of solids.
  • Artificial feeding:
    - Maintenance of bottle hygiene.
    - Feeding techniques.

➢ Disease of Childrens:
➢ Def. causes s/s investigations, factors indications; prevention, management complications of :-
  • Gastro - enteritis.
  • Oesophogal Atresia.
  • Mega Colon.
  • Imperferated Anus.
  • Jaundice.
  • Phototherapy.

➢ Benito - Urinary System:
  • Hypospodias.
  • Undesecndel Tests.

➢ Cardio Vascular System:
  • Patent Duetus Arteriosus.
  • Atrial Septal Defect.
  • Ventricular spetal Defect.
  • Fallots Telrology.
  • Rheumative Fever.

➢ Nervous System:
  • Cerebral Pulsy.
  • Mental Retardation.
  • Meningocele.
  • Mangolism.
  • Hydrocephalus.

➢ Eye, Ear:
  • Squint.
  • Deafness.

➢ Components of nutrition and Disorders:
  • Marasmas.
  • Kwashiorkar.
  • Vitamin Dificencies.
  • Nutritional Programme.

➢ Community Health Nursing:
➢ Primary Health Centre.
  • Set Up.
  • Function.
  • Services.
• **Sub Centre.**

- Health services Organisation at different levels:
  - **National.**
  - **State.**
  - **Local.**

- Special community Health Services and Nurses Role:
  - **Industrial Nursing.**
  - **Tuberculosis Nursing.**
  - **Geriatric Nursing.**
  - **Leprosy Nursing.**
  - **Oncology Nursing.**

- Function of District Public Health Nurse:
  - **Health Assessment.**
  - **Antenatal/Care.**
  - **Postnatal/Care.**
  - **Brest Palpation.**
  - **Introduction of RCH.**

- Human Sexuality:
  - **Puberty in male and female.**
  - **Importance of sex education and sex hygiene.**
  - **Different methods of family planning.**
  - **Planning, Organising Family Planning Programmes in our area.**

- **Sex Life:**
  - **Sterilization.**

- Female Reproductive System and Breast:
  - **Cysts, Tumours and Fibroid of Ut. Hystrectomy.**
  - **Abortions, MTP.**
  - **Venereal Disease.**
  - **Abnormalities of Mensturation.**
  - **Breast Cancer/ Mastectomy**

**Midwifery**

- **Introduction of Hisotiral Review.**
  - **Moribidity and Mortality Rates their Significance.**

- Review of reproductive System and embiyology.
  - **The female pelvis and generative organs,**
  - **Menstrual Cycle.**
  - **Maturation, fertilization and implantation of Ovum,**
  - **Formation of foetal membranes and placenta,**
  - **Foetal bones, skull sutures and fontanels,**
  - **Foetal development of foetal circulation,**
  - **Measurement.**

- Normal Pregnancy:
  - **Physiological changes due to pregnancy,**
  - **Sings and symptoms diagnosis of pregnancy.**
  - **Pre - Natal Care.**
    - Objectives.
    - History raking .
    - Calculation of expected date of delivery .
    - Rotec examination .
  - **care and advice regarding diet in pregnancy and ante excise.**
  - **Minor disorders or pregnancy and alleviation of discomfort.**
Diseases Associated with pregnancy:
- Cardio Vascular.
- Urinary.
- Respiratory.
- Metabolic.
- Nutritional deficiencies.

Normal Delivery (Preparation):
- Requirements for mother and Baby.
- Preparation of patient and Delivery Room - hospital and Home.
- Psychological preparation of mother and Family.

Normal Labour:
- Onset of Labour,
- Physiological changes,
- Mechanisms,
- Stages of Labour,
- Technique of vaginal examination.
- Management of labour and Nursing Care of mother in labour.

Puerperium:
- Physiology,
- Management of puerperium.
- Postnatal examination and care,
- Care of episiotomy.
- Establishment of breast feeding,
- Postnatal exercises,
- Minor ailments and management,
- Family welfare.

Care of New Born:
- Establishment of respiration,
- Care of card eyes and skin,
- Examination of the new born,
- Examination of defeats,
- Care of premature,
- Minor ailments.

