Theory 1.1

# **Principles of Teaching Broad Vocational Scenerio & Traits of Instructor**

# Overview of vocational scenario in india

Objectives: At the end of this lesson you shall be able to

- state the importance of vocational training in India
- brief the governing agencies of vocational training in India
- describe the various schemes of NCVT
- brief the various skill implementing agencies.

The term "vocational" means providing skill and education that prepare for a job, or training of skilled carftsman.

The skilled craftsman has been defined by the planning commission thus, a worker who belongs to an occupation generally accepted as skilled and found in several industries.

The government of india started the war technicians training scheme in the year 1940 at koni bilaspur now it is in chhattisgarh state long before the new factory system of manufacturing took root on indian.

The war technician scheme was followed by the technical training scheme in 1946. All these schemes were modified and merges into a comprehensive scheme known as vocational training scheme, designed for training demobilised service personnel, but was woundup in july 1950.

After the completion of ex-servicemen's training schemes. The training of civilians was started on a national basic by establishing industrial training institutes (ITIs) by the government of inida in 1950. Under the head of directorate general of employment and training (DGET) in the ministry of labour and welfare.

Now its named as director general of training (DGT) under the ministry of skill development enterpreneurship

# Directorate general of training (DGT)

Directorate general of training (DGT) in ministry of skill development & entrepreneurship is an apex organization for development and coordination of the vocational training including women's vocational training of the employable youth in the country and to provide skilled manpower to the economy. Two directorate general of employment & training (DGE&T) working under deputy director general (Training) & Deputy director genral (apprenticeship training) along with their support systems were transferred to ministry of skill development & entrepreneurship.

# Major roles of DGT include

- Policy Formulation on Vocational Training
- Laying Down Standards

- Revise Course Curricula
- **Granting Affiliation**
- Trade testing
- Certification

#### **Functions**

DGT affiliated institutions offers a wide range of training courses catering to the needs of different segments in the labour market. Courses are available for school leaver, ITI pass outs, ITI instructors, industrial workers, technicians, junior and middle level executives, supervisors/foremen, women, physically disabled persons and SC/STs. It also conducts training oriented research and devlops instructional media packages for the use of trainees and instructors etc.

DGT acts a secretariat and implementing arm of national council for vocational training.

#### National council for vocational training (NCVT)

National councill for vocational training (NCVT) a tripartite body was set up through a resolution by ministry of labour in 1956, to advice on issues relating to "Vocational training" including craftsman training scheme such as designing of curricula, maintaining quality standards, deciding norms for affiliation, granting affiliation to institutes, trade testing and certification.

After being transferred to MSDE, NCVT has been partially modified and re-constituted under the chairmanship of Hon'ble minister of state (IC). Skill development and entrepreneurship, w.e.f. 13/05/2015.

The council consists of representatives of central ministries, state governments, employers organisations, employees organisations, secretarial support to NCVT is provided by DGT. Professtonal learned bodies. Experts and representatives of SC/ST.

## The major functions of the NCVT are:

- Establish and award national trade certificates in engineering trades
- Prescribe standards in respect of syllabi, equipment, and scale of space, duration of courses and methods of training:

- Arrange trade tests in various trade courses and lay down standards of proficiency required for a pass in the trade test
- Arrange for ad-hoc or periodical inspections of training instituitions in the country
- Lay down condicions & to recogonize training institutions run by government or by private agencies for purposes of the grant of national trade certificates;
- Prescribe qualification for the technical staff of training institutions;
- Prescribe the standards and conditions of eligibility for the award of national trade certificates
- Recommend the provision of additional training facilities wherever necessary and render such assistance in the setting up of additional training instituitons or in the organisation of additional training programmes as may be possible.

Similar councils known as State Council for Vocational training (SCVT) are constituted to advice respective state government on issues relating to skill development. These SCVTs have been advised by NCVT to be registered as societies under society registration ACT 1861.

