

CURRICULUM

FOR THE TRADE OF

HEALTH SANITARY INSPECTOR

UNDER

APPRENTICESHIP TRAINING SCHEME

2017



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENURESHIP
DIRECTORATE GENERAL OF TRAINING

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Co-ordinator for the syllabus:Shri L K Mukherjee, Deputy Director, CSTARI, Kolkata

Sl. No.	Name & Designation Sh./Mr./Ms.	Organization	Expert Group Designation
1.	Dr. Ritesh Garg, M.B.B.S., D.M.R.D	Shivam Diagnostics & Cancer Research Institute, C- 41 Mahendru Enclave Lane , Delhi-110033	Chairman
2.	C. Shibu, Faculty	-Do-	Member
3.	Dr. Sushil Gupta, M.B.B.S, D.M.R.D.	-Do-	Member
4.	Dr. Anil Grover, M.B.B.S, M.D.	-Do-	Member
5.	Dr. Rajneesh Aggarwal, M.B.B.S., D.M.R.D.	-Do-	Member
6.	Dr. Gaurav Mathur, Consultant	-Do-	Member
7.	Dr. Patwinder Bedi, Consultant	-Do-	Member
8.	Dr. Veerpal Nathoo, Surgeon	Sing's Dental Hospital (On panel C.G.H.S, govt. of India)	Member
9.	Dr. Rachna, BDS, MIDA	-Do-	Member
10.	Dr. Anamika Singh, B.D.S., M.I.D.A.	-Do-	Member
11.	Dr. Ritu, Faculty	-Do-	Member
12.	Dr. Madhavi Raj, Faculty	-Do-	Member

13.	PoojaRana , Faculty	-Do-	Member
14.	Dr. Priyanka , Faculty	-Do-	Member
15.	Dr. NishaGulia , Faculty	Govt. General Hospital, Bahadurgarh, HR	Member
16.	Dr. Sumit Nigam , BPT, Director	Dynamic Physiotherapy Services, 5495, 2 nd Floor ShorakothiPaharganj New Delhi- 110055	Member
17.	Dr. Sonia , BPT	-Do-	Member
18.	Dr. Rohit , MPT	-Do-	Member
19.	Dr. RashmiLohia , BPT	-Do-	Member
20.	Dr. S.K. Yadav , B.P.T., M.P.T. (Ortho), M.I.A.P, D.C.P	-Do-	Member
21.	Dr. SushantaKapoor , B.D.S.	Kapoor Dental Care, C-18, Model town-III, Delhi-110009	Member
22.	Kirti Sharma , Faculty	National Industrial Training Centre, Dwarka, New Delhi	Member
23.	Mukta Singh , Faculty	-Do-	Member
24.	GeetaDeswal , Faculty	-Do-	Member
25.	Preeti Singh , Faculty	-Do-	Member
26.	Akash Kumar , Faculty	-Do-	Member
27.	Bhawna , Instructor	-Do-	Member
28.	Dr. Urvashi Jain , M.D.	-Do-	Member
29.	Ramesh Kumar Garg , M.B.B.S, M.D.	-Do-	Member
30.	Dr. P.K. Anand , Faculty	-Do-	Member
31.	AmitSethi , Consultant	-Do-	Member
32.	Major Kalyan Bose	Aelis Enterprise Learning & Implementation Solutions Pvt. Ltd. , Kolkata	Chairman & Director- Aelis
33.	Dr. Ashok Kumar Khandelwal , M.B.B.S, PG Diploma in Hospital Administration	Medical Director-Anandaloke Multi Speciality Hospital, Kolkata	Subject Expert
34.	Dr. Ujjal Das , M.B.B.S,M.D, FCCP(Lond), MYCP (USA),CME (RCP,UK)	Honorary Director, Niramoy Kendra, SarsunaSatelite Township, Kolkata- 61	Subject Expert
35.	Dr. RekhaKhandelwal - M.B.B.S	Medical Officer-B.S.F, STC, Salugara	Subject Expert

36.	Dr. DebabratoLaha- M.B.B.S,M.S	Medical Officer In Charge of AELIS Healthcare Unit at PVUNL Patratu, Jharkahnd	Subject Expert
37.	SagarikaGhosh	Aelis Enterprise Learning & Implementation Solutions Pvt. Ltd. , Kolkata	COO-Aelis
38.	P.K. Bairagi, T.O.	CSTARI, Kolkata	Member
39.	K.V.S. Narayana, T.O.	-Do-	Member