Abnormal Midwifery:
- Pregnancy its complications Medical and gynaecological.
  - Contracted pelvis
    Ante Partum.
  - Harmon ages
    Post Partum.
  - Abortions.
  - Ectopic gestation.
  - Hydrated form Mole.
  - Toxaemia of pregnancy.
  - Polyhydromnias.
Sub: Syllabus for written test (Objective Type) for the post of MALE / FEMALE MULTIPURPOSE HEALTH WORKER (FMPHW / MMPHW)

Marks :- 150
Time :- 2.30 Hours

Science –I
- Anatomy and Physiology
- Microbiology
- Psychology
- Sociology
- Hygiene
- Nutrition.

Fundamentals of Nursing-I
- Section “A” introduction to Nursing and Nursing procedures.
- Section “B” Nursing techniques
- Section “C” First aid and emergency nursing.

Fundamentals of Nursing-II
- Section A introduction to Child Health.
- Section B introduction to Maternal Health.
- Section C introduction to Family Health and Community Health.

Community Health Nursing-I
- Section A Domiciliary Midwifery.
- Section B Midwifery and Hepernitoy Nursing.
- Section C Family planning and family welfare.

Community Health Nursing-II
- Section A Nutrition Education.
- Section B Health Education.
- Section C Communication skills and Audio-visual aids.

Community Health Nursing-III
- Section A Basic Medicine and Pharmacology.
- Section B Health Problems and Plans.
Section C Communicable Diseases.
Section D Mental Diseases.

ANATOMY

(i) Introduction
(ii) Skeletal system overview of skeletal system, Bones, bone development and the repair, axial skeleton, appendicular Skeleton, surface anatomy and landmarks.
(iii) Structure and function of joints, types of joints, muscular system introduction overview of skeletal muscles chief muscles and group of muscles.
(iv) Heart, Structure.
(v) Respiratory system structure
(vi) Human Reproductive System structure and Embryology (Prenatal).

PHYSIOLOGY

(i) Introduction
(ii) Organization of living things.
(iii) Cells, tissues, organs, cavities and body system.
(iv) Typical cell structure, properties of cell, living processes, tissues, types, structure and functions, the skin.
(v) Muscular system-Structure.
(vi) Muscle contraction and properties of muscle.
(vii) Nervous System –division of the nervous system, brain and its functions, oriental nerves, spinal nerves.
(viii) Special senses structure function and location of organs of special senses, eye structure and function of visual apparatus, ear structure and function of auditory apparatus.
(ix) Maintaining the metabolism of the body circulatory system-blood composition, blood cells and plasma, hemoglobin , blood coagulation bleeding time, blood grouping and cross-matching physiological structure of heart and function, heart sounds and heart rates, circulation – systematic and pulmonary, blood vessels, pulse, venous and capillary system.
(x) Digestive system the alimentary tract oral cavity stomach, small and large intestines peristalsis digestion salivary glands. Liver pancreas and gallbladder enzymes absorption and assimilation of food.
(xii) Endocrine system-overview of the endocrine system, endocrine glands location, structure and function body temperature regulation.
(xiii) Human Reproduction
(xiv) Embryology, parental Development, maturation of reproduction Organs.

The male reproductive tract external, organs. The Female reproductive tract external organs, menstrual cycle, hormones and reproduction.
**Principles of organizing care according to head of the patient.** (Seriously ill, Chronically ill)  
Moderately ill, terminally.  
Principles of organizing care according at patient group.  
Maintenance of supplies, equipments and other facilities.  

**Records and Reports.**  
Health records, family care records, medical records, use of diaries by health workers understanding the system of reporting and recording referral system.  
Maintaining a Healthy environment cleanliness of unit and sick room cleanliness of furniture, floors, space and surfaces doors and windows disposal of waste, garbage.

**NURSING PROCEDURES AND TECHNIQUES**

(i) Meeting hygienic and comfort needs care of skin, care of hair, care of hands, care of eyes, nutrition mouth care elimination, exercise, body.  
(ii) Maternal health factors.  
Socio-economic factors affecting maternal health.  
Section C- Introduction to family health and Community health.

a) Family health care.  
The family as integral unit of the health services,  
- Prevention and control of communicable diseases.  
- Home visiting and domiciliary health.  

b) Introduction to Community health.  
c) Environmental Health and Sanitation.  
c) School health Services.