**NCVT MIS portal:** Directorate general of training has launched the NCVT MIS portal to access online information related ITIs including:

- Information of all affiliated government & private industrial training institutes (ITIs).
- Candidates seeking skilling training/apprenticeship training
- Employers seeking skilled workers
- Citizen information & feed back
- ITI & approved courses
- Enrolment transparency
- Training/acadamic schedule
- Visibility on self -profile and training progress
- On-line access to e-mark sheet & e-certificates
- · E-mail & SMS alerts
- Placement faciliation
- STAR grading of ITIs

More details related to NCVT - MIS portal is available at www.ncvtmis.gov.in

Regional Directorate of Apprenticeship training (RDATs) are responsible for monitoring the implementation of the apprenticeship act for trade apprentices in central government undertaking/departments

At present, there are 6 RDATs which are located at Chennai (Tamilnadu) Faridabad (Haryana), Hyderabad (Andhra pradesh), Kanpur (uttar pradesh), Kolkata (west bengal), and Mumbai (Maharashtra).

## National Skill Development Agency (NSDA)

The National Skill Development Agency (NSDA) is a quality assurance and policy research body of Ministry of Skill Development and Entrepreneruship in the skilling ecosystem. The National Skill Development Agency was notified in june 2013 by subsuming the prime minister's National Council on Skill Development, the National Skill Development Coordination Board and the office of the adviser to PM on skill devlopment. NSDA is an autonomous body registered as a society under the society's registration act 1860. Ministry of Skill Devlopment and Entrepreneurship is the nodal ministry for the NSDA.

As per the gazette notification dated 6th june, 2013 the functions assigned to the NSDA include:

- Take all possible steps to meet skilling targets as envisaged in the 12<sup>th</sup> five year plan and beyond
- Ensure that the skilling needs of the disadvantage and the marginalized groups like SCs, STs, OBCs, miniorties, women and differently able person are taken care of
- Nodal agency for state development missions
- Coordinate and harmonize the approach to skill development among various central ministries and departments, state governments. NSDC and private players.
- · Anchor and operationalize thhe NSQF.
- Raise extra-budgetary resosurces for skill development
- Evaluate existing skill development schemes to assess their efficacy, and to suggest corrective action
- Create and maintain a national data base related to skill devlopement including devlopment of a dynamic Labour Market Information System (LMIS)
- Affirmative action for advocacy
- Discharge any other function entrusted by the government

# Additional functions of NSDA as per national policy for skill devlopment & entrepreneurship, 2015 are as under

- To establish and operationalise a Quality Assurance Framework (QAF) embedded in NSQF to improve consistency of outcomes in the skills landscape, which include laying down a framwork for training. assessment and certifiction processes and agencies in the country.
- Establishment of a National Skill Research Division (NSRD) housed under NSDA which will serve as a think tank for inputs on research related to skill development and evlove as a credible research organization in skill development at the national level.

It aims to serve as an authentic, qualitative and accessible think tank for research related to skill development in India.

- Develop national protocols for registration and accreditation of private training providers.
- Promote use of skill india logo on skill certificates by SSCs/agencies adhering to the QA framework.

## National Skills Qualifications Framework (NSQF)

The National Skills Qualifications Framework (NSQF) is a compentency - based framework that organizes all qualifications accroding to a series of levels of knowledge, skills and aptitude. These levels, graded from one to ten, are defined in terms of learning outcomes which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning.

NSQF in india was notified on 27<sup>th</sup> December 2013. All other frameworks, including the NVEQF (National Vocational Educational Qualification Framework) released by the ministry of HRD, have been superseded by the NSQF. Government funding is also expected to be on preferntial basis for NSQF compliant training/educational programmes/courses.

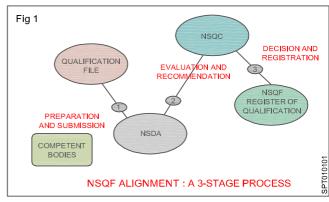
The NSQF would facilitate a paradigm shift from education focused on inputs to an outcomes/competency based education - which would help in the recognition of prior learning, and simultaneously enable the alignment of the Indian qualifications with international ones.

It is a competency based framework that organizes qualifications into ten levels, with the entry level being 1, and the highest level being 10.Each of these levels is characterised by the following categories of competencies.

- Professional knowledge what the person must know at that level
- Professional skills what the person shoould be able to do at that level
- Core skills which include soft and interpersonal skills
- Responsibility the degree of supervision that needs to be exercised over the person while doing the job, or the degree of supervision that person is capable of exercising over others.

