

Model Curriculum

Manufacturing Assistant – Life Sciences

Manufacturing Assistant- Life Sciences

SECTOR: LIFE SCIENCES
SUB-SECTOR: PHARMACEUTICAL, BIOPHARMACEUTICAL
OCCUPATION: MANUFACTURING
REFERENCE ID: LFS/ Q 0216 Ver1.0
NSQF LEVEL: LEVEL 2



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Manufacturing Assistant – Life Sciences

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Manufacturing Assistant – Life Sciences”, in the “Life Sciences” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Manufacturing Assistant – Life Sciences		
Qualification Pack Name & Reference ID.	Manufacturing Assistant – Life Sciences LFS/ Q 0216 Ver1.0		
Version No.	1.0	Version Update Date	24 – 12 – 2015
Pre-requisites to Training	Minimum qualification – 10 th Class		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Gain knowledge about Life Science and Pharmaceutical Industry, its rules, regulations • Understand manufacturing assistant / helper job description and responsibilities • Support supervisors in the manufacturing process and facilitate with equipment readiness, safety checks • Know about How and where disposal take place and what procedure is to be followed for safety purpose • Ensure cleanliness in the work area by doing Pre housekeeping activities , operations & post housing activities • Maintain a healthy, safe and secure working environment in the life sciences facility by learning managing emergency procedures • Know, how to start machines or equipment to begin production processes, able to check the working environment for experimentation • Gain familiarity with methodology for storage area inspection with best methods and materials required for cleaning variety of surfaces and equipment and understand of handling personal protective equipment • Gain complete knowledge of company’s standard operating procedure and guidelines and carry out proper reporting and documentation, types of documentation and recording of data/problem/incidents in secure manner 		

This course encompasses Four (4) out of Four (4) National Occupational Standards (NOS) of “Manufacturing Assistant – Life Sciences LFS/ Q 0216 Ver1.0” Qualification Pack issued by “Life Sciences Sector Skill Development Council”.

Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
1	Orientation Module	02:00	00:00	<ul style="list-style-type: none"> • Know and follow General Discipline of the class room • Overview about Life Sciences Industry in Indian and Global Context 	LFS/N0239 LFS/N0103 LFS/N0102 LFS/N0101	Participant Manual, Power point presentation, Case Studies, Computer



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> Overview of pharmaceutical & biopharmaceutical sub-sector of Life Sciences Industry including relevant Govt. Scheme, social security benefits, and manufacturing basics and requirements Brief introduction of Regulatory Authorities and Government Policies, rules and Regulations and their impact on manufacturing organizations, its structure Describes the knowledge, understanding and skills required for a manufacturing assistant 		system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts
2	Definition of Manufacturing process, requirement and function	03:00	00:00	<ul style="list-style-type: none"> Orientation on typical manufacturing processing function. Basic knowledge of the machinery used in production standard measuring units and methods of performing simple calculations quality control procedures Housekeeping activities & managing emergency procedures awareness for layout design basic signals used in factories or organizations in production line GMP/CGMP guidelines of pharmaceutical quality / manufacturing standards 	LFS/N0239 LFS/N0103 LFS/N0102 LFS/N0101	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts
3	Orientation with Machines and Equipment	02:00	03:00	<ul style="list-style-type: none"> Gain basic knowledge of process handling and tools used in manufacturing. Gain familiarity with machines and equipment operational characteristics of material and equipment 	LFS/N0239	Participant Manual, Power point presentation, Case Studies, Computer system, LCD



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> Learn process of wrapping or unwrapping of the parts and tools 		Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts Compression Machine Commercial - 10 stn, Coating Machine Prototype, Preparation vessel, reactor & Storage Tank, Agitator-Stirrer, Weighing balance (1.2kg, 6.0kg with printer), Rapid mixer granulator (table top 1/5 L capacity), Double cone blender (5L Capacity), Remi stirrers, Machine Hooper, Tablet Deduster, Jet Cleaner, Paste Kettle, Semi-Automatic Cap Sealing Machine, On



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						Line Inspection, Turn Table , Labelling machine, Induction machine, Labeling Machine, Tube Filling Machine Prototype, Vernier calipers, Scale, Hot plate with magnetic stirrer, Seive Shaker, Seive meshes (All grade levels like 100, 150, 200, 250 etc,..), Analytical Balance, Pipettes (1mL, 2mL, 5 ml/10 ml), Water Bath, Glassware for Lab, Sodium Metal in kerosine for testing, Reactor min 50 L, Condensor , Reciever , Centrifuge , Drier flatbed lab model, Volves
4	Transportation of Material and tools	02:00	04:00	<ul style="list-style-type: none"> correct methods of handling and moving of raw material & final finished product 	LFS/N0239	Participant Manual, Power point presentation,