**COMMUNITY HEALTH NURSING - (I)**

**Domidiloary Midwifery**  
(i) Contacting antenatal mothers.  
(ii) Conducting a delivery in the home.  
(iii) Post–Natal care. Records to be maintained.  

**Midwifery and maternity nursing**  
(i) The reproductive system  
(ii) Growth and development of foetus  
(iii) Pregnancy  
(iv) Labour  
(v) Normal puerperium  
(vi) Complication of pregnancy  
(vii) Complication of labour.  
(viii) Obstetric operations.  
(ix) Drugs used in obstetrics  

**Family planning and welfare.**  
(i) Introduction.  
(ii) National family welfare programme.  
(iii) Organizing family welfare work.  
(iv) Family planning methods.
COMMUNITY HEALTH NURSING

**Nutrition Education:**
(i) Introduction to nutrition education.
(ii) Nutrition education for material and cold health.
(iii) Nutrition education (method and media)

**Health Education:**
(i) Introduction
(ii) The Teaching (Learning Proceed)
(iii) Approaches used in health education.
(iv) Planning health education activities.
(v) Community resources for health education.

**Communication Skills & Audio –Visual AIDS :**
(i) Introduction to communication.
(ii) Communication skill for health work.
(iii) Introduction to Audio-visual aids.
(iv) Selection and utilization of audio-visual aids selecting suitable aids for health work.
(v) Preparation of audio-visual aids for health work basic skill/competencies.

**Health Problems and Plans :**
(i) Health problems.
(ii) Organization and structure of health services and related welfare services.
(iii) Health planning and programme.

**Communicable Diseases:**
(i) Introduction to communicable diseases.
(ii) Immunity and immunization.
(iii) Care and treatment of patients with infection.
(iv) Specific Communicable diseases and infections, symptoms, prevention and control and care in specific communicable diseases and infections.
   - Malaria, filarial, dengue, typhoid, cholera infections hepatitis, other gastrage intestinal infections-acute waste enteritis, dysenteries small-pox, chicken pox mumps, measles, diphtheria. Trachoma, conjunctivitis, worm infestations hoolworm rouun worn. Threadworm, amoebiasis, rabies, tuberculosis, pertustis.

**Mental diseases:**
(i) Introduction
(ii) Resources and facilities for prevention and early detection of mental illness, use of family health care services.
(iii) Maternal and child health services.
   - School health services.
   - Primary health centre facilities.
   - Community, health worker as a resource.
(iv) Prevention of mental illness.
(v) Early direction of mental disorders.
(vi) Mental diseases.

**COMMUNITY HEALTH NURSING I (II)**

**Environmental sanitation:**
- Basic sanitation needs all village level towns and sen:- Urban areas.
- Disinfection and disinfectants, sterilization, antiseptics, disinfectants acodorant, etergent, sterilization.
- Environmental sanitation aspects of communicable diseases communicable diseases control.
- Venereal diseases.

**Microbiology:**
- Introduction
  Classification of micro-organisms, characteristic, of bacteria, viruses, conditions affecting and growth of bacteria, parasites, fungi yeasts and mold.
- Sources and mode of infection.
  Sources of infection, mode of transmission infectin-factors which favour and hinder infection immunity, vicunas.
- Pathogenic Micro-organism.
  Transmitted from, respiratory tract. Alimentary tract, food, food poisoning blood-borne pathogenic organism.
- Collection of specimens for bacteriological examination.

**Sociology:**
(i) Introduction.
  Group-primary and secondary, in group and out groups, structure, activities of groups organization of groups Urban and rural administrative pattern panchyats and corporations, crowd public and audience.
(ii) Social process.
(iii) Social controls.
(iv) Social stratification.
(v) Marriage and family.
(vi) Community rural and urban community.

**Psychology:**
(i) Factors influencing human behavior.
(ii) Life stages and behavioral patterns.
(iii) Emotions and behavior.
(iv) Defence mechanism and behavior.
(v) Social behavior and interpersonal relations.
(vi) Learning, motivation and change in behavior.

