

## **2. EMPLOYMENT OPPORTUNITIES FOR A DIPLOMA HOLDER IN AGRICULTURAL TECHNOLOGY**

The following are the employment opportunities for diploma holders in Agricultural Technology :

- Supervisor in Department of Agriculture.
- Supervisor / Junior Engineer in Minor Irrigation and Tubewell Corporation.
- Supervisor in command area Development.
- Supervisor in Soil Conservation Department.
- Supervisor in Agro-Industries Corporation in workshop or Marketing of Tractors, implements, inputs, seeding and harvesting equipment.
- Supervisor in Land Development Corporation.
- Supervisor in Seed Corporation and State Farms.
- Incharge of Feed Plant or Fertiliser Plant of Fertiliser Corporation of State.
- Junior Engineer in Ware Housing Corporation / HAFED Mandi/ Rice Mill.
- Supervisor Machinery Forest Department (Soil Conservation)
- Technical Supervisor in Banks.
- Assistant to Agricultural Engineer in Research and Extension Department of Agriculture.
- Set up his smallscale industry for manufacturing and marketing of agriculture machinery/own farming enterprise.
- Supervisor/foreman in organizations manufacturing Agro Implements and Tractors.
- Instructor in teaching institutes.
- Sales and service representatives of irrigation equipment Agro implements and Tractors.
- Tractor and farm machinery custom hiring centers
- Establishment of repair and maintenance centre, agro processing units.

### **3. COMPETENCY PROFILE OF A DIPLOMA HOLDER IN AGRICULTURAL TECHNOLOGY**

A diploma holder in agricultural technology should have following competencies:

- i) Familiarity with various operations carried out on the farms/in the field for raising the crops.
- ii) Familiarity with various inputs of agriculture, their selection and procurement.
- iii) Skill to perform various operations and learn packages of practices for different crops being grown in the season.
- iv) Ability to prepare cost estimates for the production of crops.
- v) Ability to install, maintain and carry out repair of farm equipment like tractors, combine harvester, electric motor, pumps, planter and digger, sprayer, sprinkler and underground pipeline, thresher, plant protection equipments and agro processing unit
- vi) Ability to select handle and operate post harvesting equipment.
- vii) Development of entrepreneurship traits i.e. decision making, innovation, calculated risk taking ability.
- viii) Understanding of engineering principles and techniques required for solving problems of irrigation and drainage, land preparation and conservation.
- ix) Knowledge of non conventional sources of energy.
- x) Knowledge and skills regarding optimum use of water for maximum agricultural yield.

- xi) Knowledge regarding soil erosion, factors effecting soil erosion and use of various erosion control practices for soil conservation.
- xii) Demonstrate the use of an Agro Implements/Agro processing Machinery to rural people
- xiii) Ability to prepare read and interpret Drawing
- xiv) Knowledge regarding various pollutants, their impact and methods to control pollution
- xv) Knowledge of basic science subjects which will serve as foundation for technology subjects.
- xvi) Ability to demonstrate proper usage, care and handling of agricultural implements/ agro processing machinery.
- xvii) Knowledge of different storage structures, farm structures and their environment control
- xviii) Establishing his own industry/ manufacturing and marketing of products.
- xix) Use IT tools for storing, processing and presenting information.

#### 4. DERIVING CURRICULUM AREA FROM COMPETENCY PROFILE

Sr. No.	Competency	Curriculum Area
i)	Familiarity with various operations carried out on the farms/in the field for raising the crops	<ul style="list-style-type: none"> <li>▪ Crop production</li> </ul>
ii)	Familiarity with various inputs of agriculture, their selection and procurement.	<ul style="list-style-type: none"> <li>▪ Crop production</li> </ul>
iii)	Skill to perform various operations and learn packages of practices for different crops being grown in the season.	<ul style="list-style-type: none"> <li>▪ Field Practice</li> </ul>
iv)	Ability to prepare cost estimates for the production of crops.	<ul style="list-style-type: none"> <li>▪ Crop production</li> <li>▪ Farm machinery and implements</li> </ul>
v)	Ability to install, maintain and carry out repair of farm equipment like tractors, combine harvester, electric motor, pumps, thresher, planter and digger, sprayer, sprinkler and underground pipeline, thresher, plant protection equipments and agro Processing units.	<ul style="list-style-type: none"> <li>▪ Field practice</li> <li>▪ Theory of Machine</li> <li>▪ Workshop technology-I,II</li> <li>▪ Farm Tractors</li> <li>▪ Farm Machinery and Implements</li> <li>▪ Farm I.C. Engine</li> <li>▪ Irrigation Technology</li> <li>▪ Basic electrical and Electronics Engineering</li> <li>▪ Manufacturing practices</li> </ul>
vi)	Ability to select handle and operate post harvesting equipment	<ul style="list-style-type: none"> <li>▪ Post Harvest Technology</li> <li>▪ Agro process Engineering</li> </ul>
vii)	Development of entrepreneurship traits i.e. decision making, innovation, calculated risk taking ability.	<ul style="list-style-type: none"> <li>▪ Entrepreneurship Development</li> </ul>
viii)	Understanding of engineering principles and techniques required for solving problems of irrigation and drainage, land preparation and conservation.	<ul style="list-style-type: none"> <li>▪ Irrigation technology</li> <li>▪ Soil conservation</li> </ul>

ix)	Knowledge of non-conventional sources of energy.	<ul style="list-style-type: none"> <li>Non conventional Energy Sources</li> </ul>
x)	Knowledge and skills regarding optimum use of water for maximum agricultural yield.	<ul style="list-style-type: none"> <li>Irrigation Technology</li> <li>Water Resources Engineering</li> </ul>
xi)	Knowledge regarding soil erosion, factors affecting soil erosion and use of various erosion control practices for soil conservation	<ul style="list-style-type: none"> <li>Soil Conservation</li> </ul>
xii)	Demonstrate the use of agricultural Implements/Agro processing Machinery to rural people	<ul style="list-style-type: none"> <li>Communication Skill – I</li> <li>Communication Skill –II</li> <li>Industrial Management</li> </ul>
xiii)	Ability to prepare read and interpret Drawing.	<ul style="list-style-type: none"> <li>Engineering Drawing-I, II</li> <li>Machine Drawing</li> <li>CAD</li> </ul>
xiv)	Knowledge regarding various pollutants, their impact and methods to control pollution	<ul style="list-style-type: none"> <li>Environmental Awareness</li> </ul>
xv)	Knowledge of basic science subjects which will serve as foundation for Technology subjects.	<ul style="list-style-type: none"> <li>Applied Physics.-I, II</li> <li>Applied Chemistry –I,II</li> <li>Applied Math –I,II</li> <li>Applied Mechanics</li> <li>Fundamentals of I.T.</li> </ul>
xvi)	Ability to demonstrate proper usage, care and handling of agricultural implements/ agro processing machinery.	<ul style="list-style-type: none"> <li>Farm Tractor</li> <li>Farm Machinery</li> <li>Irrigation Technology</li> <li>Agro Process Engineering</li> <li>Water Resource Engineering</li> </ul>
xvii)	Knowledge of different storage structures, farm structures and their environment control green houses.	<ul style="list-style-type: none"> <li>Post Harvest Technology</li> </ul>
xviii)	Establishing his own industry/ manufacturing and marketing of products practical use of knowledge gained during the course.	<ul style="list-style-type: none"> <li>In-plant training</li> </ul>
xix)	Use IT tools for storing, processing and presenting information	<ul style="list-style-type: none"> <li>Fundamentals of IT</li> <li>Computer Applications in Mechanical Engineering</li> </ul>