# **Process of NSQF alignment**

Awarding bodies submit their qualifications/courses to NSDA in order to seek approval from NSQC for NSQF alignment. The awarding bodies submit their information in a template called qualification file. The qualification file is the means by which awarding bodies present evidence to the National Skills Qualification Committee that their qualifications are NSQF compliant.



A qualification file captures all necessary information to establish NSQF compliance for a qulification. The qulification file is a folder which contains.

- A summary sheet in which information about the qualification must be entered.
- A structured document in which information showing that the qualification meets the NSQF requirements must be entered.
- Supporting evidence attached to the qualification File
   i.e. already existing documents which are included to back up the information in the completed file.

#### **Qualification file template**

#### Qualification

- Title enter the full title of the qualification as it well appear on certificates title should be as clear and informative as possible.
- Any identification number which has been formally allocated to the qulification by the certificating body should be included here.

#### Nature and purpose of the qualification

- Indicate the nature of the qulification. For example, a qualification pack (QP) a trade certificates aligned to QP, a diploma which incorporates National Occupational Standers (NOS), or a Qualification which is not directly linked to any QP or NOS.
- Indicate the main purpose of the qualification and the target learners - eg designed to get people in to work, a qualification intended for people already in work, a qualification to allow people to add new skills based on technological change.

# **Craftsmen Training scheme (CTS)**

The Directorate General of Training (DGT) (erstwhile DGE &T, Ministry of Labour and Employment) in the Ministry of Skill Development and Entrepreneurship, Government of India initiated Craftsmen Training Scheme (CTS) in 1950 by establishing about 50 Industrial Training Institutes (ITIs) for imparting skills in various vocational trades to meet the skilled manpower requirements for technology and industrial growth of the country. The

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second major phase of increase in ITIs came with the oil-boom in West-Asia and export of skilled manpower to that region from India. Several new private ITIs were established in 1980's in southern states mostly in Kerala, Karnataka and Andhra Pradesh, etc. from where trained craftsmen found placement mainly in Gulf countries. In 1980, there were 830 ITIs and the number rose to 1900 ITIs in 1987. During 1990's, the growth of ITIs had been steep and presently there are over 10,750 ITIs (2275 in Govt. & 8475 in Private Sector) having a total seating capacity of 15.22 lakhs.

Under the constitution of India, Vocational training is the concurrent subject of both Central and State Governments. The development of training schemes at National level, evolution of policy, laying of training standards, norms, conducting of examinations, certification, etc. are the responsibilities of the Central Government, whereas the implementation of the training schemes largely rests with the State Govts. /UT Administrators. The Central Govt. is advised by the National Council of Vocational Training (NCVT), a tripartite body having representatives from employers, workers and Central/State Governments. Similar Councils termed as State Councils for Vocational Training are constituted for the same purpose by the respective State Governments at state levels.

#### Semester system

Structure of training programme has been converted into semester system in place of long term, W.e.f August, 2013

The courses have been designed to impart basic skills and knowledge in the trades so as to prepare trainee for employment as a semi-skilled worker or for selfemployment.

As 70% of the training period is allotted to practical training and the rest to subjects relating to Trade Theory, Workshop Calculation & Science, Engineering Drawing, therefore, emphasis is on skill building.

For over all personality development of trainees, a course on "Employability Skill" has been introduced from session July, 2012. The subject cover topics introduced on IT Literacy, English Literacy, Occupational Safety and Health, Quality tools, Communication Skills, Entrepreneurship Skills, Environment Educationand Labour Welfare legislation.

#### An overview of appreticeship training scheme

# **Background**

Development of human resource is crucial for the industrial development of any nation. Up-gradation of skills is an important component of Human Resource Development. Training imparted in institutions alone is not sufficient for acquisition of skills and needs to be supplemented by training at the workplace. The

Apprentices. Act, 1961 was enacted with the prime objective to utilize fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry. Initially, the Act covered the apprenticeship training for the trade Apprentices and subsequently amended in 1973, 1986 and 2014 to bring the Graduates, Technician, Technician (Vocational) and Optional Trade Apprentices respectively under its purview.

#### **Objectives**

Apprentices Act, 1961 was enacted with the following objectives:-

- To regulate the programme of training of apprentices in the industry so as to conform to the syllabi, period of training etc. as laid down by the Central Apprenticeship Council; and
- To utilise fully the facilities available in industry for imparting pratical taining with a view to meeting the requirements of skilled manpower for industry.