**Hygiene:**
(i) Introduction to hygiene and healthful living, consents of health and disease.
  Factors influencing health and healthful living. Health habits and practice. Scientific
(ii) Physical health:- Skin care, cleanliness clothing care of the hair, prevention of pediculosis. Dental care and oral hygiene, care of hands, hygiene of elimination and menstrual hygiene, mental hygiene.

(iii) Mental hygiene and health in childhood ensuring mentally healthy growth in later childhood, need for friendship, games and plays, affection and recognition. Mental hygiene, approach to some problems speed problems, reading difficulties, learning problems, day dreaming.

(iv) Mental hygiene and health in adolescence. Preparation of girls for menstruation, sex-education.

(v) Mental hygiene and health in adulthood. Ensuring mental health in adulthood satisfaction on the job, marriage, marital life, parental responsibilities.

(vi) Mental hygiene and health in old age ensuring health in old age and need for preparation for retirement.

(vii) Physical health, feature, exercise, rest relaxation and sleep care of the fact, foot wear, care of eyes, ear more and throat food values.

(viii) Periodic Health Examination.

Health records, deletion and correction of defects. Prevention and early treatments of common ailments, common cold, indigestion constipation, headache.

(ix) Health in home.

C) Disposal of refuse, waste.

D) Latrines and sanitation, ventilation.

E) Safety in the home.

F) Sanitation in animal sheds.

(x) Mental hygiene and health.

In adults, in-infancy and early childhood. Like, feeding weaving, thumbsucking, toilet-training, need for security, affection, love, adventure.

**Nutrition:**

(i) Introduction to the study of nutrition, definition, relation of nutrition of health classification and functions of food-body building, energy yielding and protective foods

- Nutrients- Carbohydrates, protein, fats, Eatmine.
- Mineral- functions, sources and daily requirements of each caloric requirements, water and cellulose.

(ii) Nutritive value of foodstuffs

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Fruits</th>
<th>Fats and oils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pluses</td>
<td>Milk and Milk products</td>
<td>Sugars condiments</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Egg, meat and Fish</td>
<td>Spices and beverages</td>
</tr>
</tbody>
</table>

(iii) The balance diet.

- Definition, factors to be considered in planning meals, improvement of diars, selection of foods, cultural factors improving maternal nutrition and child nutrition.

- Modified diets- liquid bland, soft, full.

(iv) Preparation and preservation of foods general. General principles of cooking.

- Methods of cooking.

- Effects of cooking on nutrients and common foodstuffs, preservations of food- house-hold methods.

- Food hygiene simple household measures.

(v) Malnutrition.
Malnutrition and under nutrition.
Deficiency diseases in the country.
Cultural factors in nutrition, food fats, food habits, food adulteration practive injurious to health.
Nutrition education-principles of imparting nutrition knowledge.

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J &K Services Selection
Board, Jammu.
Annexure “24”

Syllabus for written test (Objective Type) for the above posts of
GRADUATION LEVEL / COMPUTER PROGRAMMER

Time: 02.30Hrs.
Marks: 150

Unit-I  GENERAL ENGLISH  20 Marks
(I) Tenses
(II) Rearranging of jumbled sentences.
(III) Narration
(IV) Models
(V) Articles
(VI) Comprehension with blanks to be filled in with
    Phrases, Pronouns, Homonyms / homophones.
(VII) Clauses
(VIII) Synonyms and antonyms
(IX) Pairs of words and their use in meaningful sentences.
(X) Idioms and phrases.
(XI) Uses of Prepositions.

