





QUALIFICATION FILE

MUSHROOM CULTIVATOR

| \checkmark Short Term Training (STT) $\ \square$ Long Term Training (LTT) $\ \square$ Apprenticeship |
|--|
| \square Upskilling \square Dual/Flexi Qualification \checkmark For ToT \checkmark For ToA |
| |
| √ General □ Multi-skill (MS) □ Cross Sectoral (CS) □ Future Skills □ OEM |
| NCrF/NSQF Level: 3 |
| |

Submitted By: West Bengal State Council of Technical & Vocational Education and Skill Development

Submitting Body Name> West Bengal State Council of Technical & Vocational Education and Skill Development, Karigari Bhavan (5th Floor), Plot-B/7, Action Area-III
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Section 1: Basic Details

| 1. | Qualification Name | | room Cultivator AGR/NSQF-2022/0231 | | | | | | | | |
|----|---|-----------|---|------------|---|---------------------------------|--|--|--|--|--|
| 2. | Sector/s | Agric | Agriculture | | | | | | | | |
| 3. | Type of Qualification: ☐ New ☐ √ Revised | | NQR Code & version of existing/previous Qualification Name of existing/previous ver | | | | | | | | |
| | ☐ Has Electives/Options | _ | ication: (change to previous, once app | roved) | | | | | | | |
| | □OEM | STC - | AGR/NSQF-2018/801 | | Mushroom Cultiva | ator | | | | | |
| 4. | a. OEM Name b. Qualification Name (Wherever applicable) | NA | | | | | | | | | |
| 5. | National Qualification Register (NQR) Code | | 3-AG-00365-2023-V2-WBSC | | 6. NCrF/NSQF Le | evel: 3 | | | | | |
| | &Version | Versio | on 2.0 | | | | | | | | |
| | (Will be issued after NSQC approval) | 0 | | | | | | | | | |
| 7. | Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple | Certifi | cate | | | | | | | | |
| | entry/exits also & provide details in annexure) | | | | | | | | | | |
| 8. | Brief Description of the Qualification | A mu | shroom cultivator primarily carries | out ex-s | situ cultivation of m | nushrooms. Perform routine care | | | | | |
| | | | ling planting, irrigating and harvesting | | | | | | | | |
| | | | are items for market/sale purposes. | _ | | | | | | | |
| | | lines, | air flow and barn temperature. Ensur | e the clea | anness of the farm w | orking. | | | | | |
| 9. | Eligibility Criteria for Entry for | Entry | Qualification & Relevant Experience: | | | <u>_</u> | | | | | |
| | Student/Trainee/Learner/Employee | | | | | | | | | | |
| | | S. No. | Academic/Skill Qualification (with Specialization - if applicable) | Spe | ed Experience (with ecialization - if applicable) | | | | | | |
| | | 1 | Grade 10 | Nil | | | | | | | |
| | | 2 | Grade 8 pass and pursuing | Nil | | | | | | | |
| | | | continuous schooling in regular | | | | | | | | |
| | | | school with vocational subject | | | | | | | | |
| | | 3 | Grade 8 Pass | 2 yrs | | | | | | | |
| | | 4 | 5th Grade Pass | 5 yrs | | | | | | | |
| | | | | | | | | | | | |

| 10. | to Assessment (as per National Credit Framework (NCrF)) | 12 | | | | ommon Cost Nori plicable): | m Category | (I/II/III) (wherever |
|-----|---|----------------------------|-------------------|-------------------|-----------------------------|--------------------------------|------------------|----------------------|
| 12. | Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable) | NA | | | 1 | | | |
| 13. | Training Duration by Modes of Training | √□Offline □Online □ | □Blended | | | | | |
| | Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification) | Training Delivery Modes | Theory (Hours) | Practical (Hours) | OJT Mandatory (Hours) | OJT Recommende d (Hours) | Total (Hours) | |
| | the quamication) | Classroom (offline) | 120 | 120 | 120 | , | 360 | 1 |
| | | Online | | | | | | i |
| | | (Refer Blended Learnin | ng Annexure f | or details) | | | | |
| | Aligned to NCO/ISCO Code/s (if no code is available mention the same) | 6194.9900 | | | | | | |
| 15. | Progression path after attaining the | Horizontal Progress | | | | | | |
| | qualification (Please show Professional and | 1. Vermi-Composter (| | | | | | |
| | Academic progression) | 2. Bio Gas and Bio Sli | | ian (L-3) | | | | |
| | | Vertical Progression | | | | | | |
| | | Mushroom Grower (I | L-4) | | | | | |
| 16. | Other Indian languages in which the | NA | | | | | | |
| | Qualification & Model Curriculum are being | | | | | | | |
| 47 | submitted Is similar Qualification(s) available on NQR-if | | | | | | | |
| | yes, justification for this qualification | □ Yes √□ No URLs | of similar Q | ualifications | | | | |
| 18. | Is the Job Role Amenable to Persons with | □ Yes √□ No | | | | | | |
| | Disability | If "Yes", specify appli | | | | | | |
| 19. | How Participation of Women will be | Women as part of self | f-help group: | s take part in | this training | and then go for s | self-employ | ment as well as |
| | Encouraged | wage employment | | | | | | |
| 20. | Are Greening/ Environment Sustainability | ☐ Yes √ No | | | | | | |
| | Aspects Covered (Specify the NOS/Module | | | | | | | |
| | which covers it) | | | | _ | | | |
| | Is Qualification Suitable to be Offered in Schools/Colleges | Schools √ Yes □ No | o Colleges | s⊠Yes □ N | lo | | | |
| 22. | Name and Contact Details of Submitting / | Name: Saequa Monaz | zza, Chief Ad | lministrative | Officer | | | |
| | Awarding Body SPOC | Email: caowbsctvesd | l@gmail.com | Contact | No.: 033-2340 | 0-3717 | | |
| | (In case of CS or MS, provide details of both Lead | | = | | | | | |

| | AB & Supporting ABs) | Website: sctvesd.wb.gov.in | |
|---|--|--------------------------------|-------------------------------|
| | | | |
| | | | |
| 2 | 3. Final Approval Date by NSQC: 3.5.2023 | 24. Validity Duration: 3 years | 25. Next Review Date 3.5.2026 |
| | | | |