# Monitoring of the implementation of the act

- Directorate General of Training under Ministry of skill Development and Entrepreneurship monitors the implementation of the Apprentices Act in respect of Trade Apprentices in the Central Government Undertakings & Departments and establishments operating business 4 or more states through six Regional Directorates of Appreticeship Training (RDAT) located at Chennai, Faridabad, Hyderabad, Kanpur, Kolkata, & Mumbai.
- State Apprenticeship Advisers are resposible for implementation of the Act in respect of Trade Apprentices in State Government undertakings/ deparetments and private establishments.
- Department of Education in the Ministry of Human Resource Development is responsible for monitoring the implementation of the act in respect of Graduate, Technician & Technician (vocational) Apprentices. This monitoring is done through four Boards of Apprenticeship Training located at Chennai, Kanpur, Kolkata and Mumbai.

# **Central Apprenticeship Council**

- It is an apex statutory body. It is tripartite by constituion with members from Govenement both Central and States/UTs, Emplyers etc.
- It advises the Government on laying down of policies and prescribing norms & standards in respect of Apprenticeship Training.

# Fields of apprenticeship training

Apprenticeship training can be provided to apprentices both in designated and optional trades.

- **Designated trade:** Designated trade means any trade or occupation as notified by the Government.
- Optional trade: Optional trade means any trade or occupation decided by an emplyer.

## Categories of apprentices

There are five categories of apprentices:

- · Trade apprentices
- Graduate apprentices
- · Technician apprentices
- Technician (Vocational) apprentices
- Optional trade apprentices

## Coverage

- It is obligatory on the part of employers having manpower strength 40 or more and having requisite training infrastructure as laid down in the Act, to engage apprentices.
- Employer shall engage of apprentices in a band of 2.5% to 10% of total manpower strength of the establishments including contractual staff.
- The total engagements of apprentices in the band with of 2.5 % to 10% include all categories of apprentices engaged by establishment.
- The establishments/Employers can decide the categories of apprentices and trade (s) in which the apprentices to be engaged depending upon the facility available with them for imparting on-the-job training/ practical training at his workplace.

#### **Stipend**

The minimum rate of stipend per month payable to trade apprentices is as follows:

• The expenditure on stipend for trade apprentices is borne by the employers.

Stipend (year wise)	
Year	Minimum Rate of stipend
First Year	70% of minimum wage of semi- skilled workers notified by the respective State or Union territory.
Second year	80% of minimum wage of semi- skilled workers notified by the respective State or Union territory.
Third & Fourth year	90% of minimum wage of semi- skilled workers notified by the re- spective State or Union territory.

- The rates of stipend for Graduate, Technician & (Vocational) apprentices are Rs. 4984 p.m., Rs. 3542 p.m., and Rs. 2758 p.m. respectively. (with effect from 19th December -2014
- Expenditure on Stipend for the categories of Graduate, Technician & Technician (Vocational) apprentices is shared equally between the employer and the Central Government.

# **Training of Trade Apprentices**

- · Minimum age is 14 years.
- Qualifications vary from Class VIII pass to XII class pass (10+2) system.
- Period of training varies from one year & two years.
- Training comprises Basic Training and practical Training followed by Releated Instructions as per prescribed syllabus for each trade.
- 261 trades in 39 trade groups have been designated.
- Numbers of seats for apprentices are calculated in the band of 2.5% to 10% of the total strength of the workers.
- Every apprentice and employer has to enter into a contract of apprenticeship training, which is registered by the Apprenticeship Advisers.
- Employers and apprentices have to fulfill their obligations under the Act.

# **Testing and certification of Trade Apprentices**

- All india trade tests (AITT) for trade apprentices are conducted by National Council of Vocational Training (NCVT) twice a year (October/November and April/ May).
- National Apprenticeship Certificates (NAC) are awarded to those who pass the AITT.
- NAC is recognized for employement under Govt./ Semi - Government departments/ organizations.

#### **Skill competition of Trade Apprentices**

- With a view to fostering healthy competition among apprentices as well as establishments, skill competition is organized at local, regional & All India levels.
- Skill competition is held for 15 trades namely; Fitter, Machinist, Turner, Welder (Gas & Electric), Electrician, Mechanic (Motor Vehicle), Tool & Die Maker (Die & Moulds), Tool and Die Maker (Press Tool, jigs & Fixture), Instrument Mechanic, Draughtsman (Mechanical), Mechanic Machine Tool Maintenance, Wireman, Mechanic (Diesel), Refrigeration & Air-Conditioning Mechanic and Electronics Mechanic.

