







Model Curriculum

Farm Workshop Foreman/Supervisor

SECTOR: AGRICULTURE & ALLIED

SUB-SECTOR: AGRICULTURE CROP PRODUCTION

OCCUPATION: FARM MACHINERY, EQUIPMENT OPERATION

AND MAINTENANCE

REF ID: AGR/Q1109, V1.0

NSQF LEVEL: 5















Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AGRICULTURE SKILL COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/ Qualification Pack: 'Farm Workshop Foreman/Supervisor' QP No. 'AGR/ Q1109 NSQF Level 5'

Date of Issuance: April 24th, 2017

Valid up to: March 31st, 2020

* Valid up to the next review date of the Qualification Pack

Authorised Signatory (Agriculture Skill Council of India)









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Farm Workshop Foreman/Supervisor

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "<u>Farm Workshop Foreman/Supervisor"</u>, in the "<u>Agriculture & Allied</u>" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Farm Workshop Foreman/Supervisor			
Qualification Pack Name & Reference ID.	AGR/Q1109, v1.0			
Version No.	1.0	Version Update Date		
Pre-requisites to Training	ITI in relevant field or class10 preferably			
Training Outcomes	After completing this programme, participants will be able to: monitor day to day operations of a farm workshop ensure work is carried out in a safe and efficient manner by distributing duties among workshop plan and procure resources for up keeping of farm machinery maintain health and safety at the workplace			









This course encompasses $\underline{4}$ out of $\underline{4}$ National Occupational Standards (NOS) of " $\underline{\text{Farm Workshop}}$ Foreman/Supervisor" Qualification Pack issued by " $\underline{\text{Agriculture Skill Council of India}}$ ".

Sr. No.	Module	Key learning outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	 Understand general discipline in the class room and workshop (Do's & Don'ts) Study the scope and importance of farm mechanization industry in India Familiarize with different farm machineries' manufacturers and their brands/models Understand the role of a Farm Workshop Foreman/ Supervisor and the progression pathways 	Laptop, white board, marker, projector and video films & Presentations
2	Maintain farm equipments and workshop infrastructure Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 40:00 Corresponding NOS Code AGR/N1131	 Enlist various primary and secondary tillage equipments Explain construction detail and working of primary and secondary tillage equipments Perform visual inspection of the farm equipments daily Identify and check the tools required for maintenance of equipments regularly Identify the physical infrastructure requirement for workshop as per standards Keep the tools, equipment and spare parts in allocated positions in workshop Check for water leakage, seepage in wall and fire safety equipment, 	Laptop, white board, marker, projector and video films, tractors, power tillers, disc harrows, cultivators, seed drills, planters, reapers, threshers, winnowers, tools tools such as screw driver set, pliers set, hammer set, set of chisels, set of files, hand hacksaw, set of spanners, set of sockets, set of pullers, pipe wrench, adjustable screw wrench, chisel set, tongs, hand grease gun, bench vice, micrometer, vernier callipers, screw jack, hydraulic jack, air compressor, washing machine, welding machine, pullers, anvil, cotton jute etc.
3	Assign and organize work plan of operators and technicians Theory Duration (hh:mm) 13:00 Practical Duration	 Plan activity to be carried out in a season Design daily schedule, weekly and monthly schedule of work Allot the work among mechanics and technicians to complete day's work Issue the materials like protective equipments, tools etc. as per work requirements Design advance planning of the 	









Sr. No.	Module	Key learning outcomes	Equipment Required
	(hh:mm) 50:00 Corresponding NOS Code AGR/N1132	requirements based on various season like seeding or harvesting Check performance criteria for operators and technician for various jobs in workshop Select trained operators and technicians per the need of workshop requirements Plan the work schedule of operators based on requirements Discuss and explain the work to be done by technician and operators Identify effective ways of completing the work on time State role of job card and its filling Maintain job cards, record and report the progress of work in accordance with company's policy Monitor the progress of work at regular intervals Carry out troubleshooting of equipments during operation or repairs Report problems to workshop manager in a timely manner	
4	Plan resources for upkeep of farm machinery and assist in procurement Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 50:00 Corresponding NOS Code AGR/N1133	 State importance of routine maintenance of farm machinery Select and identify fast wearing out parts of tractors, engine, pumps, reapers, thresher and other equipments Assess requirement of parts of farm machinery equipments depending on wear and tear and breakage Prepare final list of resources required along with their quantity in consultation with the workshop manager Purchase tools and spare parts depending on the requirement List quotations, types of quotation and filling of quotation Purchase material from suppliers on the basis of quotation Record the procurement details, proposals for purchase and writing off obsolete equipment of the workshop 	Seed drill, planter, tools such as screw driver set, pliers set, hammer set, set of chisels, set of files, hand hacksaw, set of spanners, set of sockets, set of pullers, pipe wrench, adjustable screw wrench, chisel set, tongs, hand grease gun, bench vice, micrometer, vernier callipers, screw jack, hydraulic jack, air compressor, washing machine, welding machine, pullers, anvil, cotton jute etc Power cutter, Drill machine
5	Maintain Health & Safety at the work place Theory Duration (hh:mm) 10:00	 Identify basic safety checks before operation of all machinery and vehicles Explain importance and use of protective clothing or equipment Handle protective clothing or equipment during use of equipment. 	Laptop, white board, marker, projector, Personal protective equipment Like: Helmet / head gear, Cotton / woollen safety gloves, Safety