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> • Basic physical activities like climbing, lifting, stooping, walking etc. • How to attach slings, ropes, cables to the object like bundles • operations for fork lifting • methods of driving, transport machineries and its maintenance • Learn how to load & stack the stock, tools & transport it safely using trolley, forklift etc • inspecting the obstructions in the path of transportation 		Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts Trolley, Forklift, Ropes/ Slings, Cables, Lifter (For Bins)
5	Ensure Machine and Equipment Readiness	03:00	05:00	<ul style="list-style-type: none"> • Learn to read and understand production schedule • understanding of job cards, memos or reports • understanding of standard operating procedures • cleaning and lubricating equipment • correct cleaning methods to remove the obstructions • basic techniques of assembling the machines • eliminating ineffective equipment 	LFS/N0239 LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts Compression Machine Commercial - 10 stn, Coating Machine Prototype,



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						Preparation vessel, reactor & Storage Tank, Agitator-Stirrer, Weighing balance (1.2kg, 6.0kg with printer), Rapid mixer granulator (table top 1/5 L capacity), Double cone blender (5L Capacity), Remi stirrers, Machine Hooper, Tablet Deduster, Jet Cleaner, Paste Kettle, Semi-Automatic Cap Sealing Machine, On Line Inspection, Turn Table , Labelling machine, Induction machine, Labeling Machine, Tube Filling Machine Prototype, Vernier calipers, Scale, Hot plate with magnetic stirrer, Seive Shaker, Seive meshes (All



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						grade levels like 100, 150, 200, 250 etc,..), Analytical Balance, Pipettes (1mL, 2mL, 5 ml/10 ml), Water Bath, Glassware for Lab, Sodium Metal in kerosine for testing, Reactor min 50 L, Condensor , Reciever , Centrifuge , Drier flatbed lab model, Volves
6	Assisting the Manufacturing Process	02:00	04:00	<ul style="list-style-type: none"> • standard reference material • following of basic instructions making the accessories ready for operation • installation of materials into machines • machine hopper and its functioning • feeding and placing the items for processing into the hopper of machine • status labelling and inline weighing of product containers 	LFS/N0239 LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts Compression Machine Commercial - 10 stn,



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						Coating Machine Prototype, Preparation vessel, reactor & Storage Tank, Agitator-Stirrer, Weighing balance (1.2kg, 6.0kg with printer), Rapid mixer granulator (table top 1/5 L capacity), Double cone blender (5L Capacity), Remi stirrers, Machine Hooper, Tablet Deduster, Jet Cleaner, Paste Kettle, Semi-Automatic Cap Sealing Machine, On Line Inspection, Turn Table , Labelling machine, Induction machine, Labeling Machine, Tube Filling Machine Prototype, Vernier calipers, Scale, Hot plate with



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						magnetic stirrer, Seive Shaker, Seive meshes (All grade levels like 100, 150, 200, 250 etc,..), Analytical Balance, Pipettes (1mL, 2mL, 5 ml/10 ml), Water Bath, Glassware for Lab, Sodium Metal in kerosine for testing, Reactor min 50 L, Condensor , Reciever , Centrifuge , Drier flatbed lab model, Volves
7	Ensuring Safety Checks, troubleshooting and accuracy of equipment	03:00	05:00	<ul style="list-style-type: none"> • Work specifications • Types of faults in the machineries • Identification of faults & their recovery • Corrective actions to be taken against faults • Identification of leakage in the machineries and containers • Preventive methods to avoid leakage • Types of emergency calls • Types of equipment failures • How to respond to emergency calls 	LFS/N0239 LFS/N0103 LFS/N0102 LFS/N0101	Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts Compression Machine Commercial - 10 stn,



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> • Listing equipment with specifications • Calibrating the listing equipment • How to check accuracy of equipment • Recording the correct data obtained by performing trail runs 		Coating Machine Prototype, Preparation vessel, reactor & Storage Tank, Agitator-Stirrer, Weighing balance (1.2kg, 6.0kg with printer), Rapid mixer granulator (table top 1/5 L capacity), Double cone blender (5L Capacity), Remi stirrers, Machine Hooper, Tablet Deduster, Jet Cleaner, Paste Kettle, Semi-Automatic Cap Sealing Machine, On Line Inspection, Turn Table , Labelling machine, Induction machine, Labeling Machine, Tube Filling Machine Prototype, Vernier calipers, Scale, Hot plate with



