Annexure – I

|  |  |  |
| --- | --- | --- |
| **SI.** | **Theory** | **Practical** |
| 1. | Introduction to Electricity, Alternating Current (A.C), Direct Current (D.C.) | Identification of conductors, Insulator, Hand tools - Screw driver, Tweezer Soldering Iron, Cutter etc. Demonstration on Soldering Practice. |
| 2. | I Introduction to Resistor - Types, specification, symbols, uses. Ohm's Law, Colour Code Series, Parallel circuit. | Identification of components, Measurement of Resistor using colour-code method. |
| 3. | Introduction to Multimeter. | Measurement of Resistance by Multimeter (Analog & Measurement of Voltage and Current. |
| 4. | Introduction to capacitor, Inductor - Types, Uses, Symbols. | Measurement of cacacrtor, Inductor by LCR Meter. |
| 5. | Introduction to Transformer Types, Specification, Symbol, Uses. Relay - Symbol, Pin Configuration, Uses. | Voltage Measurement of Transformer Primary and Secondary.Testing of Rea. |
| 6. | Introduction to Semiconductor.-Diode, Rectifiers-Types, Functioning, Specification, Uses. | Diode Measurement, Half Wave, Full Wave-Centre-Tapped, Brags circuit.Handling of CR 0 |
| 7. | Introduction to Power-supply Zener Regulated, Using Regulator IC Introduction to Battery Eliminator. | Servicing of Regulated Power Supply and Battery Eliminator Circuit. |
| 8. | Introduction to Transistor- Types, Lead configuration, Symbol, Specification, Uses. Amplifier - classification, function, Uses. | Transistor Test-g by Multimete CE Amplifier Circuit. |
| 9. | Introduction to Oscillator- Function, Classification, Uses. | A stable Multivibrator circuit. |
| 10. | Introduction to AM Radio- Different Stage Identification, Principal of working. | Demonstration on Radio Circuit Familiarization with different components used in Radio |
|  | Introduction to FM Radio. | Voltage Measurement at the of different stage. Familiarization with FM kit. |
| 11. | Introduction to Fault finding procedure of AM and FMPqHìa | Servicing of AM & FM Radio |
| 12. | Introduction to B/W TV - Function of Tuner, Picture Tube with different controls, EHT Power supply. | Identification of important sections and components, Demonstration on Assembling of a BAA/ TV. |
| 13. | Introduction to Fault Finding procedure of BA*N* TV. | Servicing of TV (B/W) |
| 14. | Emergency Light - unctioning, uses. | Demonstration on Emergency Light & Servicing. |
| 15. | Electronics Choke, Fan, Regulator, Light Dimmer, functioning, Advantages. | Demonstration on Emergency Light & Servicing. |
| 16. | Calling Bell (IC Based) Electronic Buzzer, Alarm Circket. | Demonstration on Emergency Light & Servicing. |
| 17. | Introduction to Digital Electronics-Binary No. System Logic Gates. | Familiarization with digital ICS, Logic Gate Realization. |
| 18. | introduction to CD, VCD - Function, Advantage over Recorder. | Demonstration on Different faults of CD & Servicing. |
| 19. | Digital clock. | Demonstration on Different faults of CD & Servicing. |
| 20. | Introduction to Computer. | Demonstration on parts of Computer, UPS. |

**Detail of Employability Skills Syllabus**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Content** | **Details** |
| 1. | English Literacy & Communication Skills | Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech) Transformation of sentences, Voice change, Change of tense, Spellings. Reading and understanding simple sentences about self, work and environment. Construction of simple sentences, Writing simple English.Speaking with preparation on self, on family, on friends, classmates, on know, picture reading gain confidence through role-playing . 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.Communication and its importance, Principles of Effective communication, Types of communication – verbal, non verbal, written, email, talking on phone. Non verbal communication –characteristics, components-Para-language, Body – language, Barriers to communication and dealing with barriers.Handling nervousness/ discomfort. Self awareness, Importance of Commitment, Ethics and Values, Ways to Motivate Oneself, Personal Goal setting and Employability Planning. Manners, Etiquettes, Dress code for an interview, Do’s & Don’ts for an interview, Problem Solving, Confidence Building, Attitude. |
| 2. | I.T. Literacy | Introduction, Computer and its applications, Hardware andperipherals, Switching on-Starting and shutting down ofcomputer.Basics of Operating System, WINDOWS, The user interfaceof Windows OS, Create, Copy, Move and delete Files andFolders, Use of External memory like pen drive, CD, DVDetc, Use of Common applications.Basic operating of Word Processing, Creating, opening andclosing Documents, use of shortcuts, Creating and Editing ofText, 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 excelsheetsInternet, Concept of Internet (Network of Networks),Meaning of World Wide Web (WWW), Web Browser, WebSite, Web page and Search Engines. Accessing the Internetusing Web Browser, Downloading and Printing Web Pages,Opening an email account and use of email. Social media sitesand its implication. Information Security and antivirus tools, Do’s and Don’ts in Information Security, Awareness of IT – ACT, types of cyber crimes. |
| 3. | Entrepreneurship Skills | Entrepreneurship vs. management, Entrepreneurial motivation. Performance & Record, Role & Function of Entrepreneur, Qualities of a good Entrepreneur, SWOT and RiskAnalysis. Concept & application of PLC, Sales &distribution Management. Different Between Small Scale & Large Scale Business, Market Survey, Method of marketing, Publicityand advertisement, Marketing Mix.Preparation of Project. Role of Various Schemes andInstitutes 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.Project formation, Feasibility, Legal formalities i.e.,Shop Act, Estimation & Costing, Investment procedure – Loan procurement – Banking Processes. |
|  | Productivity & Quality Tools | Definition, Necessity, Meaning of GDP.Personal / Workman – Incentive, Production linked Bonus,Improvement in living standard. Industry Nation.Skills, Working Aids, Automation, Environment, Motivation. How improves or slows down.Banking processes, Handling ATM, KYC registration, safecash handling, Personal risk and Insurance.Meaning of quality, Quality characteristic. 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.Idea of ISO 9000 and BIS systems and its importancein maintaining qualities.Purpose of Housekeeping, Practice of good Housekeeping.Basic quality tools with a few examples |
|  | Occupational safety, health and Environment Education &Labour WelfareLegislation | Introduction to Occupational Safety and Health importanceof safety and health at workplace.Basic Hazards, Chemical Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards.Occupational health, Occupational hygienic, OccupationalDiseases/ Disorders & its prevention.Basic principles for protective equipment.Accident Prevention techniques – control of accidents andsafety measures.Care of injured & Sick at the workplaces, First-Aid &Transportation of sick person.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. |