2. BACKGROUND

1.2 Apprenticeship Training Scheme under Apprentice Act 1961

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate(ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are four categories of apprentices namely; **Trade Apprentice, Graduate, Technician and Technician (Vocational) Apprentices.**

Qualifications and period of Apprenticeship training of **Trade Apprentices** vary from trade to trade. The apprenticeship training for trade apprentices consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

1.3 Changes in Industrial Scenario

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

1.4 Reformation

The Apprentices Act, 1961 has been amended and brought into effect from 22nd December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

- Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.
- Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.
- Scope has been extended also to non-engineering occupations.
- Establishments have been permitted to outsource basic training in an institute of their choice.
- The burden of compliance on industry has been reduced significantly.

3. RATIONALE

[Need for Apprenticeship in Health Sanitary Inspectortrade]

Individual health and hygiene is dependent largely on adequate availability of drinking water and proper sanitation. There is, therefore, a direct relationship between water, sanitation and health. Consumption of unsafe drinking water, improper disposal of human excreta, improper high infant mortality rate is also attributed largely to poor sanitation. Proper sanitation is important not only from the general health point of view but it has a vital role to play in our individual and social life too. Sanitation is one of the basic amenities people must have as it has a direct link to food hygiene. Good sanitation practices prevent contamination of water and soil, and thereby, prevent diseases.

The practice of public health has been dynamic in India, and has witnessed many hurdles in its attempt to affect the lives of the people of this country. Since independence, major public health problems like malaria, tuberculosis, leprosy, high maternal and child mortality and lately, human immunodeficiency virus (HIV) have been addressed through a concerted action of the government.

4. JOB ROLES: REFERENCE NCO

Brief description of Job roles:

Sanitary Inspector; Health Assistant takes measures to maintain and improve standard of public health in specified area. Inspects houses, shops, factories, entertainment places, markets, drains, night soil depots, rubbish depots, latrines, burial and cremation ground, etc., and undertakes public health activities such as disinfections, anti-malarial and antiepidemic measures. Inspects hotels, restaurants, etc. to ensure that food and edibles sold are fit for public consumption. Attends to complaints regarding sanitation. Reports outbreak of infectious diseases to authorities and takes preventive measures. Attends courts for prosecution of persons violating sanitation and public health regulations and performs inoculation work. Controls. May maintain accounts and correspondence, compile figures of births and deaths in his jurisdiction and may investigate causes of death. May be designated as Disinfecting Inspector, Food Inspector etc. according to nature of work performed.

NCO CODE 2015: 3257.0100

5. GENERAL INFORMATION

1. Name of the Trade : Health Sanitary Inspector

2. N.C.O. Code No. : 3257.0100

3. Duration of Apprenticeship Training (Basic Training + Practical Training): 15 Months

3.1 For Fresher's:- Duration of Basic Training: -

Block –I: 3 months

Total duration of Basic Training: 3 months

Duration of Practical Training (On -job Training): -

Block–I: 12 months

Total duration of Practical Training: 12 months

3.2 For ITI Passed: - Duration of Basic Training: - Nil

Duration of Practical Training (On -job Training): 12 months

5. 4. Entry Qualification : Passed 10th Class Examination

Selection of Apprentices : The apprentices will be selected as per Apprenticeship Act amended time to time.

1. Rebate for ITI passed trainees : 3 months rebate in the trade of Health Sanitary Inspector under CTS.

Note: Industry may impart training as per above time schedule, however this is not fixed. The industry may adjust the duration of training considering the fact that all the components under the syllabus must be covered. However the flexibility should be given keeping in view that no safety aspect is compromised and duration of industry training to be remains as 1 year.

6. COURSE STRUCTURE

Training duration details: -

Time (in months)	1-3	4-15
Basic Training	Block – I	-----
Practical Training (On - job training)	----	Block – I

Components of Training 	Duration of Training in Months														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Basic Training Block - I															
Practical Training Block - I															

7. SYLLABUS
7.1 BASIC TRAINING
(BLOCK – I)
DURATION: 03 MONTHS

GENERAL INFORMATION

- | | |
|------------------------------------|---|
| 1) Name of the Trade | :Health Sanitary Inspector |
| 2) Hours of Instruction | : 500 Hrs. |
| 3) Batch size | : 20 |
| 4) Power Norms | : 4 KW |
| 5) Space Norms | : 40.Sq.m. |
| 6) Examination | : The internal assessment will be held oncompletion of the Block. |
| 7) Instructor Qualification | : |

(A) Instructor's /Trainer's Qualifications: Diploma in Sanitary Inspector with 2 years relevant Experience.