Unit-II  GENERAL KNOWLEDGE AND CURRENT AFFAIRS  30 Marks
➢ Important dates in Indian History / Freedom struggle, different dates and events.
➢ First in world (Adventure, Sports, Discoveries).
➢ First in India (Adventure, Sports, Discoveries).
➢ Popular names of Personalities (Religion, Politics, Scientific discoveries, Geographical,
    Sports, History)
➢ The Newspaper world – (Current Dailies & Weeklies of India).
➢ Books & Authors – General
➢ Languages.
➢ Capitals & Currencies.
➢ United Nations Organisations – Veto Powers
    No. of Countries as its Members.
    Principal organs and their functions.
➢ SAARC, ASEAN.
➢ Everyday Science
➢ World famous Awards - (1. in Science)
    (2. in Literature)
    (3. in Sports)
    National Awards - (1. in Science)
    (2. in Literature)
    (3. in Sports)
➢ The world of Sports
➢ Climate & Crops in India.
➢ Democratic institutions
➢ Forms of Government
➢ Political & Physical divisions of world & India
➢ Important rivers & Lakes in India.
Current Events of National and International Level.
- Role of Mathematics in Economics.
- Agriculture in economic development; Industrialization and economic development.
- Indian Foreign Trade
- New economic reforms and growth of foreign trade.
- Inflation – Concept and types; Causes and consequences

UNIT-III  GENERAL KNOWLEDGE WITH SPECIAL REFERENCE TO J &K  25 Marks
(I) Abbrevations, Important dates, popular names of personalities and their achievements/Contribution (National and International).
(III) Weather, Climate, Crops, Means of Transport.
(IV) Important power projects and their impact on State Economy.
(V) Rivers and Lakes.
(VI) Important Tourist Destinations.
(VII) History of J &K State.
(VIII) Historical places of the State and their importance.
(IX) RTI Act.
(X) Indus Water Treaty and its impact on State economy.

Unit-VI  GENERAL SCIENCE  25 Marks
(i) Various sources of energy; conventional sources of energy; improvement in technology for using conventional source of energy (Biomass and wind energy)
(ii) Non-conventional sources of energy (Solar energy, Tidal energy).
(iii) Mechanics, Rest, motion, Velocities, acceleration, Newton Laws of motion,
(iv) Voltage, Current, Resistance, Power, D.C Batteries.
(v) Waves, light as a wave, Sound waves, Transverse and longitudinal waves.
(vi) Structure of Atom.
(vii) Solids, Liquids and Gases (Basics).
(viii) Life processes: Nutrition and its types, Respiration, Transportation of water, food and minerals in plants.
(ix) Vitamins- Diseases related to vitamin deficiency.
(x) Environmental pollution.
(xi) Ecosystem – Its components, Food chains and Food webs.
(xii) Ozone layer, its depletion, Green House Effect.
(xiii) Importance of water in life.

Unit-V  MENTAL ABILITY TEST  25 Marks
(I) Number series.
(II) Letter series.
(III) Coding decoding.
(IV) Direction sense.
(V) Blood relations.
(VI) Mathematical reasoning.
(VII) Speed, Distance and Time.
(VIII) Statements and conclusions.
(IX) Logical Reasoning.
(X) Mental Reasoning.

Unit-VII  Computer Applications  25 Marks
(I) Fundamentals of computer sciences
(II) Hardware & Software
(III) Input and output devices
(IV) Operating system
(V) M.S Word, M.S Excel, M.S Acess and Powerpoint Presentation
(VI) E-mail & Internet

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J &K Services Selection
Board, Jammu.
Syllabus for written test (Objective Type) for the above posts of Electrician / Technician III

<table>
<thead>
<tr>
<th>Topics</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ohm’s Law -</strong></td>
<td></td>
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<tr>
<td>Simple electrical circuits and problems.</td>
<td></td>
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<tr>
<td>Series and parallel circuits.</td>
<td></td>
</tr>
<tr>
<td><strong>Kirchoff’s Laws</strong> and applications.</td>
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<tr>
<td>Wheatstone bridge principle and its applications .</td>
<td></td>
</tr>
<tr>
<td>Common Electrical Accessories, their specifications-Explanation of switches lamp holders, plugs and sockets .Developments of domestic ckt’s, Alarm &amp; switches, lamp, fan with individual switches, Two way switch .</td>
<td></td>
</tr>
<tr>
<td><strong>Chemical</strong> effect of electric current-Principle of electrolysis. Faraday’s Law of electrolysis. Basic principles of Electro-plating and Electro chemical equivalents. Explanation of Anodes and cathodes. Lead acid cell-description, methods of charging-Precautions to be taken &amp; testing equipment, Ni-cadmium &amp; Lithium cell, Cathodic protection. Electroplating, Anodising Rechargeable dry cell, description advantages and disadvantages.</td>
<td>05 Marks</td>
</tr>
</tbody>
</table>
### Care and maintenance of cells
Grouping of cells of specified voltage & current, Sealed Maintenance free Batteries, Solar cell.