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project

| S. | NOS/Module Name | NOS/Module | Core/ | NCrF/ | Credits | T | raining | g Durati | on (Hou | ırs) | Assessment Marks | | | | | | |
|----|---|-----------------------------------|--------------|---------------|----------------|-----|---------|--------------|--------------|-------|------------------|-----|-------|----------|-------|-------------------------------------|--|
| No | | Code & Version (if applicable) | Non- Core | NSQF Level | as per NCrF | Th. | Pr. | OJT- Man. | OJT- Rec. | Total | Th. | Pr. | Proj. | Viv a | Total | Weightage (%) (if applicable) | |
| 1. | Identify the Scope & importance of Mushroom cultivation in India | AGR/0231/OC1,V 2.0 | Core | 3 | 1 | 20 | 10 | | | 30 | 50 | 40 | | | 90 | 9% | |
| 2. | Prepare & pasteurize the compost necessary to cultivate mushrooms | AGR/0231/OC2,V 2.0 | Core | 3 | 1 | 10 | 20 | | | 30 | 24 | 60 | | | 84 | 8.4% | |
| 3. | Select commercially important species of mushroom and design appropriate site to cultivate mushrooms | AGR/0231/OC3,V 2.0 | Core | 3 | 1 | 10 | 20 | | | 30 | 26 | 60 | | | 80 | 8% | |
| 4. | Undertake disease control and pest management activities, casing and pinning for mushroom cultivation | AGR/0231/OC4,V 2.0 | Core | 3 | 1 | 10 | 20 | | | 30 | 24 | 60 | | | 84 | 8.4% | |
| 5. | Demonstrate harvest & post-harvest procedures of mushrooms | AGR/0231/OC5,V 2.0 | Core | 3 | 2 | 10 | 50 | | | 60 | 26 | 140 | | | 166 | 16.6% | |
| 6. | Work in real job situation with special | AGR/0231/OC6,V 2.0 | Core | 3 | 4 | 0 | 0 | 120 | | 120 | 0 | 0 | 440 | | 440 | 44% | |

| S. | NOS/Module Name | NOS/Module | Core/ | NCrF/ | Credits | Training Duration (Hours) | | | | | | Assessment Marks | | | | | | | |
|----|--|-----------------------------------|--------------|---------------|----------------|---------------------------|-----|--------------|--------------|-------|-----|------------------|-------|----------|-------|-------------------------------------|--|--|--|
| No | | Code & Version (if applicable) | Non- Core | NSQF Level | as per NCrF | Th. | Pr. | OJT- Man. | OJT- Rec. | Total | Th. | Pr. | Proj. | Viv a | Total | Weightage (%) (if applicable) | | | |
| | emphasis on basic safety and hazards in this domain. | | | | | | | | | | | | | | | | | | |
| 7. | Employability Skills- 60 hrs. | DGT/VSQ/N0102 | Core | 3 | 2 | 60 | 0 | | | 60 | 50 | 0 | | | 50 | 5% | | | |
| | Duration (in Hours) / To | tal Marks | | | 12 | 120 | 120 | 120 | | 360 | 200 | 360 | 440 | | 1000 | | | | |

Elective NOS/s:

NA

| S. No | NOS/Module Name | NOS/Module | Core/ | NCrF/NSQF | Credits | T | raining | g Durati | on (Hou | ırs) | | | Asses | sment | Marks | |
|---------|-----------------------------|--------------------|--------------|-----------|----------------|-----|---------|--------------|--------------|-------|-----|-----|-------|-------|-------|-------------------|
| | | Code & Version (if | Non- Core | Level | as per NCrF | Th. | Pr. | OJT- Man. | OJT- Rec. | Total | Th. | Pr. | Proj. | Viva | Total | Weightage (%) (if |
| | | applicable) | | | | | | | | | | | | | | applicable) |
| 1. | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | |
| Duratio | on (in Hours) / Total Marks | | | | | | | | | | | | | | | |

Optional NOS/s:

NA

| S. No | NOS/Module Name | NOS/Module | Core/ | NCrF/NSQF | Credits | Tı | raining | j Durati | ion (Hou | ırs) | | | Asses | sment | Marks | |
|---------|-----------------------------|-------------|-------|-----------|---------|-----|---------|----------|----------|-------|-----|-----|-------|-------|-------|----------------|
| | | Code & | Non- | Level | as per | Th. | Pr. | OJT- | OJT- | Total | Th. | Pr. | Proj. | Viva | Total | Weightage |
| | | Version (if | Core | | NCrF | | | Man. | Rec. | | | | | | | (%) (if |
| | | applicable) | | | | | | | | | | | | | | applicable) |
| 1. | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | |
| Duratio | on (in Hours) / Total Marks | | | | | | | | | | | | | | | |

Assessment - Minimum Qualifying Percentage Please specify **any one** of the following:

Minimum Pass Percentage - Aggregate at qualification level: Th. 60% & Pr70% (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise:_____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

| 1. | Trainer's Qualification and experience in the | CTS/ATS (Food production) 5 years' experience |
|----|--|---|
| | relevant sector (in years) (as per NCVET | OR . |
| | guidelines) | B.sc (Hons.)/ Diploma (Food and nutrition or Food processing technology /Food Technology) 3 years' experience OR |
| | | B.Tech / B.E ((Food technology / Food Processing Technology/Biochemical Engineering) 2 years' experience AND |
| | | Certified for Job Role: "Mushroom Cultivator" -STC - AGR/NSQF-2018/801 OR STC - AGR/NSQF-2022/0231. Minimum accepted score is 80%. Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". Minimum accepted score is 80% |
| 2. | Master Trainer's Qualification and experience | CTS/ATS (Food production) 5 years' experience |
| | in the relevant sector (in years) (as per NCVET | OR |
| | guidelines) | B.sc (Hons.)/ Diploma (Food and nutrition or Food processing technology /Food Technology) 3 years' experience OR |
| | | B.Tech / B.E ((Food technology / Food Processing Technology/Biochemical Engineering) 2 years' experience AND |
| | | Certified for Job Role: "Mushroom Cultivator" -STC - AGR/NSQF-2018/801 OR STC - AGR/NSQF-2022/0231.Minimum accepted score is 80%. And |
| | | Certified on any domain skill of NSQF Level 5 with experience in training activities in similar field. |
| 3. | Tools and Equipment Required for Training | ✓ Yes □ No (If "Yes", details to be provided in Annexure) |
| 4 | In Case of Revised Qualification, Details of Any Upskilling Required for Trainer | NO |