OR

NTC/NAC in the trade of Health Sanitary Inspector with 3 years experience in the relevant field.

(B).Desirable Qualification : Preference will be given to Craft Instructor Certificate(CIC)

- 8) **Tools, Equipments& Machinery required** : - As per Annexure – I

7.1 DETAIL SYLLABUS OF BASIC TRAINING

7.1.1 DETAIL SYLLABUS OF PROFESSIONAL SKILLS & PROFESSIONAL KNOWLEDGE

Block –I
Basic Training

Week No.	Professional Skills	Professional Knowledge
1-2	<p>Knowledge of General Safety, Occupational health and hygiene</p> <p>FOOD & NUTRITION</p> <ol style="list-style-type: none"> 1. Classification of public health and importance of food stuffs. 2. Assessment of daily requirement of nutrition. 3. Coding of balanced diet. 4. Assessment of nutritional Status of family. 	<ol style="list-style-type: none"> 1. Science of food. Introduction to Nutrition, Health & Disease. 2. Nutrient: Carbohydrates, Proteins, Vitamins, & Minerals & their functions. 3. Balanced Diet : Definition, factors to be considered co planning - Nutritional requirements of special age Groups. Prescription of diet Menu for Hypertensive persons, Nephritis Patients, Diabetic patients, Heart Patients etc. 4. Nutrition Education:- Malnutrition Low birth Weight (LBW) Causes of LBW Prevention of LBW
3	<p>WATER SANITATION:</p> <ol style="list-style-type: none"> 1. Classification of sources of water. 2. Sanitary inspection of water supply. 3. Collection and dispatch of water sample for chemical, biological, arsenic and bacteriological examination. 4. Purification of water in urban area. 5. Purification of water in rural area. 	<p>1.WATER :</p> <p>WHO's definition of environmental Sanitation. Safe and wholesome water, Sources of water, Various uses of water and its need. Water borne diseases, Conservation source of water, quality of water, public health aspect of very hard water, Steps of disinfection of well. Water supply and storage system at the community and domestic level.</p>
4	<p>AIR SANITATION:</p> <ol style="list-style-type: none"> 1. Demonstration of an air-conditioning plant for thermal comfort. <p>REFUSE DISPOSAL :</p> <ol style="list-style-type: none"> 1. Method of waste disposal. 2. Demonstration and operation of compost pits, 	<p>2. AIR</p> <p>Concepts and importance of adequate ventilation. Types of ventilation. Natural ventilation. Mechanical ventilation. Indicators of air pollution. Process air purification and disinfection. Green</p>

	sanitary landfilling and insanitation process.	house effect, types of ventilation, thermal comfort, air temperature humidity, radiation, evaporation and their measurements.
5	NIGHT SOIL DISPOSAL : Construction and maintenance of sanitary latrines. <ul style="list-style-type: none"> - Soakage pit. - Sanitary latrine. - RCA latrine - Septic tank latrine - Sewage treatment plant. - Sulabh Sauchalaya 	3. SOLID WASTE DISPOSAL Source of generation, storage and collection. Sanitary method of disposal of solid waste. Classification of solid waste in the community.
6	SEWAGE DISPOSAL : <ol style="list-style-type: none"> 1. Demonstration of sewage treatment plant. 2. Inspection of flushing tank, soil plant, traps, man holes, inspection chambers and maintenance of gully trap. 3. Collection of sewage sample for chemical and bacteriological analysis and interpretation of reports. 4. Comparisons of monthly reports. 5. Organization of cleaning, minor engineering and oil operation of the sewage system. 6. Testing water samples after complete treatment of waste water. 	4. LIQUID WASTE DISPOSAL Hygienic method of disposal of liquid waste. Health hazard related to accumulation of liquid waste or insanitary drainage system. Construction and maintenance of sanitary sewerage system. Use of different types of traps, pollution of water sources from sewerage and its disinfection. 5. NIGHT SOIL DISPOSAL Sewage is liquid waste containing human excreta. Fly nuisance Soil pollution. Water pollution Food contamination, Faucal - borne disease due to insanitary disposal. What is sewage. Why sewage purification is required. Sewer appurtenances, house drain. Street sewers or municipal sewers. Sewage forming land treatment
7	CONTROL OF BIOLOGICAL ENVIRONMENT :- <ol style="list-style-type: none"> 1. Identification and use of insecticides, pesticides and disinfection. 2. Application of Techniques of sterilization and disinfection of various articles. 3. Identification of different parts of spraying equipments. 4. Operation and maintenance of spraying equipment. 5. Identification of sterilizers. 	Study of insecticides, pesticides and disinfections. Sterilization & disinfections of different articles. Various spraying equipments.
8	OCCUPATIONAL HEALTH <ol style="list-style-type: none"> 1. Inspection of trade premises. 2. Visit to a factory for survey of sanitation problems of the workplace. 	OCCUPATIONAL HEALTH Industrial hygiene- workers health protection- occupational risk factors and safety measures- control of dust and other