**Lead Acid cell, general defects & remedies.**

### ALLIED TRADES:
Marking use of chisels and hacksaw on flats, sheet metal filing practice, filing true to line.
Sawing and planning practice. Practice in using firmer chisel and preparing simple half lap joint.
Drilling practice in hand drilling & power drilling machines. Grinding of drill bits.
Practice in using taps & dies, threading hexagonal & square nuts etc. cutting external threads on stud and on pipes, riveting practice.
Practice in using snips, marking & cutting of straight & curved pieces in sheet metals. Bending the edges of sheets metals. Riveting practice in sheet metal.
Practice in making different joints in sheet metal in soldering the joints.

### Magnetism
- Principle of electro-magnetism, Maxwell’s corkscrew rule, Fleming’s left & right hand rules, Magnetic field of current carrying conductors, loop & solenoid.

### Electrostatics
- Capacitor - Different types, functions & uses

### Resistance
- Different Types of resistors used in electrical ckt's. Specification of resistance and tolerance.
- Effect of variation of temperature on resistance. Different methods of measuring the values of resistance

### Working principles and circuits of common domestic equipments & appliances

### D.C. Machines
- Expl. Of Armature reaction, interpoles and their uses, connection of interpoles, commutation.

### DC Motors
- **Terms** used in D.C. motor-Torque, speed, Back-e.m.f. etc. their relations practical application. Related problems
- Types, characteristics and practical application of D.C. motors.
- Special precaution to be taken in DC Series motors.
- Starters used in D.C. motors
- Types of speed control of DC motors in industry Word-Leonard control, Thyristor/electronic controls.

### Insulating materials – properties common insulting materials, classifications

### Electric wirings
- Importance, I.E.E. rules. Types of wirings both domestic & industrial - Specifications for wiring – Grading of cables and current ratings. Principle of laying out in domestic wiring-testing by meggar
- **Wiring system** - Using casing capping, P.V.C., concealed system.
- Maintenance & Repairing data sheet preparation.
- Specifications, standards for conduits & accessories

### Earthing
- Principle of different methods of earthing. Importance of Earthing.
**Alternating Current** - Comparison D.C & A.C., Advantages of A.C. Alternating current & related terms frequency, instantaneous value, R.M.S. value, average value, peak factor, form factor. Generation of sine wave, phase and phase difference. Inductive & Capacitive reactance X_L & X_c, Impedance (Z), power factor, (P.F.); Vector diagram. Active and Reactive power, simple problems on A.C. circuits, single phase & three-phase system etc. Problems on A.C. cks. both series & parallel power consumption P.F. etc.

Concept three-phase Star & Delta connection, line voltage & phase voltage, current & power in a 3 ph ckt, with balanced and unbalanced load.

**Transformers**

**Transformer** - construction cores, winding, shielding, auxiliary parts, breather, conservator buckholtz relay, other protective devices, cooling of transformer, Transformer oil testing and Tap changing off load and on load. Transformer bushings and termination.

**Alternator** – Explanation of alternator, prime mover, types, regulations, phase sequence, specification of alternators and brushless alternator. Automatic Voltage Regulator.

**Electrical measuring instruments** - types
Deflecting torque, controlling torque & damping torque,
Moving coil permanent magnet
Moving iron
Range extension
Multimeter
Wattmeter
P.F. meter
Intergrading type, digital energy meter – megger.
Energy meter
Frequency meter
Tri vector meter
Max Demand meter
Phase sequence indicator
Multimeter – Analog and Digital – C.R.O.
Explanation of light
White light illumination factors, intensity of light – importance of light, human eye factor units.
Types illumination & lamps
- Neon sign, Halogen, Mercury vapour, sodium vapour, Fluorescent tube CFL, Solar lamp applications, Concept of Energy
- Characters watt ages, fixing places. Types of lighting.
Decoration lighting Drum Switches, Direct & indirect lighting-efficiency in lumens per watt, colour available. Thumb rule calculations of lumens.
Estimating placement of lights and fans and ratings.