Section 4: Assessment Related

| . Assessor's Qualification and experience in | CTS/ATS (Food production) 5 years' experience |
|--|---|
| relevant sector (in years) (as per NCVET | OR |
| | B.sc (Hons.)/ Diploma (Food and nutrition or Food processing technology /Food Technology) 3 |
| | years' experience |
| | OR |
| | B.Tech / B.E ((Food technology / Food Processing Technology/Biochemical Engineering) 2 years' |
| | experience And |
| | Certified for Job Role: "Mushroom Cultivator" -STC - AGR/NSQF-2018/801 OR STC - AGR/NSQF- |
| | 2022/0231. Minimum acceptedscore is 80%. |
| | Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped |
| | to the Qualification Pack: "MEP/Q2701, v2.0". Minimum accepted score is 80% |
| Proctor's Qualification and experience in | CTS/ATS (Food production) 5 years' experience |
| relevant sector (in years) (as per NCVET | OR |
| guidelines) | B.sc (Hons.)/ Diploma (Food and nutrition or Food processing technology /Food Technology) 3 |
| , | years' experience |
| | OR |
| | B.Tech / B.E ((Food technology / Food Processing Technology/Biochemical Engineering) 2 years' |
| | experience |
| | And Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped |
| | to the Qualification Pack: "MEP/Q2701, v2.0". Minimum accepted score is 80% |
| | to the Qualification rack. MEI / Q2701, V2.0. Millimum accepted score is 00% |
| B. Lead Assessor's/Proctor's Qualification and | CTS/ATS (Food production) 5 years' experience |
| experience in relevant sector (in years) (as per | OR |
| NCVET guidelines) | B.sc (Hons.)/ Diploma (Food and nutrition or Food processing technology /Food Technology) 3 |
| · | years' experience |
| | OR |
| | B.Tech / B.E ((Food technology / Food Processing Technology/Biochemical Engineering) 2 years' |
| | experience And |
| | Assessor will be required to be empaneled with WBSCTVESD upon successfully clearing TOA in |
| | relevant job role to be conducted from time to time by WBSCTVESD. |
| Assessment Mode (Specify the assessment | Offline |
| mode) | |
| mode) | |
| 5. Tools and Equipment Required for | Same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for the same as for training □ V Yes □ No (details to be provided in Annexure-if it is different for the same as for the same |
| , | |

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

| 1. | Latest Skill Gap Study (not older than 2 years) (Yes/No): No |
|----|--|
| 2. | Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): NO |
| 3. | Government /Industry initiatives/ requirement (Yes/No): NO |
| 4. | Number of Industry validation provided: 3 |
| 5. | Estimated nos. of persons to be trained and employed: 700 per year |
| 6. | Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes |
| | If "No", why: |

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

| 1. | Annexure: NCrF/NSQF level justification based on NCrF | Annexure 1 |
|-----|--|-------------------------|
| | level/NSQF descriptors (Mandatory) | |
| 2. | Annexure: List of tools and equipment relevant for | Annexure 2 |
| | qualification (Mandatory, except in case of online course) | |
| 3. | Annexure: Detailed Assessment Criteria (Mandatory) | Annexure 6 |
| 4. | Annexure: Assessment Strategy (Mandatory) | Annexure 7 |
| 5. | Annexure: Blended Learning (Mandatory, in case selected | NA |
| | Mode of delivery is "Blended Learning") | |
| 6. | Annexure: Multiple Entry-Exit Details (Mandatory, in case | NA |
| | qualification has multiple Entry-Exit) | |
| 7. | Annexure: Acronym and Glossary (Optional) | Annexure 8 |
| 8. | Supporting Document: Model Curriculum (Mandatory – | Yes |
| | Public view) | |
| 9. | Supporting Document: Career Progression (Mandatory - | Yes in Q file |
| | Public view) | |
| 10. | Supporting Document: Occupational Map (Mandatory) | Yes in Q File |
| 11. | Supporting Document: Assessment SOP (Mandatory) | Yes in Model Curriculum |
| 12. | Any other document you wish to submit: | NO |

Annexure 1: Evidence of Level

| NCrF/NSQF Level | Key requirements of the job role/ outcome of the | How the job role/ outcomes relate to the NCrF/NSQF level | NCrF/NSQF |
|--|---|---|-----------|
| Descriptors | qualification | descriptor | Level |
| Professional Theoretical Knowledge/Process | Ability to do the routine works of maintaining Mushroom farm | User/individual on the job needs to know and understand: Plan and organize work of mushroom culture and compost and analyse the components of compost. | 3 |
| Professional and Technical Skills/ Expertise/ Professional Knowledge | Factual knowledge about the different types of edible Mushrooms and the methods of cultivation | •User/ individual needs to have an understanding of basic principles and knowledge about the preparation of mushroom | 3 |
| Employment Readiness & Entrepreneurship Skills & Mind- set/Professional Skill | Ability to prepare different compost required for Mushroom cultivation, manage pests & diseases, harvest right quality Mushroom at right time. | •User/ Individual demonstrate the practical skill about quality of mushroom and disease control with harvesting and post harvesting management. | 3 |
| Broad Learning Outcomes/Core Skill | Ability to start and run Mushroom farm on scientific lines in profitable manner. Communicate effectively with subordinates/coworkers and convey and share work related information clearly using appropriate language. Fundamental knowledge of computer and basic understanding personal banking | •User / Individual gathers knowledge of soft skill and fundamental knowledge of computer which enable the user/ individual to work in a team in a collaborative manner. | 3 |
| Responsibility | Since this training leads to self employment, responsibility for won work and learning is to be present and demonstrated The job holder will work under supervision and he will be responsible for selection of mushroom, cultivation site, management, harvest and post-harvest activities, disease and pest control, processing and storage, sale of produce in local or specified market. | • User / Individual is required to carry out functions such as interpreting warnings/instructions given on tools and materials needed in Mushroom Culture. In these activities user / individual is doing the task under supervision. | 3 |