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
						magnetic stirrer, Seive Shaker, Seive meshes (All grade levels like 100, 150, 200, 250 etc,..), Analytical Balance, Pipettes (1mL, 2mL, 5 ml/10 ml), Water Bath, Glassware for Lab, Sodium Metal in kerosine for testing, Reactor min 50 L, Condensor , Reciever , Centrifuge , Drier flatbed lab model, Volves
8	Basics Communication at Workplace for Manufacturing Assistant	02:00	03:00	<ul style="list-style-type: none"> • Read and interpret the graphs/ images of product and instructions given in tool/ equipment manual • Basic understanding of machines control panel, material labels & safety signage • Various coding system of the company • Selection of documentation • Recording and communicating details of work done • Follow daily report format and submission as per the instructions 	LFS/N0239 LFS/N0102	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster,



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> • maintenance of record in appropriate manner • validation process of document • production work flow sequence and material demand 		flip charts, Formats for BMR & BPR, Formats of Log Books, Format of Shift Schedule, Format of Job Cards, GMP Guidelines, Sample Labels
9	Reporting, Recording and communication	03:00	03:00	<ul style="list-style-type: none"> • Complete knowledge of company's standard operating procedure and guidelines • why timely reporting about each and every incident is important and time management • impact of wrong practices and informing to supervisor • identifying and reporting incidents where SOP are not followed • Identification of reporting to supervisor for finding solutions • Escalation matrix for decision making that is not defined in SOP • Reading and writing of memos, job cards, reports etc. in pre decided format both Offline and online as per SOP • Recording & communicating the work done in local language and English • taking inputs from team and making proper report of that input 	LFS/N0102	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts, Formats for BMR & BPR, Formats of Log Books, Format of Shift Schedule, Format of Job Cards, GMP Guidelines, Sample Labels



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> efficient and clear communication methods for reporting the incidents and communication with team 		
10	Use of IT Skilling in Reporting and Recording	02:00	08:00	<ul style="list-style-type: none"> Basic knowledge of computer/ MS Word/ MS Excel etc. way of entering the data/information writing reports, application & letter using computer applications best utilization of data entry system 	LFS/N0102	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts, Computer Lab
11	Information Security	01:00	00:00	<ul style="list-style-type: none"> how to deal with confidential matters various types of documents and data handling of sensitive data way to communicate and disciplined behaviour to maintain information security 	LFS/N0102	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
12	Ensure Healthy, Safe and Secure Workplace	02:00	02:00	<ul style="list-style-type: none"> • understanding of health • understanding of safety • Awareness of good working environmental conditions like proper ventilation, temperature etc. • health practices: the actions that do not harm health • safe practices: the practices that don't lead to damage life or property • reading/understanding safety principles and standards of company • understanding of working with PPE • ensure behavioural safety in the workplace • First aid kit and its maintenance and use • Types of occupational health hazards • What is hazard occurring at workplace • Reporting of hazards • Storage and handling of hazardous materials/ equipment • complete understanding of dealing with hazards • organization emergency procedures • elimination procedures for hazards in production processes 	LFS/N0101	Half Face Mask, Full Face Mask, Safety Goggles, Safety Shoes, Gum Boots, Chemical Absorbent, Self-Contained Breathing Apparatus, PVC Apron, Gloves(Nitrile, {Heat, acid, chemical} resistant, washing etc..), Lab Coat, Surgical Gloves (in Microbiology), Eye washer with sprinkler/ Manual bottle eye washer, Co2 type Fire Extinguisher, ABC Type Fire Extinguisher
13	Managing Emergency Procedures	02:00	03:00	<ul style="list-style-type: none"> • Chemical substances, their characteristics and safety measures • Different types of breaches in the health safety & security • Maintaining high standard of security and safety 	LFS/N0101	