Sr. No.	Module	Key learning outcomes	Equipment Required	
	Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N9903	 Identify causes of hazards and its effect Assess risks prior to performing manual handling jobs, Follow safe practices during handling of farm machinery Use equipment and materials safely Dispose off waste safely and correctly in a designated area Recognize risks to bystanders and take action to reduce risk associated with jobs in the workplace Explain importance of environmental protection and its awareness Enlist types of accidents and its cause Employ standard emergency procedures Use emergency equipment in accordance with manufacturers' specifications and workplace requirements Provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques Practise the use of first aid kit Report details of first aid administered in accordance with workplace procedures. Illustrate the dangerous machines regulation act 	Safety Harness; First Aid Kit: Bandages, Adhesive bandages, Betadine Solution / ointment, Pain relief spray / ointment, Antiseptic liquid; Phone directory, Search lights, fire extinguisher	
	Total Duration: Theory Duration (hh:mm) 50:00 Practical Duration (hh:mm) 150:00	Unique equipment required: Mould board plough, disc plough, disc harrow, cultivator, seed drill, planter, sprayer, duster, power sprayer, reaper, thresher, cleaners/ graders, workshop tools and safety equipment, Seed drill, planter, tools such as screw driver set, pliers set, hammer set, set of chisels, set of files, hand hacksaw, set of spanners, set of sockets, set of pullers, pipe wrench, adjustable screw wrench, chisel set, tongs, hand grease gun, bench vice, micrometer, vernier callipers, screw jack, hydraulic jack, air compressor, washing machine, welding machine, pullers, anvil, cotton jute, Power cutter, Drill machinePersonal protective equipment Like:Helmet / head gear, Cotton / woollen safety gloves, Safety boots, Safety Harness; First Aid Kit: Bandages, Adhesive bandages, Betadine Solution / ointment, Pain relief spray / ointment, Antiseptic liquid; Phone directory, Search lights, fire extinguisher		

Grand Total Course Duration: 200 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by Agriculture Skill Council of India)









Trainer Prerequisites for Job role: "Farm Workshop Foreman/Supervisor" mapped to Qualification Pack: "AGR/Q1109, v1.0"

Sr. No.	Area	Details			
1	Description	Trainer is responsible for monitor day to day operations of a farm workshop, ensure work is carried out in a safe and efficient manner by distributing duties among workshop and plan and procure resources for up keeping of farm machinery			
2	Personal Attributes	Trainer should be Subject Matter Expert. He/ she should have good communication, leadership, observation and practical oriented skills.			
3	Minimum Educational Qualifications	Diploma / ITI (Mechanical / Agriculture engineering)			
4a	Domain Certification	Certified for Job Role: "Farm Workshop Foreman/Supervisor mapped to QP: "AGR/Q1109, v1.0". Minimum accepted score is 80%.			
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted % as per respective SSC guidelines is 80%.			
5	Experience	 B Tech in Mechanical / Agriculture engineering B. Sc. (Agriculture / Horticulture / Botany / Forestry) with 1 year of relevant work experience and 2 years of total work experience Graduate(with 10+2 in Science) with 3 years of relevant work experience Diploma / ITI (Mechanical / Agriculture engineering) with 3 years of relevant work experience 			









Annexure: Assessment Criteria

Job Role Farm Workshop Foreman/Supervisor

Qualification Pack AGR/Q1109, v1.0

Sector Skill Council Agriculture

Guidelines for Assessment

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
- 6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.