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment Batch Size: 30

| Tools and Equipments: (For a batch of 30 candidates) | | | |
|---|---|--|----------|
| Sl No. | Item Name | Item description/technical specification (Instruments andmachinery) | Quantity |
| 1. | Hot air oven (24"×24"×24") inch size | Hot air oven (24"×24"×24") with blower digital temp (Multispan) and time control, inside made of 304SS of 20gage, outside of MS with powder coated finish, ball catcher heavy door. Three side heating elements, Standard double wall fabrication, Inner chamber made of highly polished stainless steel sheet, Exterior fabricated out of thick mild steel duly finished in white stoving enamel with mat finished colour combinations, Quick and uniform heating in range of 50°C to 250°C ±2°C controlled by capillary type thermostat, L-shaped thermometer is built-in type, Control panel is provided with selector switch of high or low rates of power thermostat control knob and indicators for mains& thermostat. | 1 no. |
| 2. | Autoclave (18 x 24 inch)double coil | Autoclave (18 x 24 inch) double coil, double wall, digital temperature controller, timer arrangement vertical with control cut off pressure (15-30psig) temperature indicator, inner and outer wall 304SS of 14gage, heavy lid and ring made of 304SS of 10gage, 304SS of 20gage perforated Basket with handle. It is equipped with pressure guage, steam release valve and safety valves. Pressure Controls by spring Valves, Fitted with silicon rubber gasket jointless, to work on 230 volts A./C. only. Autoclave have central out let at the bottom and also have water level indicator. The chamber is absolutely leak proof & can be operated at any selected point in between 5 to 30 pound persq.inch. | 1 no. |
| 3. | Rectangular hot plate of,(10"×16"×9") inch size | Rectangular hot plate of, (10"×16"×9") 304SS top of 10 gauge/fully SS body of 18 gauge, digital temperature indicatorcum controller in one side. | 1 no. |
| 4. | High precision balance Capacity=1000 g | High precision balanceCapacity=1000gm Readability=0.001 SS Pan size (mm) = 128×128 | 1 no. |
| 5. | Digital electronics balance, capacity : 5mg-210 g | Digital electronics balance, capacity : 5mg-210gm, accuracy0.001gm, SS pan | 1no. |

| 6. | Physical rough balance Capacity=30 Kg | Physical rough balanceCapacity=30Kg Readability=0.5gm SS Pan size (mm) = 250×330 | 2 nos. |
|-----|---|---|--------|
| 7. | Refrigerator having fivestar BEE mark | Refrigerator having five star BEE mark with separate deep freezeand normal freeze,Capacity - 500lit and above. Supply with voltage stabilizer 3KV | 1no. |
| 8. | Thermometer,0 🗹 to 100 1. C | Thermometer,0 ºC to 100 º C glass | 4 nos. |
| 9. | Serological water bath | Serological water bath, Double wall insulation, total 304SS of 20gauge(inner and outer), capacity (12x250ml) (16"×12"×10")304SS lid, Ambient to 110 © and digital temperature indicator. one outlet with ball valve | 1 no. |
| 10. | Tray dryer, horizontalcross air flow system | Tray dryer, horizontal cross air flow system, inner 304SS wall of18 gauge & with six 304SS tray of 16gauge Tray size: (16"x32"x1")inch Solid SS tray/perforated SS tray / wire net SS try, all traysadjustable type with gape of 6" per tray. Digital PID type temperature controller. Temperature range 50°-300°C with accuracy ±1°C 1HP. crompton brand motor with fittings of 304SS made blower. | 1 no. |
| 11. | Air Conditioner | 2 ton | 1 no. |
| 12. | Exhaust Fan | 12 inch | 3 nos. |
| 13. | Iron Shelves | Iron Shelves with 6 no shelves | 6 nos. |
| 14. | Gas Oven | Gas Oven double | 1 no. |
| 15. | Digital pH Meter, Range : 0 to 14pH | Digital pH Meter, Range: 0 to 14pH (mV upto 1999mV), Resolution: 0.01pH (±1mV), Accuracy: 0.01pH, •±1 digit (1mV, •±1digit), Temperature compensation: 0°C to100°C (manual), 4 digit LED display with automatic polarity and decimal indications, With one combination electrode, stand, clamp, buffers, dust cover & manual. Supply with pH 4.01 buffer, pH 7.00 buffer pH 10.01 buffer | 1 no. |

| 16. | Magnetic Starrer, with Hot Plate | Magnetic Starrer, with Hot Plate, with Stepless Speed control &S.S. body and top. Stirring capacity 5lt liquid. It utilises magnetic filed created by a Heavy duty permanent magnet which induces variable speed stirring action. Stirring is accomplished by means of small teflon rotor, which when placed to be stirred is capable or rotation by magnetic field applied from below the container. Fitted with pilot lamp. | 1 no. |
|-----|-------------------------------------|--|--------|
| | B.O.D cooling | B.O.D COOLING INCUBATOR (IMPORTED:COMPRESSOR) | 1 no. |
| 17. | incubator (imported | | |
| | :compressor) | Cooling BOD incubator, combined low & high temperature, provided with precise electronic temperature control with digital readout | |
| | | a) Construction: Double-walled with adequate polystyreneand glass wool insulation.b) Inner Chamber: Stainless Steel, (304SS of 20gauge)duly polished with different shelf | |
| | | positions. c) Outer Walls: CRC Steel Sheet, scraped and treatedwith anti-corrosive primer and finished with powder | |
| | | coating. d) Outer Door: The outer door will be double walled duly insulated and provided with magnetic strip gasket withproper sealing and locking device with anti-corrosive primer and finished with powder coating. | |
| | | e) Inner Door: An Acrylic door is provided. f)Inner chamber made of 304 grade quality Stainless Steel. Wall side 20 gauge thickness | |
| | | sheets & Tray side 20gauge thickness sheets. g) Temp. Digital controller - Multispan brand. Temperature Range : 5°C to 60°C | |
| | | Temperatures.Accuracy of Control : ± 0.50 Working Chamber Made of : Stainless Steel Sheet. Volume=285 Lt/ 10cft | |
| | | No. of Trays : 3 Numbers Perforated 304SS Trays of 20 gauge. | |
| | | Operable on : 220/230 Volts, SinglePhase, 50 Cycles, AC Mains. | |
| | | Proper white light illumination is necessary in innerchamber Supply with Suitable stabilizer with surge suppresser (3KVA) | |
| 18. | Digital Thermometer | 1. Temperature scale: oC or o F User-Selective 2. | 2 nos |
| 10. | 2 great thermometer | Resolution: 1 oC or 1 oF 3. Measurement Range: 0oC to200oC 4. Display: LCD | 2 1103 |

| 19. | flow chamber <u>LAMINAR FLOW</u> | Horizontal Laminar air flow chamber <u>LAMINAR FLOW (Horizontal):</u> 1 . HEPA filter with efficiency : 99.999% at 0.3 um.2 .Microprocessor control system , Led/LCD display | 1no. |
|-----|-------------------------------------|--|------|
| | | | |
| | | | |