	<p>3. Identification of danger zones and adequacy of safety arrangements.</p> <p>4. Using Personal Protective Equipments.</p>	<p>hazardous substance- safety measure for occupational risk factor-legislative provisions- benefits to employees</p> <p><i>Incorporation of Municipal Rules and Regulation in Sanitation.</i></p>
9-10	<p>1. Prepare a report on general survey of health care in different area.</p> <p>2. Preparing immunization schedule.</p> <p>3. Prepare Immunization Conduction, feedback data.</p> <p>4. Participation in various programmes.</p> <p>5. Conducting programmes on personal hygiene in different area.</p> <p>6. Arranging First aid treatment in case of emergency.</p>	<p>1. COMMUNICABLE DISEASES: Introduction, Disease transmitted through air- Diseases transmitted by air- Diseases transmitted by contact- Diseases transmitted by insects and other diseases. General measures for prevention & control of communicable diseases.</p> <p>2. IMMUNITY & IMMUNISATION: Purpose, types & effects. National immunization schedule for prevention of major communicable diseases - BCG, DTP, polio. Measles & Typhoid Vaccines.</p> <p>3. DISINFECTION&STERILISATION Effective disinfection by liquid Chemical agents like Halogen, Potassium per magnate solution etc. Solid chemical agent- Bleaching -Bleaching powder, Lime etc.</p> <p>4.NON-COMMUNICABLE DIESEASES: Introduction- Incidence and prevalence: Diagnosis & prevention.</p>
11-12	<p>PUBLIC HEALTH ACTS Collection and dispatch of foodsamples for analysis andpreparation of papers for legalproceeding. Performance of simplehousehold tests toidentify adulteration inMilk, ghee, oil, sugar, tea, etc.Acquaintance with theregistration, reporting anddocumentation process forimplementation of different acts.</p>	<p>DEMOGRAPHY AND HEALTH SURVEY a) Registration of birth, death andmortality b) Immunization process</p> <p>PUBLIC HEALTH ACTS :- Indian Epidemic Diseases Act. Purification of Air And Water Pollution Acts. Prevention of Food adulteration Act. Birth and Death Registration Act. N.T.P ACT. Suppression of immoral Traffic Act (SITA). Municipal and local body Acts related to housing, sanitation etc. Factory Act and Employer's State Insurance Act.</p>
13	Revision & Examination	

7.1.2 EMPLOYABILITY SKILLS

GENERAL INFORMATION

- 1) **Name of the subject** : **EMPLOYABILITY SKILLS**
- 2) **Applicability** : **ATS- Mandatory for fresher only**
- 3) **Hours of Instruction** : **110 Hrs.**
- 4) **Examination** : **The examination will be held at the end of two years Training by NCVT.**
- 5) **Instructor Qualification** :

i) MBA/BBA with two years experience or graduate in sociology/social welfare/Economics with two years experience and trained in Employability skill from DGET Institute.

And

Must have studied in English/Communication Skill and Basic Computer at 12th /diploma level

OR

ii) Existing Social Study Instructor duly trained in Employability Skill from DGET Institute.