# Training of Graduate, Technician And Technician (Vocational Apprentices)

- 163 subject fields have been designated for the category of Graduate & Technician apprentices.
- 137 Subject fields have been designated for the category of Technician (Vocational) apprentices.
- Period of post qualification training for these categories is one year.
- Seats are located based on managerial/supervisory posts and training facilities.
- Training programme is prepared in joint consultation between Apprenticeship Adviser Establishment concerned.
- Certificates are awarded on completion of training by the Deptt. of Education, Ministry of Human resource Development.

# **Craft Instructor Training Scheme (CITS)**

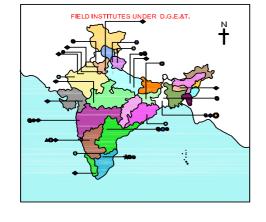
- Training of craft instructors is the responsibility of Directorate General of Training (DGT), Ministry of skill Development and Entrepreneurship (Erstwhile Ministry of Labour & Employment, Directorate General of Employment and Training (DGE &T). The craft instructors' Training Scheme is operational since inception of the Craftsmen Training Scheme. The first craft instructors' Training Institute was established in 1948. Subsequently, 13 more institutes namely, Central Training Institute for instructors (now called as National Skill training Institute (NSTI) at Ludhiana, Kanpur, Howrah, Mumbai, Hyderabad, Bangalore, Calicut, Bhubaneshwar, Jodhpur, Haldwani Dehradun and Jamshedpur were established by DGT.
- Objective of the Craft Instructor Training is to train Instructors in the techniques of transferring hands on skills, in order to train semi skilled / skilled manpower for industry. Structure of training programme is such that comprehensive training both in skill development and training methodology is imparted to the trainees.

- During year 2010 government also allowed setting up
  of the Instructor Training Institute by State/UT
  Governments, companies like sole propriety, private/
  public limited registered under companies Act,
  societies and Trusts registered as per Act, and
  promoters of SEZs. In order to maintain quality and
  standards of Instructor Training, NCVT has approved
  separate standards for infrastructure and course
  curriculum. The institutes meeting the standards would
  be affiliated with NCVT. These institutes are named
  as Institute for Training of Trainers (ITOT). On
  completion of the training trainees would be trade
  tested and awarded National Craft Instructor
  Certificate. Guidelines for setting up of ITOTs were
  issued in jan 2012.
- Pangalore, Trivandrum, Jaipur, Allahabad, Indore, Vadodara, Panipat, Kolkata, Tura, Shimla, Rajpura, Trichy, Agartala and Patna are also imparting Instructor Training Courses exclusively for women in various trades like Secretarial Practice (English), Secretarial practice (Hindi), Electronic Mechanic, Dress Making, Computer Aided Embroidery & Needle Work, Fashion Technology, Architectural Assistantship and Beauty Culture & Hair Dressing.
- Under the programme, Instructors from Government/ Private ITIs and Centres established by industries under the Apprentices Act are trained. Training in 24 Engineering and 10 Non-Engineering trades is being offered in these institutes. Second shift has been also started to increase the seating capacity under Crafts Instructor Training Programme. Total seating capacity in the above stated Institutes is over 13000.
- To make instructor training more effective, semester pattern of Craft Instructor Training in place of conventional one year training has been introduced in NSTIs and ITOTs, since 2014 session.

#### Training Institutes under DGT in India

The Central Training Institute is merged with Advance training Institutes in june 2017.

Fig 2



- CTI-CENTRAL TRAINING INSTITUTE INSTRUCTORS (1)
- ATI ADVANCE TRAINING INSTITUTES (6)
- RVTI REGIONAL VOCATIONAL TRAININIG INSTITUTE (10)
- RDAT REGIONAL DIRECTORATE APPRENTICE SHIP TRAINING (6)
- FTI -FOREMAN TRAINING INSTITUTES (2)
- CSTARI -CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE (1)
- APEX APEX HI-TECH INSTITUTE (1)
- AT-EPI -ADVANCE TRAINING INSTITUTES FOR ELECTRONICS AND PROCESS INSTRUMENTATION
- NVTI NATIONAL VOCATIONAL TRAINING INSTITUTE (1)

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The institutes under DGT with different names like ATI, FTI, ATI, EPI, AHI, NVTI and RVTI are imparting training on skill based training but the skill ingredientes are not refelected in the name of institute. In order to avoid confusion uniformity and reflect the "Skill" in name of the institute the Government Of India has changed the name as "National Skill Training Institute" with effect from April 2018.