| 20. | Straw immersion tank, | Straw immersion tank, made by SS304, 18 gaugesheet , 500 lt capacity | 1 no. |
|-----|---|--|---------|
| 21. | Paddy Straw | Paddy Straw bundle | 20 nos. |
| 22. | Wheat bran | Wheat bran, 1kg | 20 nos. |
| 23. | Gypsum | Gypsum, 1kg | 2 nos. |
| 24. | Formalin (2%) | Formalin (2%), 2.5 lt | 2 nos. |
| 25. | Polythene | Polythene, 10 meter | 2 nos. |
| 26. | Hand Sprayer | Hand Sprayer 1lt capacity | 5 nos. |
| 27. | Calcium Sulphate | Calcium Sulphate, 1 kg | 3 nos. |
| 28. | Calcium Carbonate | Calcium Carbonate, 1 kg | 3 nos. |
| 29. | Dextrose | Dextrose, 500 gm | 3 nos. |
| 30. | Agar Powder | Agar Powder, 500gm | 3 nos. |
| 31. | Ethyl alcohol | Ethyl alcohol, 500ml | 6 nos. |
| 32. | Formaldehyde | Formaldehyde, 500ml | 3 nos. |
| 33. | Chlorox | Chlorox, 500 gm | 3 nos. |
| 34. | Lactic Acid | Lactic Acid, 500 ml | 3 nos. |
| 35. | Lactophenol | Lactophenol, 500 ml | 2 nos. |
| 36. | Yeast Extract | Yeast Extract, 500 ml | 2 nos. |
| 37. | Peptone | Peptone, 500 ml | 2 nos. |
| 38. | Malt Extract | Malt Extract, 500 ml | 2 nos. |
| 39. | Test tube ,borosilicate glass 18x15 ml | Test tube ,borosilicate glass 18x15 ml Heat Resistant, Annealing Surface | 50 nos. |
| 40. | Test tube ,borosilicate glass 15x15 ml | Test tube ,borosilicate glass 15x15 ml Heat Resistant, Annealing Surface | 50 nos. |
| 41. | Beaker, graduated , borosilicate glass 1000ml | Beaker, graduated, borosilicate glass 1000ml Heat Resistant, Annealing Surface | 5 nos. |
| 42. | Beaker, graduated , borosilicate glass 500ml | Beaker, graduated, borosilicate glass 500ml Heat Resistant, Annealing Surface | 10 nos. |

| 43. | Beaker, graduated , borosilicate glass 250ml | Beaker, graduated, borosilicate glass 250ml Heat Resistant, Annealing Surface | 10 nos. |
|-----|--|---|---------|
| 44. | Beaker, graduated , borosilicate glass 100ml | Beaker, graduated, borosilicate glass 100ml Heat Resistant, Annealing Surface | 10 nos. |
| 45. | Conical flask, graduated , borosilicate glass 500ml | Conical flask, graduated , borosilicate glass 500ml Heat Resistant, Annealing Surface | 5 nos. |
| 46. | Conical flask, graduated , borosilicate glass 250ml | Conical flask, graduated, borosilicate glass 250ml Heat Resistant, Annealing Surface | 10 nos. |
| 47. | Conical flask, graduated , borosilicate glass 100ml | Conical flask, graduated , borosilicate glass 100ml Heat Resistant, Annealing Surface | 10 nos. |
| 48. | Pipette, graduated , borosilicate glass 50ml | Pipette, graduated , borosilicate glass 50ml Heat Resistant, Annealing Surface | 5 nos. |
| 49. | Pipette, graduated , borosilicate glass 25ml | Pipette, graduated , borosilicate glass 25ml Heat Resistant, Annealing Surface | 5 nos. |
| 50. | Pipette, graduated , borosilicate glass 10ml | Pipette, graduated , borosilicate glass 10ml Heat Resistant, Annealing Surface | 5 nos. |
| 51. | Pipette, graduated , borosilicate glass 5ml | Pipette, graduated, borosilicate glass 5ml Heat Resistant, Annealing Surface | 5 nos. |
| 52. | Pipette, graduated , borosilicate glass 2ml | Pipette, graduated, borosilicate glass 2ml Heat Resistant, Annealing Surface | 5 nos. |
| 53. | Pipette, graduated , borosilicate glass1ml | Pipette, graduated, borosilicate glass1ml Heat Resistant, Annealing Surface | 5 nos. |

| 54. | | Burette 50ml, graduated, borosilicate glass Heat Resistant, Annealing Surface (with ptfe stoppered), | 6 nos. |
|-----|---|--|---------|
| 55. | Volumetric flask, graduated, borosilicate glass 1000ml | Volumetric flask, graduated , borosilicate glass 1000ml Heat Resistant, Annealing Surface | 5 nos. |
| 56. | Volumetric flask ,graduated , borosilicate glass 500ml | Volumetric flask ,graduated , borosilicate glass 500ml Heat Resistant, Annealing Surface | 5 nos. |
| 57. | Volumetric flask ,graduated , borosilicate glass 250ml | Volumetric flask ,graduated , borosilicate glass 250ml Heat Resistant, Annealing Surface | 10 nos. |
| 58. | Volumetric flask ,graduated , borosilicate glass 100ml | Volumetric flask ,graduated , borosilicate glass 100ml Heat Resistant, Annealing Surface | 10 nos. |
| 59. | Measuring cylinder, graduated , borosilicate glass 1000ml | Measuring cylinder, graduated , borosilicate glass 1000ml Heat Resistant, Annealing Surface | 6 nos. |
| 60. | Measuring cylinder ,graduated , borosilicate glass 500ml | Measuring cylinder 'graduated ' borosilicate glass 500ml Heat Resistant, Annealing Surface | 6 nos. |
| 61. | Measuring cylinder ,graduated , borosilicate glass 250ml | Measuring cylinder ,graduated , borosilicate glass 250ml Heat Resistant, Annealing Surface | 6 nos. |

| 62. | Measuring cylinder ,graduated , borosilicate glass 100ml | Measuring cylinder ,graduated , borosilicate glass 100ml Heat Resistant, Annealing Surface | 6 nos. |
|-----|--|--|---------|
| 63. | Measuring cylinder ,graduated , borosilicate glass 50ml | Measuring cylinder ,graduated , borosilicate glass 50ml Heat Resistant, Annealing Surface | 6 nos. |
| 64. | Measuring cylinder ,graduated , borosilicate glass 25ml | Measuring cylinder ,graduated , borosilicate glass 25ml Heat Resistant, Annealing Surface | 6 nos. |
| 65. | Measuring cylinder ,graduated , borosilicate glass 10ml | Measuring cylinder ,graduated , borosilicate glass 10ml Heat Resistant, Annealing Surface | 6 nos. |
| 66. | Funnel 60 deg angle long stem , borosilicate glass 75mm | Funnel 60 deg angle long stem , borosilicate glass 75mm Heat Resistant, Annealing Surface | 10 nos. |
| 67. | Glass rod 150 mm long, 5-6 mm dia borosilicate glass | Glass rod 150 mm long, 5-6 mm dia borosilicate glass Heat Resistant, Annealing Surface | 20 nos. |
| 68. | Porcelain basin 100 mm dia | Porcelain basin 100 mm dia Heat Resistant, | 6 nos. |
| 69. | Mortar/ pestle(porcelain) 100 mm | Mortar/ pestle(porcelain) 100 mm | 2 nos. |
| 70. | Mortar/ pestle(porcelain) 150 mm | Mortar/ pestle(porcelain) 150 mm | 2 nos. |
| 71. | Reagent bottle, borosilicate glass 250ml | Reagent bottle, borosilicate glass 250ml Heat Resistant, Annealing Surface | 10 nos. |