**Transformer – winding**,
Principle of different winding techniques
**D.C. m/c Winding** – pole pitch, coil pitch, back pitch, front pitch, Lap & Wave winding, Progressive and retrogressive winding.
<table>
<thead>
<tr>
<th><strong>SYNCHRONOUS MOTOR</strong></th>
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<tbody>
<tr>
<td>Working principle, effect of change of excitation and load. Application in industry in power factor improvement.</td>
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<table>
<thead>
<tr>
<th><strong>Induction motor</strong></th>
<th>08 Marks</th>
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</thead>
<tbody>
<tr>
<td>Working principle, Squirrel Cage Induction motor, Slip-ring induction motor</td>
<td></td>
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<tr>
<td>Construction and characteristics, starting and speed control.</td>
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<tr>
<td>D.O.L Starter, Star/Delta starter, Autotransformer starter.</td>
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<tr>
<th><strong>Single phase induction motor</strong></th>
<th>07 Marks</th>
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</thead>
<tbody>
<tr>
<td>Working principle, different method of starting and running (capacitor start/capacitor run, shaded pole technique). FHP motors.</td>
<td></td>
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<tr>
<td><strong>A.C. m/c Winding</strong></td>
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<tr>
<td>Armature winding terms, coil side, end coil and grouping of coils. Connection to adjacent poles, connected armature winding, alternate pole connection, armature winding.</td>
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<tr>
<th><strong>Universal motor</strong></th>
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<tbody>
<tr>
<td>Advantages Principle, characteristics, applications in domestic appliances and industry, Fault Location and Rectification.</td>
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<tr>
<th><strong>Converter</strong></th>
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<tr>
<td>Inverter, M.G.Set-description-Characteristics, specifications-running and maintenance.</td>
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</table>

<table>
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<tr>
<th><strong>Fuse/auth cut out/kit Kat</strong></th>
<th>08 Marks</th>
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</thead>
<tbody>
<tr>
<td>Function, characteristics, and materials.</td>
<td></td>
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<tr>
<td>H.R.C Fuses – application.</td>
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<tr>
<td>Contactors – Miniature circuit breakers.</td>
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<tr>
<td><strong>Relays</strong></td>
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<tr>
<td>Thermal, Electromagnetic, solid state relays, Control Relays and Protective Relays.</td>
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<tr>
<th><strong>Industrial wiring</strong></th>
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<tbody>
<tr>
<td>Code of practice &amp; relevant span. Wiring of electric motors, control panel, etc.</td>
<td></td>
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<tr>
<td>Types, specifications, advantages of different types of circuit brackets construction and maintenance.</td>
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<tr>
<td>Corona, Lightning arrester/lighting conductor, Horn gap.</td>
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<tr>
<th><strong>Filter ckt</strong></th>
<th>05 Marks</th>
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<tbody>
<tr>
<td>Passive filter. Working principle and uses of an oscilloscope</td>
<td></td>
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<tr>
<td>Explanation of principle of working of a transistor- Types of transistors Characters of a transistors Biasing of transistors. Mode of use of transistor.</td>
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<tr>
<td>Specification and rating of transistors</td>
<td></td>
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<tr>
<td>Explanation of transistor Amplifiers, Amplifiers. – class A,B &amp; C</td>
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<tr>
<td>Power amplifier</td>
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<tr>
<td>Explanation of oscillator-working principle</td>
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<tr>
<td>Explanation of stages and types.</td>
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<tr>
<td>Multivibrator – applications.</td>
<td></td>
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<tr>
<td><strong>OP-AMP</strong></td>
<td></td>
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<tr>
<td>Working principles and applications. Timer I.C.555</td>
<td></td>
</tr>
</tbody>
</table>
**Digital Electronics** - Binary numbers, logic gates and combinational ckt's, Flip Flops, Counter, Register & Timer.
I.E.E. Rules.
Multistoried system.
Fault finding and trouble shooting of domestic electrical appliances.

**Decorative lighting** -
Fault finding techniques in Decoration lighting.

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Sd/-

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