#### **GROUP-36**

# Sanitary Inspector Level- Matric+ ITI Diploma in Sanitary Inspector

- 1) General awareness, Reasoning, Mathematics, Science, History including Haryana related history, current affairs, literature, Geography, Civics, Environment, Culture etc.- (Weightage 20%)
- **2)** Computer terminology, Fundamentals, word software, excel software, Power point, internet, web browsing, Communication, emails, downloading and uploading data on websites etc. -

(Weightage 10%)

3) Subject related syllabus-

(Weightage 70%)

#### **Professional Skill**

Food (definition) & function of food & introduction of nutrition & nutrients. Classification of food, their sources, nutrient diets proteins, fat, vitamins & minerals – sources, function, deficiency excess & daily requirement. Balanced diet- definition & importance – Factors to be considered on planning meals. – Nutrient requirement of different age group – Diet survey Family assessment – clinical examination of all members – height & weight BMI [Body mass index], Head circumference, -Blood test for Hb. Nutrition education malnutrition- causes prevention, low birth weight,(LBW), causes of LBW, prevention of LBW, special care to be given to malnourished children. Therapeutic Diet: Introduction for balanced diet, weight reducing diet- low fat diet, bland diet, cirrhosis of liver, renal stone Food Preservation: definition & methods, household & industrial method of preservation, self-line, Pasteurization: methods, types & importance. Refrigeration: Prevents spoilage.

# Water and its properties and cause of water pollution.

WHO's definition for environmental sanitation. Safe and whole some water. Sources of water. Various uses of water and its needs. Water borne diseases. Conservation sources of water. Quality of water. Physical, chemical and biological standard for portable water. Public health aspect of very hard water. Steps of disinfection of well. Sources and nature of pollution of water. Purification of water: i) Large Scale ii) Small Scale, Prepare of a sanitary well and tube well. Plumbing system and its maintenance. Water supply and storage system at the community and domestic. Pot method of chlorination. Swimming pool. Water testing labs.

# Night soil disposal

Sewage in liquid waste containing human excreta. Numerous impacts of night soil on the environmental factors. Faecal borne disease due to unsanitary disposal of night soil. Different types of latrines in use principal of construction of sanitary latrines and their uses. i) Bore hole ii) Dug well iii) RCA iv) Septic tank latrines.

# Solid waste disposal

Source, generation, storage, collection and disposal methods of solid waste. — Classification of solid waste in community. — Polluting effects of different types of solid waste. — System of collection of solid waste from the houses & streets. — Sanitary transportation of solid waste. — Sanitary process of disposal of solid waste such as composting, sanitary land filling, incineration etc.

## **Bio Medical Waste Management**

Definition of Bio Medical Waste - Sources of Bio Medical Waste - Waste minimisation - BMW – segregation, collection, transportation, treatment and disposal (including colour coding) - Liquid BMW, Radioactive waste, Metals/Chemicals/Drug waste - BMW management and method of disinfection - Modern technology for handling BMW - Use of personal protective equipment (PPE) - Monitoring and controlling of cross infection (protective devices) - Identifying the risk of Bio Medical Waste — E-waste: Introduction, toxicity due to hazardous substances in e-waste and their impacts, domestic e-waste disposal, e-waste management, technologies for recovery of resource from electronic waste, guidelines for environmentally sound management of e-waste, occupational and environmental health perspectives of recycling ewaste in India.

### Air pollution

Introduction of air pollution. – Composition of air. – Sources and nature of air pollution. – Effect of air pollution on health. – Prevention and controlling methods for air pollution. –Global warming and its impact. – Concept of temperature, humidity, radiation, thermal comfort, evaporation etc. – Methods of air purification. – Air disinfection. – Definition of ventilation. – Concept and importance of adequate ventilation. – Types of ventilation.

### **Noise pollution**

Introduction. – Sources. – Health Impacts. – Preventive measures for controlling Noise pollution.

## Liquid waste disposal

Definition of liquid waste and its sources. — Human waste management system. — Various methods for liquid waste disposal. — Pollution of water due to sewage. — Health hazard associated with liquid waste. — Sewers and its types. — Methods of laying sewers. — Construction and maintenance of sewers. — Sewer appurtenances. — Trap's introductions. — Types of traps. — Definition of plumbing. — Plumbing tools and operations.

# Sewage disposal

Definition and types of sewage system. – Sewage farming and land treatment. – Sewage disposal by biogas plant. – Methods of disinfecting sewage. – Sewage farming.