# Centre Merges skill Training Bodies, Forms New council

The union Cabinet has approved the merger of the existing regulatory institutions in the skills space- NCVT and NSDA into the National Council for Vocational Education and Training (NCVET). With effect trom (October 10,2018)

The primary functions of NCVET will include recognition and regulation of awarding bodies

#### **Merging of Skill Training Bodies**

The union Cabinet has approved the merger of the existing regulatory institutions in the skills space-National council for Vocational Training (NCVT) and the National Skill Development Agency (NSDA) into the National Council for Vocational Education and Training (NCVET). The new body will regulate the functioning of entities engaged in vocational education and training, both long-term and short-term and esablish minimum standards for the functioning of such entities.

The primary functions of NCVET will include recognition and regulation of awarding bodies, assessment bodies and skill related information providers; approval of qualifications developed by awarding bodies and Sector Skill Councils (SSCs); indirect regulation of vocational training institutes through awarding bodies and assessment agencies; research and information dissemination and grievance redressal.

The Council would be headed by a chairperson and will have Executive and Non- Executive Members.

The merger will lead to improvement in quality and market relvance of skill development programs lending credibility to vocational education and training encouraging greater private investment and employer participation in the skills space.

Schemes implemented by DGT

- Craftmen Training Scheme (CTS)
- Apprenticeship Training Schemes (ATS)
- Women Occupational Training Scheme (WOT)
- Craft Instructor Training Scheme (CITS)
- Short term cources

#### **Women Training**

#### Overview

Women's Vocational Training Programme under Ministry of Skill Development & Entrepreneurship takes care of providing skill training to women in the country and aims at stimulating employment opportunitites for social development, economic growth and empowerment of women.

NSTIs (erstwhile NVTI/RVTIs) for women are set up mainly to produce women instructors. These trained instructors provide training to students through a network of Industrial Training Institutes (ITIs) all over the country.

NSTIs for women have been set up keeping in mind the need of women belonging to lower income strata group and weaker sections of the society. Many practices like raw material, merit-cum-means stipend/scholarship, hostel facilities etc. have been adopted to attract these girls and women for skill training with effect from october 2018.

The NSTIs for women organize NCVT approved skill training programmes under Craftsmen Training Scheme (CTS) and Craft Instructors' Training Scheme (CITS) in trades such as Electronics Mechanic, Architectural Draughtsmanship, Computer Operator and Programming Assistant, Secretarial Practice, Cosmetology, Dress Making, Catering & Hospitality, Interior Decoration & Designing etc.

Vocational Training exclusively to women were earlier provided through 11 National Skill Training Institutes (NSTIs) for women, one each at Noida, Mumbai, Bengaluru, Thiruvananthapuram, Panipat, Kolkata, Tura, Allahabad, Indore, Vadodara & Jaipur.

To enhance the skill training facilities for women in India, establishment of 8 New NSTIs (erstwhile RVTIs) have been approved by Govt. of India in the states where there were no existing NSTIs for women. Out of these 8 NSTIs (W), 07 NSTIs (W) have started functioning in the states of Punjab, Himachal Pradesh, Bihar, Tripura, Tamil Nadu, Telangana and Goa.

A total of 4664 regular seats have been sanctioned in NSTIs for women in 2017-18 in various training courses under CTS and CITS. Since inception 1,45,000 women trainees have been trained in these institutes.

#### Short term courses

Short term courses are csonducted in to impart training and updating the skills of Engineers / Supervisors / Technicians / Executives of Industrial personnel & faculties of educational institutions through courses of short duration conducted in modules and Tailor made courses as per the specific needs of their industries / Govt Estt. / PSUs / Techinical Institutions. The courses are conducted for higher skill upgradation thorugh intensive skill oriented training by using the latest version of equipment and machinery used in industry.

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