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> • Conduct of safety drill operations • Understanding of emergency situations • How to call medical assistance in emergency • Evacuation procedures for visitors and workers • Understand tools and equipment to be used in case of emergency example for firefighting, fire point, fire extinguishers, exit point are to be pre decided and maintained 		
14	Pre Housekeeping Activities for Manufacturing Assistant	03:00	03:00	<ul style="list-style-type: none"> • Importance of housekeeping/ hygiene maintenance / Cleanliness at workplace • Learning of level of hygiene • Identification of dirty areas to be cleaned • Material required for cleaning • Efficient cleaning taking into account of risk, time • Types of stains / soiling and their solutions • Maintenance of cleaning equipment and supplies • Planning the sequence for cleaning the area to avoid re-soiling clean areas • Various signs used in while cleaning the area of cleanliness • various coding system in organization used during housekeeping • Methodology for storage area inspection • Optimum utilization of time & resources 	LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
15	Housekeeping Activities for Manufacturing Assistant	03:00	03:00	<ul style="list-style-type: none"> • Various cleaning methods • Working procedures • Role of different materials /chemicals/equipment • Properties of chemicals and their results & reactions with each other or surroundings • Material handling/allocation (will build/get the awareness to classify the material) • Decision making to maintain cleanliness • practices that may cause accidental damage • action to be taken in case of accidental damage • reporting any unidentified soiling • signage to be used in case of any oily substance found • escalation procedures for stains that cannot be removed • hierarchy of the system • informing to the appropriate person in case of out of control situations 	LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts
16	Post Housekeeping Activities for Manufacturing Assistant	01:00	01:00	<ul style="list-style-type: none"> • how to inspect cleaned area • how to inspect the oily substances at floor • to check the treated surface after cleaning • procedure of submission of daily reports to appropriate authority • proper storage of PPE after use • weekly maintenance schedule for keeping record of housekeeping 	LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				<ul style="list-style-type: none"> Generating the methods to improve current activities based on their experience 		Board Marker/ chalk, duster, flip charts
17	Material disposal and scrap/waste management	02:00	05:00	<ul style="list-style-type: none"> How and where disposal take place and what procedure is to be followed for safety purpose Methods of disposal of waste material Identification of the hazardous waste material Proper handling, storage, transportation of all hazardous material Chemical symbols and their meaning Damaged and expired labels Waste management, reusing of non-confirming products disposal of garnered waste dispose of chemical, their reactions 	LFS/N0239 LFS/N0103	Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts
18	Internship	00:00	40:00	<p>Learn the practical on the job skills for:</p> <ul style="list-style-type: none"> Supporting supervisors in the manufacturing process Ensuring cleanliness in the work area Maintaining a healthy, safe and secure working environment in the life sciences facility Carrying out reporting and documentation 	LFS/N0239 LFS/N0103 LFS/N0102 LFS/N0101	Internship Monitoring Report
	Total Duration	38:00	92:00	<p>Unique Equipment Required:</p> <p>Compression Machine Commercial - 10 stn, Coating Machine Prototype, Preparation vessel, reactor & Storage Tank, Agitator-Stirrer, Weighing balance (1.2kg, 6.0kg with printer), Rapid mixer granulator (table top 1/5 L capacity), Double cone blender (5L Capacity), Remi stirrers, Machine Hooper, Tablet Deduster, Jet Cleaner, Paste Kettle, Semi-Automatic Cap Sealing Machine, On</p>		



Sr. No.	Module	Theory Duration (hh:mm)	Practical Duration (hh:mm)	Key Learning Outcomes	Corresponding NOS Code	Equipment Required
				Line Inspection, Turn Table , Labelling machine, Induction machine, Labeling Machine, Tube Filling Machine Prototype, Vernier calipers, Scale, Hot plate with magnetic stirrer, Seive Shaker, Seive meshes (All grade levels like 100, 150, 200, 250 etc...), Analytical Balance, Pipettes (1mL, 2mL, 5 ml/10 ml), Water Bath, Glassware for Lab, Sodium Metal in kerosine for testing, Reactor min 50 L, Condensor , Reciever , Centrifuge , Drier flatbed lab model, Volves, Trolley, Forklift, Ropes/ Slings, Cables, Lifter (For Bins), Half Face Mask, Full Face Mask, Safety Goggles, Safety Shoes, Gum Boots, Chemical Absorbent, Self-Contained Breathing Apparatus, PVC Apron, Gloves(Nitrile, {Heat, acid, chemical} resistant, washing etc..), Lab Coat, Surgical Gloves (in Microbiology), Eye washer with sprinkler/ Manual bottle eye washer, Co2 type Fire Extinguisher, ABC Type Fire Extinguisher, Formats for BMR & BPR, Formats of Log Books, Format of Shift Schedule, Format of Job Cards, GMP Guidelines, Sample Labels, Participant Manual, Power point presentation, Case Studies, Computer system, LCD Projector & Screen/ LCD Monitor, Mike, Sound System, Laser Pointer, White/ Black Board, White Board Marker/ chalk, duster, flip charts, Internship Monitoring Report		

Grand Total Course Duration: **130 Hours 00 Minutes**

(This syllabus/ curriculum has been approved by Life Sciences Sector Skill Development Council.)



Annexure1: Assessment Criteria

Assessment Criteria for Manufacturing Assistant- Life Sciences	
Job Role	Manufacturing Assistant- Life Sciences
Qualification Pack	LFS/ Q 0216 Ver1.0
Sector Skill Council	Life Sciences Sector Skill Development Council

Sr. No.	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	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria laid out in Qualification Pack)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on the assessment criteria laid out in qualification pack
5	To pass the Qualification Pack , every trainee should score a minimum of 50% aggregate in all NOS and a minimum of 40% in every NOS
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

		Marks Allocation			
		Total Marks (400)	Out Of	Theory	Skills Practical
LFS/N0239 (Support supervisors in the manufacturing process)	PC1. start machines or equipment to begin production processes and work as per the production schedule	100	3	1	2
	PC2. load, stack, and transport stock, tools, dies, and work in process by hand or forklift (if requisite license is available)		4	2	2
	PC3. feed or place items into equipment for processing		3	1	2
	PC4. pull damaged or ineffective equipment off the line		3	1	2
	PC5. remove product and machine attachments		2	1	1
	PC6. scrape waste material from the machine		2	1	1
	PC7. load and unload processing equipment		3	1	2



	PC8. pour materials into the machine hopper		3	1	2
	PC9. wrap and unwrap parts, tools, and equipment		3	1	2
	PC10. signal co-workers to facilitate moving the product during processing		4	2	2
	PC11. load and unload items from machines , conveyors and conveyances		4	2	2
	PC12. hold tape and rods and mark reference points to assist in layout		4	2	2
	PC13. select the correct material to be loaded		3	1	2
	PC14. assist the supervisor in status labelling and inline weighing of product containers		2	1	1
	PC14. clean and lubricate the equipment to make it fit for use as per the SOP		3	1	2
	PC15. clean the approach path of obstructions for transportation from the storage area for input to the storage area for output		3	1	2
	PC16. support the supervisor in assembling the machine properly		2	1	1
	PC17. keep all the accessories like the cleaning brush, levers, release agent ready		2	1	1
	PC18. use hands and arms in handling, installing, positioning, and moving of materials		2	1	1
	PC19. perform physical activities that require considerable use of arms and legs such as climbing, lifting, balancing, walking, stooping, and handling of materials		3	1	2
	PC20. transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks		3	1	2
	PC21. observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions		3	1	2
	PC22. attach slings, ropes, or cables to objects such as pipes, hoses, or bundles		2	1	1
	PC23. carry out disposal of waste and leftover tested material safely as per the SOP		3	1	2
	PC24. dispose all materials used in the experiment safely as per the health and		3	1	2



	safety management system of the company				
	PC25. ensure the proper handling, storage, transportation and removal of all hazardous materials		3	1	2
	PC26. check for damaged labels, outdated chemicals, and damaged containers		4	1	3
	PC27. ensure that there are no leakages		4	1	3
	PC28. ensure compliance with all regulations and company policies		3	1	2
	PC29. report and take corrective action in response to typical faults and inconsistencies		3	1	2
	PC30. support in calibrating the testing equipment periodically as per the SOP		4	2	2
	PC31. verify the equipment accuracy by performing trial runs		4	2	2
	PC32. respond to emergency calls for system and equipment failure		3	1	2
	Total		100	39	61
LFS/N0103 (Ensure cleanliness in the work area)	PC1. inspect the area while taking into account various surfaces	100	4	2	2
	PC2. identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain		5	2	3
	PC3. ensure that the cleaning equipment is in proper working condition		5	2	3
	PC4. select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person		4	2	2
	PC5. plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces		4	2	2
	PC6. inform the affected people about the cleaning activity		4	2	2



	PC7. display the appropriate signage for the work being conducted		4	2	2
	PC8. ensure that there is adequate ventilation for the work being carried out		5	2	3
	PC9. wear the personal protective equipment required for the cleaning method and materials being used		4	2	2
	PC10. use the correct cleaning method for the work area, type of soiling and surface		4	2	2
	PC11. deal with accidental damage, if any, caused while carrying out the work		4	2	2
	PC12. report to the appropriate person any difficulties in carrying out work		4	2	2
	PC13. identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill		4	2	2
	PC14. ensure that there is no oily substance on the floor to avoid slippage		4	2	2
	PC15. ensure that no scrap material is lying around		4	2	2
	PC16. maintain and store housekeeping equipment and supplies		4	2	2
	PC17. follow workplace procedures to deal with any accidental damage caused during the cleaning process		4	2	2
	PC18. ensure that, on completion of the work, the area is left clean and dry and meets requirements		4	2	2
	PC19. return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored		5	2	3



	PC20. dispose the waste garnered from the activity in an appropriate manner		5	2	3
	PC21. dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly		5	2	3
	PC22. maintain schedules and records for housekeeping duty		5	2	3
	PC23. replenish any necessary supplies or consumables		5	2	3
	Total		100	46	54
LFS/N0101 (Maintain a healthy, safe and secure working environment in the life sciences facility)	PC1. observe and comply with the company's current health, safety and security policies and procedures	100	10	5	5
	PC2. while carrying out work, use appropriate safety gears like head gear, masks, gloves and other accessories as mentioned in the guidelines		10	5	5
	PC3. report any identified breaches in health, safety, and security policies and procedures to the designated person		10	5	5
	PC4. responsible for maintaining discipline at the shop-floor/ production area		10	5	5
	PC5. identify and correct any hazards that the individual can deal with safely, competently and within the limits of their authority		10	5	5
	PC6. adhere and comply to storage and handling guidelines for hazardous material		10	5	5
	PC7. identify and recommend opportunities for improving health, safety, and security to the designated person		10	5	5



	PC8. complete any health, safety and security activities like safety drills and prepare records legibly and accurately		10	4	6
	PC9. report any hazards that the individual is not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected		10	4	6
	PC10. follow the company’s emergency procedures promptly, calmly, and efficiently		10	5	5
	Total		100	48	52
LFS/N0102 (Carry out reporting and documentation)	PC1. report data/problems/incidents as applicable in a timely manner	100	10	5	5
	PC2. report to the appropriate authority as laid down by the company		10	5	5
	PC3. follow reporting procedures as prescribed by the company		10	5	5
	PC4. identify documentation to be completed relating to one’s role		10	5	5
	PC5. record details accurately in an appropriate format		10	5	5
	PC6. complete all documentation within stipulated time according to company procedure		10	5	5
	PC7. ensure that the final document meets regulatory and compliance requirements		10	5	5
	PC8. make sure documents are available to all appropriate authorities to inspect		10	5	5
	PC9. respond to requests for information in an appropriate manner whilst following organizational procedures		10	5	5



	PC10.inform the appropriate authority of requests for information received		10	4	6
	Total		100	49	51
	Grand Total	400	400	182	218
	Percentage Weightage			45%	55%
	Minimum Pass % to Qualify			50%	



Annexure2: Trainer Prerequisites for Job role: “Manufacturing Assistant – Life Sciences” mapped to Qualification Pack: “LFS/ Q 0216 Ver1.0”

Sr. No.	Area	Details
1	Job Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack <u>“LFS/Q0216 Ver1.0”</u> .
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	10 th Pass
4a	Domain Certification	Certified for Job Role: “Manufacturing Assistant- Life Sciences” mapped to QP: <u>“LFS/Q 2016 Ver1.0”</u> . Minimum accepted score is 70% as per LSSSDC guidelines.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/1402”. Minimum accepted score is 70% as per LSSSDC guidelines.
5	Experience	Preferably Minimum Five (5) years’ experience in life sciences manufacturing occupation for non-trained and non-qualified talent Minimum Five (3) years’ experience with Manufacturing Assistant-Life Sciences Level-2 qualified



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

LIFE SCIENCES SECTOR SKILL DEVELOPMENT COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Manufacturing Assistant- Life Sciences'
QP No. 'LFS/Q 0216 NSQF Level 2'

Date of Issuance: December 24th, 2015

Valid up to: December 23rd, 2016

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

Authorized Signatory
(Life Sciences Sector Skill Development Council)



Life Sciences Sector Skill Development Council
13, Palam Marg, 3rd Floor, Vasant Vihar, New Delhi, PIN 110057
Phone No. 011-41042408/ 407; E mail: info@lsssdc.in;
www.lsssdc.in