| 72. | Reagent bottle, borosilicate glass 500ml | Reagent bottle, borosilicate glass 500ml Heat Resistant, Annealing Surface | 10 nos. |
|-----|---|---|---------|
| 73. | Beaker, (Plastic)graduated, 1000ml | Beaker, (Plastic)graduated, 1000ml | 10 nos. |
| 74. | Beaker, (Plastic)graduated, 500ml | Beaker, (Plastic)graduated, 500ml | 10 nos. |
| 75. | Beaker, (Plastic)graduated, 250ml | Beaker, (Plastic)graduated, 250ml | 10 nos. |
| 76. | Beaker, (Plastic)graduated, 100ml | Beaker, (Plastic)graduated, 100ml | 10 nos. |
| 77. | Plastic bucket, 5lit | Plastic bucket, 5lit, heavy gauge nylon made | 2 nos. |
| 78. | Plastic bucket, 9lit | Plastic bucket, 9lit, heavy gauge nylon made | 2 nos. |
| 79. | Tray ,plastic, (12"×10") | Tray ,plastic, (12"×10"), heavy gauge nylon made | 6 nos. |
| 80. | Tray ,plastic, (17"×12") | Tray ,plastic, (17"×12"), heavy gauge nylon made | 6 nos. |
| 81. | Tray ,plastic, (19"×13") | Tray ,plastic, (19"×13"), heavy gauge nylon made | 6 nos. |
| 82. | Tray,SS 2 NO, with handle | Tray,SS 2 NO, with handle, made by high quality heavy gauge low carbon food grade steel | 3 nos. |
| 83. | Tray,SS 3 NO, with handle | Tray,SS 3 NO, with handle, made by high quality heavy gauge low carbon food grade steel | 3 nos. |
| 84. | Tray,SS 4 NO, with handle | Tray,SS 4 NO, with handle, made by high quality heavy gauge low carbon food grade steel | 3 nos. |
| 85. | Spoon Spatula 6" long ,SS | Spoon Spatula non-magnetic stainless steel with high polish one side spoon, 6" long ,SS | 6 nos. |

| 86. | Spoon Spatula | Spoon Spatula non-magnetic stainless steel with high polish one side spoon , 8" long ,SS | 6 nos. |
|-----|---|---|---------|
| | 8" long ,SS | | |
| 87. | Spoon Spatula | Spoon Spatula non-magnetic stainless steel with high polish one side spoon , 10" long ,SS | 6 nos. |
| | 10" long ,SS | | |
| 88. | Plane Desiccators Dia 300mm , plastic made | Desiccators Dia 300mm, plastic made | 2 nos. |
| 89 | Test tube holder (heavy) | Test tube holder (heavy) | 10 nos. |
| 90 | Burette stand with base and double clamp, (plastic PP made) | Burette stand with base and double clamp, (plastic PP made) | 6 nos. |
| 91 | Burette stand with base and single clamp, (plastic PP made) | Burette stand with base and single clamp, (plastic PP made) | 6 nos. |
| 92 | Pipette stand (plastic PP made) (Horizontal) | Pipette stand (plastic PP made) (Horizontal) | 6 nos. |
| 93. | Pipette stand (plastic PP made) (Vertical) | Pipette stand (plastic PP made) (Vertical) | 6 nos. |
| 94. | Test tube stand (plastic PP made) Dia 20mm | Test tube stand (plastic PP made) Dia 20mm | 6 nos. |

| 95. | Test tube stand (plastic PP made) Dia 25mm | Test tube stand (plastic PP made) Dia 25mm | 6 nos. |
|------|--|---|---------|
| 96. | Wash bottle, (plastic), 500 ml | Wash bottle, (plastic), 500 ml | 12 nos. |
| 97. | Filter stand with base and double clamp, (plastic PP made) and double clamp, (plastic PP made) | | 6 nos. |
| 98. | Test tube stand(plastic PP made) Dia 20mm | Test tube stand (plastic PP made) Dia20mm | 6 nos. |
| 99. | pH Paper | pH range 1 to 14 | 10 nos. |
| 100. | pH Buffer capsule/tablet, 10 caps in each pack,(pH 4, pH 7, pH 9.2) | pH Buffer capsule/tablet, 10 caps in each pack,(pH 4, pH 7, pH 9.2) Highly Pure, Analytical Grade | 3 nos. |
| 101. | Sodium hydroxide pallet,500gm | Sodium hydroxide pallet,500gm Highly Pure, Analytical Grade | 2 nos. |
| 102. | Concentrated HClacid,1 lit | Concentrated HCl acid,1 lit Highly Pure, Analytical Grade | 2 nos. |
| 103. | Potassium di hydrogen phosphate,500gm | Potassium di hydrogen phosphate,500gm Highly Pure, Analytical Grade | 2 nos. |
| 104. | Di potassium hydrogen phosphate,500gm | Di potassium hydrogen phosphate,500gm Highly Pure, Analytical Grade | 2 nos. |
| 105. | Potassium chloride,500gm | Potassium chloride,500gm Highly Pure, Analytical Grade | 2 nos. |
| 106. | Sodium chloride,500gm | Sodium chloride,500gm Highly Pure, Analytical Grade | 2 nos. |
| 107. | Phenolphthalein indicator (1% solution), 125 ml | Phenolphthalein indicator(1% solution), 125 ml Highly Pure, Analytical Grade | 2 nos. |