7.1.2.1 SYLLABUS OF EMPLOYABILITY SKILLS

A. Block – I Basic Training

Topic No.	Topic	Duration (in hours)
	English Literacy	15
1	Pronunciation : Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)	
2	Functional Grammar Transformation of sentences, Voice change, Change of tense, Spellings.	
3	Reading Reading and understanding simple sentences about self, work and environment	
4	Writing Construction of simple sentences Writing simple English	
5	Speaking / Spoken English Speaking with preparation on self, on family, on friends/ classmates, on know, picture reading gain confidence through role-playing and discussions on current happening job description, asking about someone's job habitual actions. Cardinal (fundamental) numbers ordinal numbers. Taking messages, passing messages on and filling in message forms Greeting and introductions office hospitality, Resumes or curriculum vita essential parts, letters of application reference to previous communication.	
	I.T. Literacy	15
1	Basics of Computer Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer.	
2	Computer Operating System Basics of Operating System, WINDOWS, The user interface of Windows OS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc, Use of Common applications.	
3	Word processing and Worksheet Basic operating of Word Processing, Creating, opening and closing Documents, use of shortcuts, Creating and Editing of Text, Formatting the Text, Insertion & creation of Tables. Printing document. Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and	

	functions, Printing of simple excel sheets	
4.	<p>Computer Networking and INTERNET</p> <p>Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks),</p> <p>Meaning of World Wide Web (WWW), Web Browser, Web Site, Web page and Search Engines. Accessing the Internet using Web Browser, Downloading and Printing Web Pages, Opening an email account and use of email. Social media sites and its implication.</p> <p>Information Security and antivirus tools, Do's and Don'ts in Information Security, Awareness of IT - ACT, types of cyber crimes.</p>	
	Communication Skill	25
1	<p>Introduction to Communication Skills</p> <p>Communication and its importance</p> <p>Principles of Effective communication</p> <p>Types of communication - verbal, non verbal, written, email, talking on phone.</p> <p>Non verbal communication -characteristics, components-Para-language</p> <p>Body - language</p> <p>Barriers to communication and dealing with barriers.</p> <p>Handling nervousness/ discomfort.</p> <p>Case study/Exercise</p>	
2	<p>Listening Skills</p> <p>Listening-hearing and listening, effective listening, barriers to effective listening guidelines for effective listening.</p> <p>Triple- A Listening - Attitude, Attention & Adjustment.</p> <p>Active Listening Skills.</p>	
3	<p>Motivational Training</p> <p>Characteristics Essential to Achieving Success</p> <p>The Power of Positive Attitude</p> <p>Self awareness</p> <p>Importance of Commitment</p> <p>Ethics and Values</p> <p>Ways to Motivate Oneself</p> <p>Personal Goal setting and Employability Planning.</p> <p>Case study/Exercise</p>	
4	<p>Facing Interviews</p> <p>Manners, Etiquettes, Dress code for an interview</p> <p>Do's & Don'ts for an interview</p>	

5	Behavioral Skills Organizational Behavior Problem Solving Confidence Building Attitude Decision making Case study/Exercise	
	Entrepreneurship skill	15
1	Concept of Entrepreneurship Entrepreneurship- Entrepreneurship - Enterprises:-Conceptual issue Entrepreneurship vs. Management, Entrepreneurial motivation. Performance & Record, Role & Function of entrepreneurs in relation to the enterprise & relation to the economy, Source of business ideas, Entrepreneurial opportunities, The process of setting up a business.	
2	Project Preparation & Marketing analysis Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept & application of Product Life Cycle (PLC), Sales & distribution Management. Different Between Small Scale & Large Scale Business, Market Survey, Method of marketing, Publicity and advertisement, Marketing Mix.	
3	Institutions Support Preparation of Project. Role of Various Schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to familiarizes with the Policies /Programmes& procedure & the available scheme.	
4	Investment Procurement Project formation, Feasibility, Legal formalities i.e., Shop Act, Estimation & Costing, Investment procedure - Loan procurement - Banking Processes.	
	Productivity	10
1	Productivity Definition, Necessity, Meaning of GDP.	
2	Affecting Factors Skills, Working Aids, Automation, Environment, Motivation How improves or slows down.	
3	Comparison with developed countries Comparative productivity in developed countries (viz. Germany, Japan and Australia) in selected industries e.g. Manufacturing, Steel, Mining, Construction etc. Living standards of those countries, wages.	
4	Personal Finance Management Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance.	
	Occupational Safety, Health & Environment Education	15