#### **Burial and Cremation**

Introduction – Disposal of dead. – Types of disposal methods. – Methods of preservation of dead. – Commonly and less commonly used methods for disposal of dead. – Basic requirements for burial and cremation grounds. – Health hazards associated with unsanitary disposal of dead bodies.

### Soil sanitation

Introduction and importance of soil. – Classification of soil. – Classification from the view point of importance in public health. – Reason of excessive moisture in the soil. – Reclamation of land. – Soil health.

## Housing

General principle of healthy housing. – Home sanitation. – Utility services of house. – Sanitary standards for construction of house. – Food hygiene at home. – Specification for healthy housing.

#### Sanitation in fairs and festivals

Sanitation management at fairs and festivals. – Sanitary problems associated with human gatherings and temporary settlements. – Alternative emergency sanitary provisions to prevent sanitation crisis for food, housing, water supply, lighting. – Disposal of community waste and prevention of outbreak of epidemics.

### **Occupational health**

Introduction – Occupational environment measures. – Occupational diseases. – State the importance of safety and health at work place. – State the role of employer, trade union and employees for health and safety program, Measures for health protection workers. – Prevention of occupational diseases. – Provision- benefit to employees. – Occupational health in India.

### **Control of biological environment**

Introduction — Study on insecticides, pesticides and disinfections. — Sterilisation and disinfection of different articles. — Various spraying equipment. — Uses of rodenticides and larvicides. — Principal of arthropod control, Definition of health — Content of health education. — Principal of health education. — Health education opportunities for health inspector in his work place. — Use of audio-visual aids and media. — Health education approach. — Planning health education activities, education in relation to environmental sanitation. — Awareness on need of sanitation amenities. — Health education material. —

Contribution of public health centres in health education. — Utilising community resources for health education. — Benefits of personal contract group meetings to provide health education.

#### **Behavioural Science**

Definition of behavioural science. – Importance of behavioural science. – Impact of behaviour on personal hygiene. – Basic hygiene practices. – Habits and customs affecting personal hygiene. – Caring sense organs. – Oral hygiene. – Factors influencing human behaviour, change of behavioural pattern in different age groups. – Interpersonal relations and defence mechanism.

#### **First-Aid**

Aim of first-aid. — Principles and practice of first-aid. — Contents of a basic first-aid box. — CPR — Types of dressing and bandages, Types of wounds. — Miscellaneous conditions. — Approach to a casualty. — Psychological first-aid. — Handling multiple casualties. — Types of injuries like road accidents, factories accidents and disaster injuries. — Transportation of victims and proper care provided.

#### **Communicable diseases**

Definition and introduction on communicable disease. – Air-borne and transmission of diseases through contact. – Symptoms of diseases. – Elaborate communicable diseases like Swine Flu, T.B., AIDS, Diphtheria, Polio, measles, diarrhoea etc. – General measures for prevention and control of communicable diseases.

#### Non-communicable diseases

Introduction of non-communicable disease. – Explain in detail diseases like cancer, hypertension, cardiac disease, diabetes etc. – In detail symptoms, prevention and control of non-communicable diseases.

## Immunity and immunisation

Importance of immunity and immunisation – Types, purpose and effect of immunisation. – National immunisation schedule. – Measles, typhoid vaccines and pentavalent vaccine.

#### Disinfection and sterilisation

Need of disinfection and sterilisation. – Importance of disinfection and sterilisation in hospitals. – Introduction and uses of various disinfection agents like Halogen, KMnO2solution, solid and liquid agents. – Effective disinfectants like formaldehyde, sulphur, chlorine gases etc. – Use of UV radiation and ozone as disinfectant.

# Personal hygiene

Need and importance of personal hygiene in daily life. – Factors influencing health and hygiene habits. – Maintaining basic hygiene habits of skin, hair, oral, nails etc. – Developing dental care, care of hands, washing etc. – Importance of regular exercise and nutritious food.

### Demography and health survey

Definition and introduction of demography. – Factors of demography. – Various stage of demo. 1. High stationary 2. Early expending 3. Late expending 4. Low stationary – Health survey includes birth rate, death rate, morbidity, IMR, MMR etc. – Population control measures.

### **Public Health Act**

Definition, introduction and importance of acts. — Indian Epidemic Disease Act. — Explain endemic, pandemic with examples. — Define epidemiology. — Air and Water Pollution Control Act. — Prevention of Food Adulteration Act. — Birth and Death Registration Act. — M.T.P. Act. — Suppression of Immoral Traffic Act (SITA). — Municipal and Local Body Acts related to Housing Sanitation Act. — Factory Act and ESI Acts.

Important Note: The Weightage as mentioned against the syllabus is tentative & may vary.