Compulsory				Marks Allocation			
Total Marks: 400							
Assessment outcomes	Ass	Assessment criteria for outcomes		Out Of	Theory	Skills Practical	
1. AGR/N1131 Maintain farm equipments and workshop	PC1.	perform visual inspection of farm equipments daily	100	10	3	7	
infrastructure	PC2.	check that all equipments like tractors, power tillers, disc harrows, cultivators, seed drills, planters, reapers, threshers, winnowers, etc. are in good condition		10	3	7	
	PC3.	check that all tools for maintenance are in usable condition		10	3	7	
	PC4.	inspect the tools required for maintenance regularly and ensure periodic cleaning and maintenance		10	3	7	
	PC5.	perform visual inspection of the physical infrastructure periodically as per standards		10	3	7	
	PC6.	ensure all the tools and spare parts are placed in allocated positions		10	3	7	
	PC7.	ensure all the areas are well lit and that there are no bare or damaged electrical wires		10	3	7	
	PC8.	ensure any water tap, connector or pipe is not leaking or blocked		10	3	7	
	PC9.	check that there is no seepage in the walls		10	3	7	
	PC10.	ensure that all the sewerage outlets / holes are unblocked		10	3	7	
				100	30	70	
2. AGR/N1132 Assign and organize work plan	PC1.	note down the work and activities to be done for the day	100	7	2	5	
of operators and technicians	PC2.	distribute the work among mechanics and technicians to complete day's work		7	2	5	
	PC3.	distribute materials such as protective equipments, tools, etc. as per work requirements		7	2	5	
	PC4.	assess the requirements based on the stage of season such as seeding, irrigations or harvesting		8	2	6	
	PC5.	ensure availability of trained operators as per requirements		7	2	5	









	PC6. plan the work schedule of operators based on requirements		7	2	5
	PC7. explain the work requirement to technicians and operators		7	2	5
	PC8. explain effective ways of		7	2	5
	completing the work on time PC9. maintain job cards and record/				
	report the progress of work in accordance with company's policy		7	2	5
	PC10. monitor the progress of work at regular intervals		7	2	5
	PC11. troubleshoot equipments during operation or repairs		7	2	5
	PC12. report problems to workshop manager in a timely manner		7	3	4
	PC13. ensure safe handling of fuels, lubricants, chemicals at the workshop		7	3	4
	PC14. ensure proper placement of procured parts for easy accessibility and in accordance with safety policy		8	2	6
			100	30	70
3. AGR/N1133 Plan resources for upkeep of farm machinery and	PC1. identify fast wearing out parts of tractors, engine, pumps, reapers, thresher and other equipments	100	11	3	8
assist in procurement	PC2. identify the requirement of farm machinery depending on wear and tear and breakage		11	3	8
	PC3. identify the requirement of tools and spare parts depending on the seasons		11	3	8
	PC4. identify the requirement of protective devices and first aid		11	3	8
	PC5. prepare final list of resources required along with their quantity in consultation with the workshop manager		11	4	7
	PC6. collect quotations from suppliers for the required resources in the marker		11	4	7
	PC7. select the right supplier post consultation with workshop manager		11	3	8
	PC8. place order and procure from the selected supplier(s) in a time bound manner		11	3	8
	PC9. maintain a record of procurement, proposals for purchase and writing off of obsolete equipment as per organization's policy		12	4	8
	y		100	30	70
4. AGR/N9903 Maintain health and safety at the workplace	PC1. undertake basic safety checks before operation of all machinery and vehicles and report all potential hazards to the supervisor	100	6	2	4
	PC2. identify work for which protective clothing or equipment is required and perform those duties in accordance with workplace policy		7	2	5









PC3. read	and understand the hazards				
on	and contamination mentioned the labels of		7	2	5
	des/fumigants, etc.	-			
manua accord	s risks prior to performing I handling jobs, and work ing to currently recommended actices		7	2	5
PC5. use e and co	quipment and materials safely rrectly and return the same to ated storage when not in use		7	2	5
PC6. dispo	se off waste safely and ly in a designated area	-	6	2	4
PC7. recog take ac	nize risks to bystanders and tion to reduce risk associated as in the workplace		7	2	5
PC8. performinimi proced instruc	m work in a manner which zes environmental damage all		7	2	5
PC9. report problem appropring necessions.	any accidents, incidents or ns without delay to an		7	2	5
PC10. follow accide includi	procedures for dealing with hts, fires and emergencies, ng communicating location directions for emergency		7	2	5
	r emergency procedures to ny standard / workplace ments		6	2	4
PC12. use	emergency equipment in ance with manufacturers' cations and workplace		7	2	5
PC13. provid patient	e treatment appropriate to the s injuries in accordance with ized first aid techniques		7	2	5
inspec	ver (if practical), clean, /test, refurbish, replace and the first aid equipment as riate		6	2	4
PC15. repo admini			6	2	4
			100	30	70
GRAND TOT	AL .	400	400	120	280