1	Safety & Health Introduction to Occupational Safety and Health importance of safety and health at workplace.	
2	Occupational Hazards Basic Hazards, Chemical Hazards, Vibro-acoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention.	
3	Accident & safety Basic principles for protective equipment. Accident Prevention techniques - control of accidents and safety measures.	
4	First Aid Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person	
5	Basic Provisions Idea of basic provision of safety, health, welfare under legislation of India.	
6	Ecosystem Introduction to Environment. Relationship between Society and Environment, Ecosystem and Factors causing imbalance.	
7	Pollution Pollution and pollutants including liquid, gaseous, solid and hazardous waste.	
8	Energy Conservation Conservation of Energy, re-use and recycle.	
9	Global warming Global warming, climate change and Ozone layer depletion.	
10	Ground Water Hydrological cycle, ground and surface water, Conservation and Harvesting of water	
11	Environment Right attitude towards environment, Maintenance of in -house environment	
	Labour Welfare Legislation	5
1	Welfare Acts Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund Act, The Workmen's compensation Act.	
	Quality Tools	10
1	Quality Consciousness : Meaning of quality, Quality Characteristic	
2	Quality Circles : Definition, Advantage of small group activity, objectives of quality Circle, Roles and function of Quality Circles in Organization, Operation of Quality circle. Approaches to starting Quality Circles, Steps for continuation Quality	

	Circles.	
3	Quality Management System : Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.	
4	House Keeping : Purpose of Housekeeping, Practice of good Housekeeping.	
5	Quality Tools Basic quality tools with a few examples	

7.2 PRACTICAL TRAINING (ON-JOB TRAINING) (BLOCK – I)

DURATION: 12 MONTHS

GENERAL INFORMATION

- 1) **Name of the Trade** : **Health Sanitary Inspector**
- 2) **Batch size** : a) Apprentice selection as per Apprenticeship Guidelines
b) Maximum 20 candidates
- 3) **Examination** : i) The internal assessment will be held on completion of the block
ii) NCVT exam will be conducted at the end of Apprenticeship Training
- 4) **Instructor Qualification** :

(A) **Instructor's /Trainer's Qualifications:** Diploma in Sanitary Inspector with 2 years relevant Experience.

OR

NTC/NAC in the trade of Health Sanitary Inspector with 3 years experience in the relevant field.

(B). **Desirable Qualification** : Preference will be given to Craft Instructor Certificate (CIC)

- 5) **Infrastructure for On-Job Training** : - As per Annexure – II

7.2.1 BROAD SKILL COMPONENT TO BE COVERED DURING ON-JOB TRAINING

BLOCK – I

1. Safety and best practices (5S, KAIZEN etc.)
2. Record keeping and documentation

DURATION: 12MONTHS (52WEEKS)	
SL NO	LIST OF PRACTICAL SKILLS TO BE COVERED DURING ON JOB TRAINING
1.	Instruction and safety precaution as applicable to the trade
2.	Classification of public health Importance of foodstuffs.
3.	Assessment of daily requirement of nutrition. Therapeutic nutrition.
4.	Classification of sources of water. Modern methods of water purification
5.	Air sanitation, comfort zone and air pollution, Noise and its impact on health..
6.	Method of waste disposal, Night disposal, sewage disposal,.
7.	Various policies and law regarding industry, hygiene, environment, Biomedical.
8.	Participation in various programmers, Arranging First aid treatment in case of emergency.
9.	Collection and dispatch of food samples for analysis and preparation of Paper for legal Proceeding.
10.	Visit to different types of health organization and acquaintance with their system.
11.	Concept of behavior change communication, various mode of communication, Impact of communication.
12.	Dressing of wounds, Bandaging, management of bone injuries with splints, slings.
13.	Transportation of injured and unconscious case and their managements.
14.	Assessment of desirable and organize health education program to bring about Desirable change.
15.	Control of Biological Environment.
16.	Prepare a report on general survey of health, Basic epidemiology.
17.	Mode of disease transmission, Natural history of disease, immunity and Immunization,

	Treatment and prevention.
18.	Epidemics and control of Epidemics and knowledge about WHO.
19.	Health information and basic statistics, Demography-Family planning. Related Statistics.
20.	Preparation of paper for legal proceeding.
21.	Preparation of simple house hold test to identify adulteration in milk, ghee, Oil, sugar, tea etc.
22.	Study and maintenance of record and reports to public health organization.
23.	Diagnosis and treatment of minor alignment.

8. ASSESSMENT STANDARD

8.1 Assessment Guideline:

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration to be given while assessing for team work, avoidance/reduction of scrape/wastage and disposal of scarp/wastage as per procedure, behavioral attitude and regularity in training.

The following marking pattern to be adopted while assessing:

a) Weightage in the range of 60-75% to be allotted during assessment under following performance level:

For this grade, the candidate with occasional guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of an acceptable standard of craftsmanship.

In this work there is evidence of:

- Good skill levels in the use of hand tools, machine tools and workshop equipment
- Many tolerances while undertaking different work are in line with those demanded by the component/job.
- A fairly good level of neatness and consistency in the finish
- Occasional support in completing the project/job.

b) Weightage in the range of above 75%- 90% to be allotted during assessment under following performance level:

For this grade, the candidate, with little guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of a reasonable standard of craftsmanship.

In this work there is evidence of:

- Good skill levels in the use of hand tools, machine tools and workshop equipment
- The majority of tolerances while undertaking different work are in line with those demanded by the component/job.
- A good level of neatness and consistency in the finish
- Little support in completing the project/job

c) Weightage in the range of above 90% to be allotted during assessment under following performance level:

For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.

In this work there is evidence of:

- High skill levels in the use of hand tools, machine tools and workshop equipment
- Tolerances while undertaking different work being substantially in line with those demanded by the component/job.
- A high level of neatness and consistency in the finish.
- Minimal or no support in completing the project

**8.2 FINAL ASSESSMENT- ALL INDIA TRADE TEST
(SUMMATIVEASSESSMENT)**

SUBJECTS	Marks	Sessional Marks	Full Marks	Pass Marks	Duration of Exam.
Practical	300	100	400	240	08 hrs.
Trade Theory	100	20	120	48	3 hrs.
Employability Skill	50		50	17	2 hrs.
Grand Total	450	120	570	-	

9. FURTHER LEARNING PATHWAYS

Employment opportunities:

On successful completion of this course, the candidates shall be gainfully employed in the following industries:

1. Government and Private sectors industries/Municipality Corporation
2. Hospitals
3. Pathology Lab
4. Diagnostic Centres
5. Forensic Lab

TOOLS & EQUIPMENT FOR BASIC TRAINING
INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL
KNOWLEDGE

TRADE: HEALTH SANITARY INSPECTOR

LIST OF TOOLS & EQUIPMENTS FOR 20 APPRENTICES

SL NO	Name of the item	Qty.
A. AUDIO-VISUAL AIDS.		
1	LCD/LED Projector	1 no
2	Personnel Computer with latest configuration	1 no
B. Working Models For		
1	Ventilation system	1 no
2	Sewage system and Treatment plant	1 no
3	Water purification plant	1 no
4	Sanitary plant	1 no
5	Waste disposal plant	1 no
C. General outfits		
1	Refrigerator	1 no
2	Autoclave	1 no
3	Sterilizer	1 no
4	TDS meter	1 no
5	Thermometer	1 no
6	Laboratory Microscope	1 no
7	First Aid Kit.	1 no
8	Needles and Syringes	AS REQUIRED

HEALTH EDUCATION CHARTS

Standard charts related to Health and Sanitation - Assorted.

Books/Manuals on Air and Water Pollution Acts, Epidemic diseases Act, Public and Health Acts and Municipal Acts, Factory Acts and State Insurance Act.

INFRASTRUCTURE FOR ON-JOB TRAINING

TRADE: HEALTH SANITARY INSPECTOR

For Batch of 20 APPRENTICES

Actual training will depend on the existing facilities available in the establishments. However, the industry should ensure that the broad skills defined against On-Job Training part (i.e.12 months) are imparted. In case of any short fall the concern industry may impart the training in cluster mode/ any other industry/ at ITI.

GUIDELINES FOR INSTRUCTORS AND PAPER SETTERS

1. Due care to be taken for proper & inclusive delivery among the batch. Some of the following some method of delivery may be adopted:

- A) LECTURE
- B) LESSON
- C) DEMONSTRATION
- D) PRACTICE
- E) GROUP DISCUSSION
- F) DISCUSSION WITH PEER GROUP
- G) PROJECT WORK
- H) INDUSTRIAL VISIT

2. Maximum utilization of latest form of training viz., audio visual aids, integration of IT, etc. may be adopted.

3. The total hours to be devoted against each topic may be decided with due diligence to safety & with prioritizing transfer of required skills.