| 108. | Sodium bicarbonate,500gm | Sodium bicarbonate,500gm Highly Pure, Analytical Grade | 2 nos. |
|------|--|--|----------|
| 109. | Petridish , borosilicate glass 80x17mm | Petridish, borosilicate glass 80x17mm Heat Resistant, Annealing Surface | 40 nos. |
| 110. | Petridish , borosilicate glass100x17mm | Petridish , borosilicate glass100x17mm Heat Resistant, Annealing Surface | 40 nos. |
| 111 | Plastic pouch with zip (10"×12") | Plastic pouch with zip (10"×12"), per pack | 100 nos. |
| 112. | Plastic pouch with zip (12"×14") | Plastic pouch with zip (12"×14"), per pack | 100 nos. |
| 113. | Spirit lamp SS with brass cover125ml | Spirit lamp SS with brass cover125ml | 6 nos. |
| 114. | Bunsen Burner, brass made, with regulator | Bunsen Burner, brass made with regulator, | 3 nos. |
| 115. | Spirit lamp SS with brass cover125ml | Spirit lamp SS with brass cover125ml | 6 nos. |
| 116. | Bunsen Burner, brass made, with regulator | Bunsen Burner, brass made with regulator, | 4 nos. |
| 117. | Sessios SS of high quality 8" long | Sessios SS of high quality 8" long | 3 nos. |
| 118. | Sessios SS of high quality 10" long | Sessios SS of high quality 10" long | 3 nos. |
| 119. | Rubber Gloves 14 no, pair | Rubber Gloves 14 no, pair | 6 nos. |

| 120. | Inoculation needle with nicrome wire, best quality | Inoculation needle with nicrome wire, best quality | 10 nos. |
|------|--|--|---------|
| 121. | Butter paper roll of 100 piece | Butter paper roll of 100 piece | 2 nos. |
| 122. | Non absorbent cotton,400gm pack | Non absorbent cotton,400gm pack | 10 nos. |
| 123. | Ordinary Filter paper, 125mm dia | Ordinary Filter paper, 125mm dia | 6 nos. |
| 124. | Tissu paper roll, ordinary type | Tissu paper roll, ordinary type | 10 nos. |
| 125. | Brown paper roll 100 piece | Brown paper roll 100 piece | 2 nos. |
| 126. | Pipette jacket, SS made | Pipette jacket, SS made, used for holding 25ml. 10ml,5ml pipette | 2 nos. |
| 127. | Micropipette | Range: 100 - 1000 ml , with PVC made respective disposable microtips | 3 nos. |

Classroom Aids

The aids required to conduct sessions in the classroom are:

- 1. White Board
- 2. White board writing pen
- 3. Projector
- 4. Computer

Annexure 3: Industry Validations Summary Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

| S. N o | Organization Name | Representativ e Name | Designatio n | Contact Address | Conta ct Phon e No | E-mail ID | LinkedIn Profile (if available) |
|--------------|--|-------------------------|---|---|-----------------------------|-----------------------------|---------------------------------------|
| 1. | Red Cow Dairy Pvt. Ltd | Bijan Bishnu | Asst. Manager | Nandan Housing Complex, Station Road, Hooghly | 90730 22965 | Bishnubijanfp7007@gmail.com | |
| 2. | Krishna Chandra Dutta (Spice) Pvt Ltd | Dr.Dipan Chatterjee | Food technology & quality control manager | | 98305 65872 | dipanchatterjee@cookme.com | |
| 3. | M/s Foodies Agro | Mr. Monoj Mishra | Proprictor | Beharampur, Murshidabad | 97751 86565 | foodiesagro@rediffmail.com | |

Annexure 4: Training & Employment Details

Training and Employment Projections:

| Year | Total | Candidates | | Women | People with Disability | | |
|---------|-------------------------|--|-------------------------|--|-------------------------|--|--|
| | Estimated Training # | Estimated Employment Opportunities | Estimated Training # | Estimated Employment Opportunities | Estimated Training # | Estimated Employment Opportunities | |
| 2023-24 | 400 | 100% self employed | 150 | 100% self employed | | | |
| | | | | | | | |

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

| Qualification | fication Year Total Candidates | | | | Women | | | People with Disability | | | | | |
|---------------|------------------------------------|---------|----------|-----------|-----------|---------|----------|------------------------|----------|---------|----------|-----------|--------|
| Version | | Trained | Assessed | Certified | Placed | Trained | Assessed | Certified | Placed | Trained | Assessed | Certified | Placed |
| 1.0 | 2020-21 | 320 | 300 | 300 | 100% | | | 99 | 100% | | | | |
| | | | | | (self | | | | (self | | | | |
| | | | | | employed) | | | | employed | | | | |
| | 2021-22 | 300 | 290 | 300 | 100% | | | 68 | 100% | | | | |
| | | | | | (self | | | | (self | | | | |
| | | | | | employed) | | | | employed | | | | |

List Schemes in which the previous version of Qualification was implemented:

1. State Level Short Term Program under "Utkarsh Bangla" Scheme.

Content availability for previous versions of qualifications:

Languages in which Content is available: English

Annexure 5: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools: NA

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:

https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf

| S. No. | Select the Components of the Qualification | List Recommended Tools – for all Selected Components | Offline : Online Ratio |
|--------|--|--|------------------------|
| | | | |
| 1 | ☐ Theory/ Lectures - Imparting theoretical and conceptual knowledge | NA | NA |
| 2 | ☐ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners | NA | NA |
| 3 | ☐ Showing Practical Demonstrations to the learners | NA | NA |
| 4 | ☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training | NA | NA |
| 5 | □Tutorials/ Assignments/ Drill/ Practice | NA | NA |
| 6 | ☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations | NA | NA |
| 7 | ☐ Industry Exposure/ Project Work Internship/ Apprenticeship Training | NA | NA |

Annexure 6: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

| NOS/Module Name | Assessment Criteria for Performance Criteria/Learning Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---------------------|---|-----------------|--------------------|------------------|---------------|
| | Identify the Scope & importance of Mushroom cultivation in India | 50 | 40 | | |
| | (1.1) Identify the scope and importance of cultivation of mushroom in India | | | | |
| AGR/0231/OC1,V2.0 | scenario. | | | | |
| 71011,0231,001,12.0 | (2.2) Identify the market demand of mushroom | | | | |
| | (3.3) Identify the role of mushroom cultivator. | | | | |
| | Total Marks | 50 | 40 | | |
| | Prepare & pasteurize the compost necessary to cultivate mushrooms | 24 | 60 | | |
| | (2.1) Identify and Select appropriate materials to prepare the compost-base materials. | | | | |
| | (2.2) Describe various agricultural by-products, materials rich in cellulose | | | | |
| | (2.3) Select & apply chemicals for mineral deficiency rectification and stabilization | | | | |
| | (2.4) Identify different types compost- natural & synthetic, formulation of different compost | | | | |
| | (2.5) Select composting methods- short, long; indoor, outdoor | | | | |
| | (2.6) Undertake compost rotation and ensure adequate moisture, | | | | |
| AGR/0231/OC2,V2.0 | carbohydrate, gas exchange etc | | | | |
| | (2.7) Pasteurize the compost to kill insects, nematodes, pest fungi or other | | | | |
| | pests | | | | |
| | (2.8) Explore good compost attributes role of composting in Mushroom | | | | |
| | cultivation. | | | | |
| | (2.9) Prepare different types of compost by selecting appropriate materials. | | | | |
| | (2.10) Determine of quality of compost | | | | |
| | (2.11) Identify hazards & risks associated with composting and how to | | | | |
| | control injury to self. | | | | |
| | Total Marks | 24 | 60 | | |
| AGR/0231/OC3,V2.0 | Select commercially important species of mushroom and design | 26 | 60 | | |
| , , , , - | appropriate site to cultivate mushrooms | | | | |
| | (3.1)Select commercially important type of mushroom based on market's | | | | |
| | demand. | | | | |
| | (3.2)Selection of important types of Mushroom | | | | |
| | | | | | |

| | (2.2) Dragura much room chaung from authoritic course | | | |
|-----------------------|--|----|-----|--|
| | (3.3) Procure mushroom spawns from authentic source | | | |
| | (3.4) Select appropriate mushroom cultivation site with proper drainage & | | | |
| | water supply facility | | | |
| | (3.5) Design and construct mushroom farm according to the growing | | | |
| | conditions required for different kinds of mushrooms | | | |
| | (3.6) Understand different types of mushroom growing facilities and fixtures | | | |
| | (3.7) Understand types, components and their specifications of bulk chamber | | | |
| | conducive for good quality mushroom growing. | | | |
| | (3.8) Package of practices of White button Mushroom and Oyster Mushroom | 00 | 00 | |
| | Total Marks | 26 | 60 | |
| | Undertake disease control and pest management activities, casing and | 24 | 60 | |
| | pinning for mushroom cultivation | | | |
| | (4.1) Inspect mushroom bags or beds carefully for early detection of pests | | | |
| | and diseases | | | |
| | (4.2) Identify the diseases. | | | |
| | (4.3) Control diseases and exercise preventive care- spray pesticides/ | | | |
| | fungicides etc | | | |
| | (4.4) Pasteurize the mushroom farm to remove nematode in mushroom | | | |
| | cultivation | | | |
| AGR/0231/OC4,V2.0 | (4.5) Prepare casing soil to hold moisture | | | |
| | (4.6) Promote the formation of primordia, or mushroom pins by supplying | | | |
| | water to the mycelium | | | |
| | (4.7) Detect the earliest formation of recognizable mushrooms from | | | |
| | mycelium | | | |
| | (4.8) Use sterilized casing to control nematodes | | | |
| | (4.9) Spray fungicide after casing to check dry bubble | | | |
| | (4.10) Spray insecticide for control of mites | | | |
| | (4.11) Apply caustic chemicals top keep rodents away | | | |
| | Total Marks | 24 | 60 | |
| | Demonstrate harvest & post-harvest procedures of mushrooms | 26 | 140 | |
| | | | | |
| | (5.1) Assess the maturity of mushroom and harvest periods | | | |
| A OD /0004 /007 \ (C) | (5.2) Apply good harvesting practices | | | |
| AGR/0231/OC5,V2.0 | (5.3) Cut, clean and dry harvested mushroom using approved procedures | | | |
| | (5.4) Sort and grade the harvests as per required quality specifications | | | |
| | (5.5) Store, pack, label and transport produce | | | |
| | (5.6) Record the information, e.g. quality, quantity, type, expenditure | | | |
| | (3.5) Necora the information, e.g. quanty, quantity, type, expenditure | | | |

| | incurred in operation, etc. in appropriate registers, record book and logs (5.7) Utilize spent mushroom substrate in organic farming, vermi composting, bioremediation of contaminated soil etc (5.8) Sorting the Mushrooms on the size and quality (5.9) Packaging Mushrooms with labels containing month and year of | | | | |
|-------------------|--|-----|-----|-----|--|
| | harvesting, quantity and type of Mushroom etc | | | | |
| | (5.10)Use of spent Mushroom in vermi-composting and in organic farming. Total Marks | 26 | 140 | | |
| | Work in real job situation with special emphasis on basic safety and hazards in this domain. | 0 | 0 | 440 | |
| AGR/0231/OC6,V2.0 | | | | | |
| | Total Marks | | | | |
| DGT/VSQ/N0102 | Employability Skills- 60 hrs. | 50 | 0 | | |
| DG1/ V3Q/NU102 | As per NCVET guided curriculum | | | | |
| | Grand Total | 200 | 360 | 440 | |

Annexure 7: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program. *Mention the detailed assessment strategy in the provided template.*

- <1. Assessment System Overview:
- Batches assigned to WBSCTVE&SD for conducting the assessment online through Portal with two probable dates for Assessment
- WBSCTVE&SD deploys the ToA certified Assessor for executing the assessment
- WBSCTVE&SD monitors the assessment process & records
- 2. Testing Environment:
- · Check the Assessment location, date and time
- If the batch size is more than 30, then Assessment will spill over to consecutive days.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- 3. Assessment Quality Assurance levels/Framework:
- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified.
- 4. Types of evidence or evidence-gathering protocol:

- · reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- 5. Method of verification or validation:
- Surprise visit to the assessment location
- 6. Method for assessment documentation, archiving, and access
- · Hard copies of the documents are stored

On the Job:

- 1. Each module will be assessed separately.
- 2. The pass criteria is as per norms set by WBSCTVE&SD in respect of Qualification Files
- 3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills, understanding needs & requirements, and perform Soft Skills effectively:
 - · Videos / portfolio of Trainees during Industry Exposure
- 4. Assessment of each Module will ensure that the candidate is able to:
- · Effective engagement with the stakeholders
- Understand the working of various tools and equipment
- Deliver the job assigned to him/her in conformity with job responsibility ascribed to Qualification File.

Annexure 8: Acronym and Glossary

Acronym

| Acronym | Description |
|---------|--|
| AA | Assessment Agency |
| AB | Awarding Body |
| ISCO | International Standard Classification of Occupations |
| NCO | National Classification of Occupations |
| NCrF | National Credit Framework |
| NOS | National Occupational Standard(s) |
| NQR | National Qualification Register |
| NSQF | National Skills Qualifications Framework |
| OJT | On the Job Training |

Glossary

| Term | Description |
|-----------------------|--|
| National Occupational | NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual |
| Standards (NOS) | performing that task should know and also do. |
| Qualification | A formal outcome of an assessment and validation process which is obtained when a |
| | competent body determines that an individual has achieved learning outcomes to given standards |
| Qualification File | A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The |

| | Qualification File will be normally submitted by the awarding body for the qualification. |
|--------------------|--|
| Sector | A grouping of professional activities on the basis of their main economic function, product, service or technology. |
| Long Term Training | Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf |