

Nepal Industrial and Business Sector
Occupational Standard (OS)
Of
Fishery Technician Level-2 (Foreman Level)



In jointly implemented by

Occupation classification linkage with NSCO:

Occupational Title: Fishery Technician

Level: 2 (Foreman Level)

Sector: Agriculture

Sub – Sector: Fishery

OSS ID No.: AG-02-078

Major Group: 6

Sub-major Group: 62

Minor Group: 622

Unit Group: 6221

Occupation Specific Employers Panel:

S.N.	Name	Designation	Organization
1.	Indira Karki	Proprietor	Karki Krishi Farm
2.	Janga Bahadur Shah	Proprietor	Rohan Fish Hatchery Farm
3.	Jogendra Mahato	Proprietor	Global Integrated Agriculture Farm
4.	Khagendra Subedi	Proprietor	Tribeni Fish Development Co. Pvt. Ltd.
5.	Buddhi Raj Chaudhary	Proprietor	Rabi and Rabin Integrated Agriculture Farm
6.	Indra Mani Bhusal	Proprietor	Nawalpur Fish Farm
7.	JayKalyan Thapa	Proprietor	Kalyan Fish Farm
8.	Min Raj Gautam	Proprietor	Hitaishi Multipurpose Fish Farm
9.	Punya Prasad Chaudhary	Proprietor	Shanti Matshya Hatchery Research Pvt. Ltd.
10.	Nara Bahadur Chhetri	Proprietor	Pratikshya Krishi and Fish Form
11.	Hareram Chaudhary	Proprietor	Ambika Fish Farm
12.	Ambika Pd Adhikari	Chair person	Fishery Association Nepal

Occupation Specific Expert Workers Panel:

S.N.	Name	Designation	Organization
1.	Bishal Rai	Fishery Technician	Bishal Integrated Ecological Agro Tourism Pvt. Ltd.
2.	Kedar Bd. Bhandari	Fishery Technician	Bhandari Matsya Farm
3.	Ramesh Pandey	Fishery Technician	Annapurna Matsya Hatchery and Ekikrit Krishi Farm
4.	Suraj Chaudhary	Fishery Technician	Global Integrated Hatchery and Ekikrit Krishi Farm
5.	Netra Nath Ale	Fishery Technician	Samata Krishak Samuha
6.	Jadu Lal Yadav	Fishery Technician	Hitaishi Multipurpose Agro Farm
7.	Sanu Kanccha Chitung	Fishery Technician	Sana Kisan Krishi and Pasu Farm
8.	Surya Gurung	Fishery Technician	Mansarowar Rainbow Trout
9.	Jhalak Jalahari	Fishery Technician	Annapurna Fish Farm
10.	Kanai Kurmi	Fishery Technician	Lumbini Organic Krishi and Agro Pvt. Ltd
11.	Khagisara Puri	Fishery Technician	Surkhet Fish Farm,
12.	Prem Choudhary	Fishery Technician	Carp Hatchery Udhog

OS Development Workshop Facilitated by:

S.N.	Name	Designation	Organization
1.	Mr. Harischandra Sapkota	Facilitator	Freelancer
2.	Ms. Srijana Katuwal	Co-facilitator / Recorder	Freelancer

OS Reviewed by Sector Working Group:

S.N.	Name	Designation	Organization
1.	Mr. Govinda Ghemire	Advisor, Export Promotion Committee	FNCCI
2.	Mr. Krishna Prasad Adhikari	Vice President	CNI
3.	Ms. Shanta Basnskota Koirala	Secretary General, Woman Entrepreneur Committee	FNCSI
4.	Mr. Khem Raj Kafle	Agriculture Sector Expert	EOU

OS Verified by Technical Advisory Committee:

S.N.	Name	Designation	Organization
5.	Dr. Mahesh Nath Parajuli	Professor	KU
6.	Mr. Kul Bahadur Phadera	Under secretary	MoEST
7.	Mr. Pravat Uprety	Associate Prof.	TU
8.	Mr. Kishor KC	Statistics Officer	CBS
9.	Ms. Sarada Ghimire	Dy. Director	CTEVT, Curriculum Div.
10.	Mr. Keshab Ghimire	Dy. Director	CTEVT, NSTB

OS Recommended by ELMS Coordination Committee:

S.N.	Name	Designation	Organization
1.	Mr. Rabin Kumar Shrestha	Focal Person/Ex EC member	FNCCI
2.	Mr. Sumit Kumar Kedia	Executive committee member	FNCCI
3.	Mr. Birendra Raj Pandey	Vice –president	CNI
4.	Mr. Megh Nath Neupane	Senior - Consultant	CNI
5.	Ms. Shobha Gurung	Vice president	FNCSI
6.	Mr. Mohan Katuwal	Vice president	FNCSI
7.	Mr. Binayak Shah	Senior-vice president	HAN
8.	Mr. Sajan Shakya	Secretary General	HAN
9.	Mr. Nicholas Pandey	Senior Vice President	FCAN
10.	Mr. Roshan Dahal	General Secretary	FCAN

OS Approved by ELMS Board:

S.N.	Name	Designation	Organization
1.	Mr. Shekhar Golchha	President	FNCCI
2.	Mr. Vishnu Kumar Agarwal	President	CNI
3.	Mr. Shyam Prasad Giri	President	FNCSI
4.	Ms. Srijana Rana	President	HAN
5.	Mr. Rabi Singh	President	FCAN
6.	Mr. Chandra Kanta Adhikari	Member Secretary	ELMS

Occupational Description:

A fishery technician is someone who performs scientific monitoring and analysis of fish populations and ecosystems that affect fisheries. Diagnosis of problems and sometimes solving those problems along with overseeing and assisting the daily work at a fishery are major responsibilities of a fishery technician. In addition to these responsibilities, ensuring that fishes are well and fed.

Despite having a short history of aquaculture in Nepal, fishing has been practiced since ancient times in Nepal. Aquaculture development was institutionalized in Nepal in 1956 A.D. through the establishment of Fisheries Unit under Agriculture Council.

Aquaculture is one of the fastest growing subsector of agriculture in Nepal. National data shows that the total national fish production is 83,897 metric tone, of which 25% is contributed by capture fisheries whereas 75% is from aquaculture. About 4.29% of the Agricultural Gross Domestic Production is contributed by fisheries' sector whereas 1.34% of contribution is done by fisheries in Gross Domestic Production.

Fishery has been commercialized now and is a blooming business. There is huge scope of fishery in Nepal. 93000 metric tons fishes are produced per day whereas 1, 60000 metric tons fishes are consumed per day. The concept of live fish emerged in Nepal in 2067 B.S. but only in 2069 B.S., the concept got implemented.

Nepal lacks expertise in case of fishery technician. Fishery is divided into 3 sectors here: 1) Production pond 2) Nursery Management and 3) Hatchery Management. The infrastructure is different in each sector. No technician is present in hatchery management of Tilapia and Panghas in Nepal. Till date, experts from India and Bangladesh are hired for using technical expertise in Nepal. But due to barrier in language as well as lack of knowledge sharing attitude from foreign experts has led to scarcity of production of Fishery Technician. Only 5-6 such technicians are present in Nepal. It has been just 2-3 years, Junior Technical Assistant (JTA) has been providing their expertise in fish farm.

According to government data of Nepal (2018 A.D.), 50,439 fishery farms are registered in Nepal. Still significant numbers of fish farms are unregistered. Nepal's fish is able to meet 40% of total demand of Nepali consumers. 7 lakh people are directly dependent on fish farming for their livelihoods. 24 kg fish/meat should be consumed per Nepali per year but official record shows that only 6 kg is consumed. 20 districts of Terai is involved in commercial fish farming. Veterinary technicians are used for providing technical expertise in fisheries of Nepal. Some of the commercial fish species available in Nepal are : Trout (Japanese), Rahu (Indian), Naini (Indian) Coomon carp (Israeli) Grass carp (Chinese), Big Head Carp , Silver hear carp (Chinese), Vakur /Katlakatla (India), Tilapiya (American/ African), Pangas catfish (*Pangasianodon hypophthalmus*),etc

The occupation **Fishery Technician Level-2** (Foreman Level) describes the individual with required knowledge for applying basic method of performance, knowledge to select tools, equipment and materials appropriate for the given task. He/she possess the ability to apply basic theory and principle of the common duties and tasks to solve the given assignment. Further, the performer has ability to act independently in simple core skills and can work under the supervision of supervisor for some higher level of tasks to ensure the technicality as a co-worker. This individual has to operate machines and supervises assistant worker and labour in the team. Nepal's industrial & business sector expects Individual reserving set level of skills, knowledge and attitudes which reflect for the improvement of production/services and workers' productivity.

Occupational and environmental safety:

The population of terrestrial vegetation will be reduced / damaged due to preparing fishponds and other required infrastructure for fish farming. Few plastics and non-degradable materials will also be collected in fishponds in the daily care and management of the fishery. Additionally, fish farms can be breeding ground for diseases; they can impact wild fish populations by transferring disease and parasites to migrating fish. They can also pollute water system with excess nutrients and fecal matter. Even equipment's used in fishing can create problems. Use of growth hormones and antibiotics can have adverse effect on consumers.

To prevent the adverse effect of construction of fish ponds and other infrastructures, develop greenery in the side of the ponds. Manage degradable waste by composting and manage non-degradable waste by recycling. Further, to prevent the introduction of new diseases onto a fish farm, made contact free between the fish on the farm and any potential disease carriers. Farm equipment should be cleaned and disinfected each time before use disinfection of clothing, boots and other gear must be done by the workers before having contact with healthy fish. The quantity of fish to be reared at a certain fish farm should be calculated beforehand so that pollution can be minimized. Fishes should be allowed to grow in natural ways so that the effect of hormones and antibiotics can also be minimized.

Minimum job entry requirement:

As per the labor law the Nepalese citizen aged 18 years and above and competent as per this occupation standards are eligible to enter in this occupation. To cope the required knowledge and tasks performance standard of this occupation 10th grade graduates or equivalent qualification are recommended to enter in the skills and knowledge impartation courses.

Worker's traits:

The desired workers traits for Fishery Technician are mentally and physically fit and strong, healthy individuals who are creative, inquisitive, innovative, energetic, disciplined, honest, loyal to the enterprise, hardworking, good in communication and interpersonal skills, effective time manager and the ones who have positive attitude in accountability and responsibility towards his/her occupation and needs to be enjoyed in water, fish ponds, fish, their care and management and marketing of fishery products. Someone who is sociable, worships his occupation and doesn't consume any forbidden materials while at workspace is highly desired in this occupation. Individuals who have personal interest in fish farming and loves fish and their smell are essential traits of the individual in this occupation. Likewise, individuals who love water and are good swimmer are demanded by the occupation.

Occupational career path:

- **Above the Position-** : Fishery Technician : Level- 3 (Supervisor Level)
- **Current Position-** Fishery Technician : Level-2 (Forman Level)
- **Below the Position-** Assistant Fishery Technician : Level-1 (Assistant Level).

Abbreviation used:

Task Level	Rating number and their meaning
Significance	: 1- Important; 2- Moderately important; 3-Highly important.
Ease	: 1- Easy; 2-Moderately easy; 3-Very easy.
Occurance	: 1- Rarely occurred; 2-Moderately occurred; 3-Frequently occurred.

N/A	: Not Applicable
OS	: Occupation Standard
FNCCI	: Federation of Nepalese Chamber of Commerce & Industries
CNI	: Confederation of Nepalese Industries
FNCSI	: Federation of Nepalese Cottage & Small Industries
FCAN	: Federation of Construction Association Nepal
HAN	: Hotel Association Nepal
ELMS	: Employers Led Market Secretariate
SWG	: Sector Working Group
TAC	: Technical Advisory Committee
SOP	: Standard Operating Procedure
KU	: Kathmandu University
MoEST	: Ministry of Education, Science & Technology
TU	: Tribhuvan University
CBS	: Central Bureau of Statistics
CTEVT	: Council of Technical Education and Vocational Training
NSTB	: National Skill Testing Board
Div.	: Division
VCST	: Vehicle and Consignment Tracking System
DO	: Dissolve Oxygen
C	: Centigrade or Celcius

List of duties and tasks of the Fishery Technician: level-2 (Foreman Level)

Soft Skills Area			
S .N.	Duty statements	SN	Task statements
1.	Demonstrate positive attitude	1.	Manage time for occupational assignment
		2.	Exhibit empathy with customer and team members
		3.	Keep work ethics of Fishery Technician
		4.	Respond assignment received
		5.	Receive / give feedback and feed forward
2.	Exhibit interpersonal skills	6.	Listen customers' demands, complaints and other information
		7.	Communicate with others about products and services
		8.	Coordinate with customers and team members
		9.	Perform net-working with customers, team and stakeholders
3.	Demonstrate occupational leadership	10.	Exhibit behavior of team player among the members
		11.	Make decision at different situation of the occupation
		12.	Solve problem encountered in the occupation
		13.	Take responsibility and accountability of assignment
		14.	Develop work plan of Fishery Technician
		15.	Identify common fish species.
		16.	Perform basic calculation
Core skills			
4.	Prepare pond	17.	Select site for fish pond
		18.	Design / layout fish pond
		19.	Excavat fish pond
		20.	Prepare inlet / outlet (monk)
		21.	Prepare race-way
		22.	Prepare cage/encloser
		23.	Treat pond soil
		24.	Fill water in the fish pond
5.	Manage quality of pond water	25.	Take sample water
		26.	Test water turbidity.
		27.	Test pH of pond water
		28.	Conduct ammonia test of water
		29.	Conduct dissolved oxygen test
		30.	Perform lime treatment in pond soil.
		31.	Drain contaminated pond water
		32.	Dry pond- for regular management

6. Manage fish nursery	33. Order/ request for spawn/fry/fingerlings
	34. Lay spawn/ fry/ fingerlings in the pond
	35. Protect fish from predators
	36. Feed spawn/ fry/ fingerlings
	37. Add water in the fish pond
	38. Test strength of fry
7. Manage fish pond	39. Perform conditioning of fingerlings
	40. Perform packaging of fry/ fingerlings
	41. Lay fingerlings in the production pond from nursery
	42. Perform feeding grasses for fish
	43. Reduce pond water temperature
	44. Maintain water flow rate of raceway
	45. Test growth rate of fish
	46. Clean fish pond / raceway (racking)
	47. Perform pond aeration
8. Manage fish feed	48. Prepare natural feed (zooplanktons / phytoplanktons)
	49. Calculate feed requirement
	50. Feed green grasses
	51. Prepare fish feed by locally available ingredients
	52. Order feed from manufacturer
	53. Take feed sample
	54. Conduct feed quality testing
	55. Store feed
9. Control parasites of fish (Argulus, Traquedina , backswimmer, worms ,)	56. Apply isolation principle in fishery
	57. Perform hardening of fish
	58. Perform dipping of fish
	59. Perform bird fencing
	60. Set up snake trap
	61. Control parasite by medicine adulteration in feed
10. Control diseases of fish	62. Treat bacterial diseases
	63. Control viral diseases
	64. Treat fungal diseases
11. Harvest fish	65. Collect market demand
	66. Harvest fish by casting net
	67. Harvest by drag net.

12. Conduct post- harvest management of fish	68. Catch fish by scoop net
	69. Harvest fish by trap net
	70. Separate fish species
	71. Grade fish
	72. Perform dry packaging
	73. Perform ice packaging
	74. Perform live fish packaging for transport/delivery
13. Keep Records	75. Perform boneless packaging
	76. Keep stocking records
	77. Keep feed records
	78. Keep growth records
	79. Record disease outbreak/mortality
	80. Keep treatment records
	81. Keep production records
	82. Keep productivity records

Task Competency Standard

Soft Skills Area:			
Task number:	1		
Task statement:	Manage time for occupational assignment		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Regular duty hours and work plan Task: Manage time for occupational assignment Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Exhibited punctuality; Task completed within the given time frame; Task performed as per the given work plan. 		
Related technical knowledge	<ul style="list-style-type: none"> Importance of time management; Knowledge on work priority and rescheduling as per the urgency; Points to be considered while managing time during duty hours. 		

Task number:	2		
Task statement:	Exhibit empathy with customers and team members		
Level of task:	Significance	Ease	Occurrence
	2	2	1
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Any incident (Problems, awkward situation or unusual situation) of customer or team members Task: Exhibit empathy with customers and team members Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Expressed feelings (body language, gesture, posture, facial expression) as per the given incident during the performance. Acted accordingly as per the feelings. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of empathy; Knowledge on different situation; Points to be considered while exhibiting empathy. 		

Task number:	3		
Task statement:	Exhibit work ethics of the Fishery Technician		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Occupational ethics and Code of conduct of organization or Standard operating procedure (SOP); Task: Keep work ethics Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Given occupational ethics and organizational code of conduct is followed; SOP is followed; Satisfied and motivated in the occupation. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance work ethics; Occupational work ethics and code of conducts of organization or SOP. 		

Task number:	4		
Task statement:	Respond assignment received		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Any assignment or task order Task: Respond assignment Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Promptly responded; Assignment is noted; Assignment is completed within the agreed time. 		
Related technical knowledge	<ul style="list-style-type: none"> Importance of timely response; Knowledge on time requirement of assignment. Manner of interaction with others; Knowledge on types of work and urgency. 		

Task number:	5		
Task statement:	Receive / give feedback and feed forward		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Any assignment or task order Task: Receive / give feedback and feed forward Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Listen actively; Noted feed forward and feedback; Firstly given positive feedback objectively; Secondly given developmental feedback objectively; Digestible amount of feedback is considered. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of feed forward and feedback; Types of feedback; Techniques of receiving and giving feed forward and feedback. 		

Task number:	6		
Task statement:	Listen customers' demand, complaints or others information		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Customer or team member is complaining / reporting Task: Listen customers' demand, complaints or others information Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Listened actively; Nodded the head during listening; Asked for clarification; Noted the complaint or reporting; Reporter or complainer is satisfied with his/her listening attitude. 		
Related technical knowledge	<ul style="list-style-type: none"> Importance of active listening; Differences between active listening and hearing; Techniques of active listening. 		

Task No:	7		
Task statement:	Communicate with others about products and services		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Information to be communicated and Relevant audience Task: Communicate with others about products and services Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Clear and audible voice is presented; Presented pleasant vocal; Visual expressions are natural; Information shared is concise and complete. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of effective communication; Effective communication model; Types of communication; Means of communication; Techniques of effective communication. 		

Task number:	8		
Task statement:	Coordinate with customers, team members and stakeholders		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition <ul style="list-style-type: none"> Agenda or issue or information to be coordinated, Team members or relevant stakeholders and Means of coordination. Task: Coordinate with customers, team members and stakeholders Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Given agenda, issues or information are coordinated/shared; Coordination is as per the given target receivers; Coordination is as per the given means of coordination. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance coordination; Means of coordination; Techniques of effective coordination. 		

Task number:	9		
Task statement:	Perform net-working with customers, team and stakeholders		
Level of task:	Significance	Ease	Occurrence
	3	1	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Assignment and Job description. Task: Perform net-working with customers, team and stakeholders Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Service delivery met the standard of the organization; Additional service procurement is easily available when needed. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of networking; Means of networking; Techniques of effective networking. 		

Task number:	10		
Task statement:	Exhibit behavior of team player among the members		
Level of task:	Significance	Ease	Occurrence
	2	1	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Assignment and • Working team. Task: Exhibit behavior of team player among the members Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Encouraged team members; • Taken collective ownership; • Possessed cooperative and assertiveness; • Taken responsibility and accountability. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of team work; • Characteristics of good team player; • Phases of team formation; • Tips of effective team work. 		

Task number:	11		
Task statement:	Make decision at different situation of the occupation		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Any assignment with possible unusual situation during the process and • Problem or case and time frame Task: Make decision at different situation of the occupation Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Decision is taken within given time frame; • Desired result is achieved; • Decision considered efficient use of time, money and resources. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of decision making; • Simple decision making process. 		

Task number:	12		
Task statement:	Solve problem encountered in the occupation		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Any problem or case and time frame Task: Solve problem encountered in the occupation Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Problem is solved in given time frame; • Desired result is achieved; • Considered efficient use of time, money and resources. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of problem solving; • List of potential problems in the occupation (Hotel Maintenance Technician); • General problem solving techniques. 		

Task number:	13		
Task statement:	Take responsibility and accountability of the assignment		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Assignment • Job description Task: Take responsibility and accountability of the assignment Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Exhibited dedication to the assignment; • Attempted to complete the assignment as per the set standard; • Taken ownership of results. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning of responsibility and accountability; • Importance of responsibility and accountability for hotel maintenance technician. 		

Task No:	14		
Task statement:	Develop work plan of Fishery Technician		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • List of tasks and their priority order; • Planning forms and format; • Job description Task: Develop work plan of Dairy Processor/Operator Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Plan is as per the given tasks; • Planning is done in given forms and format; • Tasks are planned based on priority order or sequence; • Considered efficient use of resources (time, money, and people). 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning of planning; • Importance of planning; • Different planning tools; • Points to be considered while planning; 		

Task No:	15.		
Task statement:	Identify common species of fish		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Common species of fishes; Task: Identify common species of fish Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Sample fish is identified by common name; • Species are identified by major characteristics; • Species are identified by body structures. 		
Related technical knowledge	<ul style="list-style-type: none"> • Common name of commercial fishes of Nepal and their origin. • Classification of fish species • Characteristics and nature of common commercial fish. • Identification marks of common fish 		

Task No:	16.		
Task statement:	Perform basic calculation		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Assignment of basic calculation; • Formula of basic calculation; • Area, rate, body weight, volume Task: Perform basic calculation for Time: 30 Minutes /problem Standard/Criteria: <ul style="list-style-type: none"> • Answer of given assignment is correct; • Calculation procedure is followed; • Given formula is applied; • Volume, body weight, total amount, area, are calculated. 		
Related technical knowledge	<ul style="list-style-type: none"> • Importance of basic calculation; • Different formula and procedure of calculation; • Points to be considered while planning. 		

Core Skills Area			
Task number:	17.		
Task statement:	Select site for fish pond		
Level of task:	Significance	Ease	Occurrence
	3	2	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Types of fish and • Quantity to be reared. Task: Select site for fish Time: 8 hours /site or location. Standard/Criteria: <ul style="list-style-type: none"> • All the required points are considered or • Observation / selection report is matched with the observation report made by the supervisor. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of fishery; • Characteristics of fish and aquatic animals; • Points to be considered while selecting site for fish farming (water, road, electricity, security, labor, market, etc); • Identification of fish species and their requirement. 		
Safety/precaution	<ul style="list-style-type: none"> • Critically analyze the required components of the fish farming. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Paper, pen and soil auger/excavator. 		

Task number: 16	18.		
Task statement:	Design / layout fish pond		
Level of task:	Significance	Ease	Occurrence
	3	2	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location; • Quantity or density of stocking; • Size and shape of land (Map of land); • Desired fish species to be grow. Task: Design / layout fish pond. Time: 30 minutes /layout. Standard/Criteria: <ul style="list-style-type: none"> • Pond design / layout is east-west oriented; • Lay out is as per the given site, location and stocking density; • Lay out matches with the given shape and size of land; • Lay out matches with the given fish species. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of layout of fish pond; • Points to be considered while doing lay-out for fish pond; • Inlet and outlet of fish pond. 		
Safety/precaution	<ul style="list-style-type: none"> • N/AT 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Paper, pen, lime, peg; • Rope and measuring tape. 		

Task number:	19.		
Task statement:	Excavat fish pond		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Lay-out /design; • Land and specification of the pond. Task: Construct fish pond Time: N/A (Depends on various factors) Standard/Criteria: <ul style="list-style-type: none"> • Fish pond is as per the given lay-out/design; • Fish pond is as per the given specification. 		
Related technical knowledge	<ul style="list-style-type: none"> • Knowledge to interpret layout or design or drawing of the fish pond; • Knowledge of measuring fish pond; • Points to be considered while excavating fish pond. 		
Safety/precaution	<ul style="list-style-type: none"> • Handle tools/ equipment safely; • Wear safety wares. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Layout/design, peg ,rope, • Measuring tape, excavator; • Shovel, dhurmus, level pipe; • Stones, bricks, cement, sand; • Trowel, wheel barrow; • Water, plastic; • Pipe/cap, elbow and T-sucket. 		

Task number:	20.		
Task statement:	Prepare inlet/outlet (Monk)		
Level of task:	Significance	Ease	Occurrence
	3	2	1
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Lay out/design of fish pond; Land or pond dike and specification of monk. Task: Prepare inlet/outlet (Monk) Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Inlet/outlet (Monk) of fish pond is as per the layout/design; Measurement is as per the given specification. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance/purpose of monk; Points to be considered while preparing monk; Procedure of preparing monk. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wear, handle tools safely 		
Tools, equipment and materials	<ul style="list-style-type: none"> Layout, peg ,rope; Measuring tape; Shovel, dhurmus; Level pipe, stones; T-socket, bricks, cement; Sand , trowel; Wheel barrow, water, plastic; Pipe/cap and elbow. 		

Task number:	21.		
Task statement:	Prepare race-way		
Level of task:	Significance	Ease	Occurrence
	3	2	1
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Location or site to be constructed; Lay-out / design and number of raceway. Task: Prepare race-way Time: N/A (depends on various factors). Standard/Criteria: <ul style="list-style-type: none"> Race- way is as per trhe given lay- out design (Length – 12m , Width – 1.5m, depth -70cm and slope -6cm.) 		
Related technical knowledge	<ul style="list-style-type: none"> Knowledge about lay-out and its interpretation; Points to be considered while constructing race-way and procedure. 		
Safety/precaution	<ul style="list-style-type: none"> Handle tools/ equipment safely and wear safety wares. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Layout/design, peg, rope, measuring tape; Excavator, shovel, dhurmus, level pipe; Stones, bricks, cement; Sand, trowel, wheel barrow; Water, plastic, pipe/cap; Elbow and T-sucket. 		

Task number:	22.		
Task statement:	Prepare cage/encloser		
Level of task:	Significance	Ease	Occurrence
	3	2	1
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Lay-out/ design and size (10' * 10' *8' for cage) Task: Prepare cage/enclose. Time: 8 hours /cage or encloser. Standard/Criteria: <ul style="list-style-type: none"> Cage is prepared as per the given lay out / design and size. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of cage/enclose; Points to be considered while preparing cage/enclose; Procedure of preparing cage/encloser. 		
Safety/precaution	<ul style="list-style-type: none"> Handle tools/ equipment safely; Wear safety wares. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Bamboo; Rope, nylon; Thread, net; Stones and needle, 		

Task number:	23.		
Task statement:	Treat pond soil		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Newly prepared pond and soil condition; Size of pond. Task: Treat pond soil. Time: 30 minutes /kattha. Standard/Criteria: <ul style="list-style-type: none"> The lime is spread uniformly; The lime applied in the ratio of 10-15 kg/kattha. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of pond soil treatment; Points to be considered while treating pond soil; Procedure of treating pond soil. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares; Consider uniformity and ratio. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Lime; Bucket and Safety wares. 		

Task number:	24.		
Task statement:	Fill water in the fish pond.		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Location and size of pond; Treated pond soil condition. Task: Fill water in the fish pond. Time: N/A (depends on horsepower of motor or flow). Standard/Criteria: <ul style="list-style-type: none"> Water is filled up to the mark (or 1.5m depth) 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of filling water in the pond; Points to be considered while filling water in the pond; Procedure of filling water in the pond. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Motor/ generator; Electricity; Delivery pipe; Source of water and fuel 		

Task number:	25.		
Task statement:	Take sample water		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> After 3 days of filling water in new pond; Number of ponds and their location or site; When problem arises or symptoms are seen (change in color of pond and behavior of fish). Task: Take sample water. Time: 20 minutes /single pond. Standard/Criteria: <ul style="list-style-type: none"> Sample size is one liter; Sample is taken from every pond; Sample of each pond is kept separately; Sample is labelled. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of taking sample of water Points to be considered while taking sample water of the fish pond; Procedure of taking sample water of the fish ponds. 		
Safety/precaution	<ul style="list-style-type: none"> Walk carefully while taking the sample. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Sample container; Towel; Label /number sticker and pen. 		

Task number:	26.		
Task statement:	Test water turbidity		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Production pond; • Standard procedure. Task: Test water turbidity. Time: 15 minutes /test. Standard/Criteria: <ul style="list-style-type: none"> • The performance is done as per the given procedure; • Test result of the performer matches with the test result of the supervisor. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of water turbidity and its testing; • Causes and effects of turbidity in fish production; • Desirable turbidity level of the fish pond; • Common methods of turbidity level reduction. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety wear, use tools safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Secchi disc and cloth 		

Task number:	27.		
Task statement:	Test pH of pond water		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Water sample. Task: Test pH of pond water. Time: 15 minutes /test. Standard/Criteria: <ul style="list-style-type: none"> • Test result is reported. • Test report of the performer is matched with the test result of the supervisor. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of conducting pH test; • Points to be considered while conducting pH test; • Procedure of pH testing. 		
Safety/precaution	<ul style="list-style-type: none"> • Use safety wares; • Use chemicals safely and handle tools safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • pH testing kit and safety wares. 		

Task number:	28.		
Task statement:	Conduct ammonia test of water		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Sample water and • Quantity (number) of different sample. Task: Conduct ammonia test. Time: 10 minutes /test. Standard/Criteria: <ul style="list-style-type: none"> • Test result is reported; 		

	<ul style="list-style-type: none"> Report is matched with the test result of supervisor.
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of conducting ammonia test; Points to be considered while conducting ammonia test; Procedure of ammonia test.
Safety/precaution	<ul style="list-style-type: none"> Use Safety wares; Use chemicals safely and handle tools safely.
Tools, equipment and materials	<ul style="list-style-type: none"> Ammonia testing kit and safety wares.

Task number:	29.		
Task statement:	Conduct dissolved oxygen test		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Sample water of the pond Task: Conduct dissolved oxygen test Time: 15 minutes /test. Standard/Criteria: <ul style="list-style-type: none"> Test result is reported; Test report of the performer is matched with the test result of the supervisor. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of conducting dissolved oxygen test; Points to be considered while conducting dissolved oxygen test; Procedure of conducting dissolved oxygen test. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares; Use chemicals safely and tools safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Dissolved oxygen testing kit, safety wares and DO meter. 		

Task number:	30.		
Task statement:	Perform lime treatment		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Pond to be treated by lime; Number of ponds; pH condition of the pond soil; Location or sites. Task: Perform lime treatment in pond soil. Time: 30 minutes /treatment (can be varied based on size of pond) Standard/Criteria: <ul style="list-style-type: none"> The amount is calculated as per the given soil condition of the pond; Lime clots are broken or in completely dust form; Lime is spread uniformly in the pond soil. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of lime treatment; Points to be considered while conducting lime treatment; Procedure of lime treatment. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares; Handle lime safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Lime, safety wares, bucket, mug, water; Drum, container; Hammer and broom. 		

Task number:	31.		
Task statement:	Drain contaminated pond water		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Water contaminated pond; Number and size of pond; Site to drain contaminated water. Task : Drain contaminated pond water Time: N/A (depends on volume of water and power of the pump or flow). Standard/Criteria: <ul style="list-style-type: none"> Drained contaminated water in the give site; Contaminated water drained completely or Pond is free from the contaminated water. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of changing water. Points to be considered while changing water. Procedure of changing water. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares Be careful while working with electricity. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Pump; Motor; Delivery pipe; Spade; Eggs and rope. 		

Task number:	32.		
Task statement:	Dry pond for regular management		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Empty pond, after harvesting of fish; Time or duration. Task: Dry pond for regular management. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Pond is dried with in the given time frame. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of drying fish pond; Points to be considered while drying fish pond; Procedure of drying fish pond. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares; Be careful while working with electricity. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Pump; Motor; delivery pipe; Spade; pegs and Rope. 		

Task number:	33.		
Task statement:	Order / request for spawn / fry / fingerlings		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Suppliers of spawn, fry or fingerlings; Contact details of the suppliers; Season, area, required quantity, species, rate or density of stocking. Task: Order / request for spawn / fry / fingerlings. Time: 20 minutes /order. Standard/Criteria: <ul style="list-style-type: none"> Quantity is calculated as per the given stocking density; Required quantity is ordered as per the calculation; Required species is specified in the order; Rate is negotiated and conformed as per the requirement. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of ordering spawn or fry or fingerlings; Classify spawn, fry and finger link; Points to be considered while ordering; Procedure of ordering. 		
Safety/precaution	<ul style="list-style-type: none"> Accuracy of information and demand is essential. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Phone; Record book; Pen; Paper and internet. 		

Task number:	34.		
Task statement:	Lay spawn/fry/fingerlings in the pond		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Spawn / fry / fingerlings; Standard procedure; Quantity of spawn or fry or fingerlings; Task: Lay spawn/fry/fingerlings in the pond. Time: 30 minutes /lay. Standard/Criteria: <ul style="list-style-type: none"> The process is performed as per the given standard procedure. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of laying spawn/fry fingerlings in pond; Points to be considered while laying spawn/fry fingerlings in pond; Procedure of laying spawn/fry fingerlings in pond. 		
Safety/precaution	<ul style="list-style-type: none"> Wear safety wares; Carefully walk around water and provide special care of spawn. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Safety uniform; Knife; Medicine (only for fry / fingerlings). 		

Task number:	35.		
Task statement:	Protect fish from predators.		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish pond; Types of common predators; Area or ponds to be protected. Task: Protect fish from predators. Time: 1.5 hours /1 kattha. Standard/Criteria: <ul style="list-style-type: none"> Pegs are fixed tightly; Net is tightly fixed. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning of predators and importance of protection from predators; Common types of fish predators; Points to be considered while protecting fish from predators; Different methods of protecting fish ponds from predators. 		
Safety/precaution	<ul style="list-style-type: none"> Wear safety wares; Handle tools safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Net ; Bamboo; Rope; Peg; See-saw; Sickle, knife; Nails and rope. 		

Task number:	36.		
Task statement:	Feed spawn/fry/fingerlings		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Newly laid spawn / fry / fingerlings in nursery; Standard procedure. Task: Feed spawn/fry/ fingerlings Time: 30 minutes /feeding Standard/Criteria: <ul style="list-style-type: none"> While process observation standard procedure is followed. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of feeding spawn/ fry/fingerlings in nursery; Points to be considered while feeding spawn/ fry/fingerlings in nursery; Feed materials, ingredients give for different group of fish; Procedure of feeding spawn/ fry / fingerlings in nursery. 		
Safety/precaution	<ul style="list-style-type: none"> Use safety wares; Handle tools safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Bucket, mug; Readymade feed, natural; Plant, spoon, egg; Milk, gas and stove. 		

Task number:	37.		
Task statement:	Add water in the fish pond		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Pond with spawn, fry or fingerlings. Task: Add water in the fish pond. Time: 3 hours / kattha (can be varied based on flow of water). Standard/Criteria: <ul style="list-style-type: none"> Water level is 1 meter depth maintained; Quality of water is hygienic for fish. 		
Related technical knowledge	<ul style="list-style-type: none"> Reason and importance of adding water in the fish pond; Points to be considered while adding water in the fish pond; Procedure of adding water in the fish pond. 		
Safety/precaution	<ul style="list-style-type: none"> Do not add muddy or turbulent water; Water should be added from surface level; Work carefully with electrical appliances. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Motor; Delivery pipe; Water source and Electrical supply. 		

Task number:	38.		
Task statement:	Test strength of fry		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Pond with fry; Prescribed procedure. Task: Test strength of fry. Time: 1 hour /lot of fry. Standard/Criteria: <ul style="list-style-type: none"> Standard procedure is followed. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of testing strength of fry; Points to be considered while testing strength of fry; Procedure of testing fry strength. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware, avoid contamination with fry 		
Tools, equipment and materials	<ul style="list-style-type: none"> Net; Fry net; Scoop net; Measuring instrument; Container; Filtering container. 		

Task number:	39.		
Task statement:	Perform conditioning of fingerlings		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fingerlings ready to be transferred in pond; Prescribed procedure or checklist. Task: Perform conditioning of fingerlings. Time: 1 hour /conditioning Standard/Criteria: <ul style="list-style-type: none"> Standard procedure is followed while observing the process. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of conditioning of fingerlings; Points to be considered while conditioning of fingerlings; Standard procedure of conditioning of fingerlings. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware, follow standard procedure and duration of conditioning. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Scoop net; Bucket; Plastic bag; Water supply and motor. 		

Task number:	40.		
Task statement:	Perform packaging of fry/fingerlings		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Conditioned fry /fingerlings; Quantity to do packaging; Distance to be delivered; Size of the fry/ fingerlings; Types of fish/ species. Task: Perform packaging of fry/fingerlings. Time: 15 minutes /packet. Standard/Criteria: <ul style="list-style-type: none"> All the given conditions are considered; The package is tight. All fry/fingerlings are active inside the pack. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of packaging fry/fingerlings; Points to be considered while packaging fry/fingerlings and while delivering the fry /fingerlings; Factors affecting packaging – distance to be delivered, size and species of fish; Procedure of packaging fry/fingerlings. 		
Safety/precaution	<ul style="list-style-type: none"> Work carefully, apply safety ware; Consider all the given conditions. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Plastic bag; Oxygen cylinder; Rope, water; Fry/ fingerlings and scoop net. 		

Task number:	41.		
Task statement:	Lay fry/ fingerlings in the production pond from nursery		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Stocking references. Site or location and size of fish pond; Packed fry / fingerlings. Task: Lay fry/ fingerlings in the production pond from nursery Time: 15 minutes /packet of fry or fingerlings. Standard/Criteria: <ul style="list-style-type: none"> Density is stocked as per the given size, species and size of ponds; Fry and fingerlings are noticed healthy and active after putting in to the ponds. 		
Related technical knowledge	<ul style="list-style-type: none"> Importance of putting fry/fingerlings in the production pond; Points to be considered while putting fry/fingerlings in the production pond; Procedure of putting fingerlings in the production pond; Type/species and stocking density of fry/ fingerlings. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware, work carefully with fry and fingerlings. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Knife / blade 		

Task number:	42.		
Task statement:	Perform feed grasses for fish		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Location or site and size of pond; Density and species of fish; Manual feeding method. Task: Perform feeding/grass. Time: 15 mins /kattha. Standard/Criteria: <ul style="list-style-type: none"> Calculated amount is as per the reference of density, species and size; Feeding is done at definite site /location; Timing of feeding is noticed consistent; Free from wastage (No waste is found at the feeding site). 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of feeding; Types of fish in different layer; Feed requirement of different layer; Types of fish feed; Different methods of feeding; Points to be considered while feeding; Factors affecting feeding management. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety/preventive measures. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Bamboos, pipe; Rope, feeder; Feedbag, feeder; Bucket/ automatic feeding machine and bamboo tray. 		

Task number:	43.		
Task statement:	Reduce pond water temperature.		
Level of task:	Significance	Ease	Occurrence
	3	3	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish pond temperature having 30 degrees Celsius or above. Task: Reduce pond water temperature. Time: 30 minutes /pond. Standard/Criteria: <ul style="list-style-type: none"> The temperature is reduced up to below 28 °C. Performance is noticed free from any harm to the fish. 		
Related technical knowledge	<ul style="list-style-type: none"> Reasons and importance of reducing temperature of pond water. Points to be considered while reducing pond water temperature. Temperature requirement and methods of reducing temperature. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Pump set; Electric supply/generator. 		

Task number:	44.		
Task statement:	Maintain water flow rate of raceway		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Site or location of race way; Number and size of race way. Task: Maintain water flow rate of raceway Time: N/A Standard/Criteria: <ul style="list-style-type: none"> The flow of (1 inch) water is continued; The temperature of water is recorded between 16-18 °C; Clean water is applied. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of maintaining water flow; Points to be considered while maintaining water flow; Desirable water temperature of different fish species. Methods of maintaining water flow. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Gate valve key and Regular water source having 1 inch flow. 		

Task number:	45.		
Task statement:	Test growth rate of fish		
Level of task:	Significance	Ease	Occurrence
	3	1	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish production pond. Task: Test growth rate of fish Time: 1 hour /pond. Standard/Criteria: <ul style="list-style-type: none"> The test result is recorded as per the test result of supervisor; Noticed free from any harm to the fish. 		

Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of testing growth rate; • Points to be considered while testing growth rate; • Methods of testing fish growth rate; • Sampling techniques of fish for testing growth rate.
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware; • Sampling is critical.
Tools, equipment and materials	<ul style="list-style-type: none"> • Net, weighing balance, drag net , scoop net and bucket

Task number:	46.		
Task statement:	Clean fish pond or raceway (racking)		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location; • Fish production pond or raceway; • Number of ponds/raceway to be clean. Task: clean fish pond or raceway (racking). Time: 1 hour / pond or raceway. Standard/Criteria: <ul style="list-style-type: none"> • Walls and base surface of raceway is free from dirt when noticed; • Surface of the pond or raceway is seen clear; • Raceway water is seen clear; • Performed as per the given number of fish pond or raceway. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of racking; • Points to be considered while racking. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety weare, prevent injuiry of the fish. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Rope, rack and safety wear. 		

Task number:	47.		
Task statement:	Perform pond aeration		
Level of task:	Significance	Ease	Occurrence
	3	3	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Potential stage of oxygen deficiency in fish pond; • Number of ponds; • Area to be aerated. Task: Perform pond aeration Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • The level of oxygen is increased up to 6.5- 7.5ppm. • Fishes are seen in stress free. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of aeration; • Causes of oxygen deficiency in the pond; • Signs and symptoms of oxygen deficiency in the fish pond • Points to be considered while performing aeration in the fish pond. • Different methods of aeration in fish ponds; • Common stages/condition of oxygen deficiency. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware, handle aerator carefully. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Aerator, pump set, rope, electricity supply, boat/motor boat and milk. 		

Task number:	48.		
Task statement:	Prepare natural feed (zooplanktons / phytoplanktons)		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fry/fingerlings under rearing pond; Quantity or density of fry/fingerlings; Standard procedure of preparing natural feeds. Task: Prepare natural feed (zooplanktons / phytoplanktons). Time: N/A Standard/Criteria: <ul style="list-style-type: none"> The task is done as per the given procedure. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of preparation of natural feed; Points to be considered while preparing natural feed; Types of natural feed commonly found in the fish pond; Methods of preparing natural feed in the fish pond; Application procedure of natural feed in the fish pond. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware; Maintain nutrition and growth temperature of the planktons. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Decomposed compost, bag, yeast, stick, molasses; Drum, vermin-compost, bucket and mug. 		

Task number:	49.		
Task statement:	Calculate feed requirement		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Stocking density; Size and species of fish; Season of feeding. Task: Calculate feed requirement Time: 15 minutes for single pond. Standard/Criteria: <ul style="list-style-type: none"> 7 % of body weight for fry and fingerlings/day is calculated; 5% for below 100 gram / day for carp is considered; 4% for above 100 gram or below 500 gram / day for carp and Panghasius spp. 4 % body weight / day for rainbow trout is considered while calculation. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of calculating feed requirement; Points to be considered while calculating feed requirement; Types of fish feed; Methods of calculation of fish feed requirement; Recommended nutrients content in different categories of fish feed; Quality of feed required to feed /day based on fish category; Duration of storage of feed and storage environment required; Frequency of feeding per day based on fish category. 		
Safety/precaution	<ul style="list-style-type: none"> Consider critical points of feed calculation. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Pen, pencil, copy, calculator and notebook. 		

Task number:	50.		
Task statement:	Feed green grasses		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location of fish ponds; • Fish species that has grass feeding habits; • Quantity or density of fish in the ponds; • Age group or size of fish to be feed; • Number of fish ponds; • Types of green grasses. Task: Feed green grasses. Time: 30 minutes /10kg green grasses. Standard/Criteria: <ul style="list-style-type: none"> • The chopped pieces of grass are below 1 inch sized; • Feeding is done as per the density of grass carp; • Feeding is done as per the given number of the ponds. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of feeding green grasses; • Common types of grasses preferred by the fish; • Points to be considered while feeding green grasses; • Nutrient contents in different types of grasses. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware; • Desirable size of the chop is below one inch; • Handle chopping machine or grass cutter carefully. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Chopper/chopping machine, basket, chopping board, knife; • Grass cutter and grasses (mulberry, banana, Napier, para, banseem, etc). 		

Task number:	51.		
Task statement:	Prepare fish feed by locally available ingredients		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Prepared feed ingredients; • Composition/ratio of feed ingredients; • Quantity or amount of feed required. Task: Prepare fish feed by locally available ingredients. Time: 30 minutes /10kg fish feed. Standard/Criteria: <ul style="list-style-type: none"> • The prepared fish feed is as per the given quantity and ratio of feed ingredients. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of preparing fish feed by locally available ingredients; • Common locally available feed ingredients; • Desired composition of feed ingredients as per the fish species; • Nutrients contents in different ingredients; • Calculation of nutrient composition; • Points to be considered while preparing fish feed by locally available ingredients. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware; • Followed given standard ratio of the feed ingredients. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Peena (soybean / mustard cake), rice bran, corn, maize, /choker; • Fish mill, lime, salt, basket, water, mug, bucket and grinder. 		

Task number:	52.		
Task statement:	Order feed from manufacturer		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Quality- nutritional value (protein, fat and carbohydrate); Quantity required; Contact detail and delivery date. Task: Order feed from manufacturer. Time: 30 minutes with single suppliers. Standard/Criteria: <ul style="list-style-type: none"> The given order is as per the required quality and quantity. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of ordering feed Nutritional requirement of different categories of fish; Quality and quantity requirement for fish feed; Points to be considered while ordering feed. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware; Calculation or required feed should be done precisely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Means of communication, calculator; Pen, papers or calculated amount of feed requirement and Contact details of suppliers. 		

Task number:	53.		
Task statement:	Take feed sample		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Feed stock; Standard sampling process. Task: Take feed sample Time: 30 minutes /sample Standard/Criteria: Process observation is essential: <ul style="list-style-type: none"> The sample represented the entire stock. The sample is taken as per the given standard sampling process. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of taking feed sample. Process of feed sampling. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety ware; Sampling process is critical 		
Tools, equipment and materials	<ul style="list-style-type: none"> Feed sampler; Plastic bag; Labelling sticker or Paper and pen. 		

Task number:	54.		
Task statement:	Conduct feed quality testing.		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Feed sample. • Quality factors to be identified. Task: Conduct feed quality testing. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Given quality factors are determined; • The feed quality testing is done in an authentic/ trustworthy feed lab; • Testing result is documented. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of testing feed quality; • Common quality factors of the feed; • Identification of potential feed labs. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware; • Trust-worthy feed lab is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Sampling packet or feed sample; • Contact details of the trustworthy feed lab; • Means of communication and transport. 		

Task number:	55.		
Task statement:	Store feed		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Feed to be stored; • Types of feed and lot number; • Quantity to be stored. Task: Store feed. Time: 30 mins / 10 quintal feed. Standard/Criteria: <ul style="list-style-type: none"> • Stored feed is labelled; • Stored feeds are in first come - first out first basis; • Lot and batch are indicated clearly; • Recommended temperature and humidity of the store is considered. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of storing feed. • Common feed storage temperature and humidity; • Points to be considered while storing feed. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety ware, • Temperature and dryness of the store is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Store room, wood rack; • Label, wheel barrow; • Marker, pen; • Labelling sticker; • Thermometer; • Dry & weight bulb thermometer. 		

Task number:	56.		
Task statement:	Apply isolation principle in fish farm		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish ponds or fishery farm; Number of entrance of the farm; Size and area occupied by the farm; Task: Apply isolation principle in fishery. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Infected fishes are isolated / segregated from the mass; Foot wash is managed at the main entrance; Tools, equipment and materials applied in the fish pond are disinfected; Pond management is followed by healthy ponds to unhealthy ponds. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of performing isolation; Procedure of isolation; Points to be considered while isolating; Methods/procedure of isolation. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wear; Isolation principle is critical to adopt preventive measure. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Spray tank; Net; Lime; Salt; First aid kit; Medicine and dipping tray. 		

Task number:	57.		
Task statement:	Perform hardening of fish		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Any fish (spawn/ fry/ fingerlings) Task: Perform hardening of fish Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Balanced diet is provided; Density of stocking is below the recommendation; Water quality is maintained. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of hardening of fish; Points to be considered while hardening of fish; Procedure of hardening of fish; 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wear; Density is critical while hardening of fish. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Balance diet as per the size of fish and their stocking; Feeding set or tools. 		

Task number:	58.		
Task statement:	Perform dipping of fish		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Location or site to be treat; Any fish; Quantity or numbers of fish to be dipped. Task: Perform dipping of fish. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Concentration of potassium permanganate solution is 1- 2 ppm maintained; Dipping duration is below 10 second provided. Fishes are ensured free from injuries. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of dipping; Points to be considered while dipping; Procedure of dipping. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wear; Concentration of potassium permanganate should exceed 1-2 ppm 		
Tools, equipment and materials	<ul style="list-style-type: none"> Potassium permanganate; Bucket, scoop net and Weighing balance. 		

Task number:	59.		
Task statement:	Perform bird fencing		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish pond; Area to be fenced. Task: Perform bird fencing Time: 5-6 hours/kattha. Standard/Criteria: <ul style="list-style-type: none"> The fence net has covered all the area of the pond; The net is tightened. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of bird fencing; Common materials of bird fencing; Points to be considered while fencing for birds; Procedure of bird fencing. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety weare; Area coverage and tightness of fence is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Fencing rope; Fencing net; Bamboo poles; Hammer and Hand saw. 		

Task number:	60.		
Task statement:	Set up snake trap		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location; • Fish pond; • Area to be protected. Task: Set up snake trap Time: 30 minutes /trap Standard/Criteria: <ul style="list-style-type: none"> • The trap is set up at the water level of pond; • The trap is set up at the corners site of the pond. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of setting up trap for snake; • Points to be considered while trapping and • Standard procedure of trapping. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety weare. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Snaketra; • Bamboo poles and • Rope. 		

Task number:	61.		
Task statement:	Control parasites by medicine adulteration in feed		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location of parasite infestation; • Feed and ratio /concentration % of poison. Task: Control parasites by medicine adulteration in feed. Time: 5 minutes /10 kg. Standard/Criteria: <ul style="list-style-type: none"> • Medicine adulteration in feed is done as per the given ratio/concentration; • Medicine adulteration in feed is maintained uniform/consistent. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of feed adulteration; • Points to be considered while adulteration and feeding; • Procedure of adulteration; • Types and ratio/concentration of medicine; • Duration of holding. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety wear; • Ratio and concentration of adulterated feed is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Medicine; • Feed; • Mixing machine; • Glove; • Bucket; • Mixture and • Container. 		

Task number:	62.		
Task statement:	Treat bacterial diseases		
Level of task:	Significance	Ease	Occurrence
	3	1	2
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Location or sites; Fish ponds suspected bacterial disease; Prescription of supervisor; Specification of medicine and standard procedure. Task: Treat bacterial diseases Time: 40 minutes /pond Standard/Criteria: <ul style="list-style-type: none"> Treatment is done as per the prescription and specification of medicine and standard procedure. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of bacterial diseases in fishery; Points to be considered while treating bacterial diseases; Types of different bacterial diseases found in fishery; Signs and symptoms of different bacterial fish diseases; Control measures of different bacterial fish diseases. 		
Safety/precaution	<ul style="list-style-type: none"> Prescription and specification are critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Medicine, feed, soybean oil; Water, basket, jug; Tarpaulin / plastic sheet; Wheel barrow and shovel. 		

Task number:	63.		
Task statement:	Control viral diseases		
Level of task:	Significance	Ease	Occurrence
	3	1	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Viral disease is suspected among fishes in the pond. Prescription and specification of medicine and standard procedure. Task: Control viral diseases Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Prevention is done as per the prescription; Followed specification of medicine and given standard procedure. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of viral diseases in fishery; Points to be considered while controlling viral diseases; Types of different viral diseases found in fishery; Signs and symptoms of different viral fish diseases; Control measures of different viral fish diseases. 		
Safety/precaution	<ul style="list-style-type: none"> Prescription and specification should be strictly followed. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Medicine, feed; Soybean oil; Water, basket, jug; Tarpaulin / plastic sheet; Wheel barrow and shovel. 		

Task number:	64.		
Task statement:	Treat fungal diseases		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location of fish pond; • Prescription and specification of medicine; • Suspected fungal disease. Task: Treat fungal diseases. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Treatment is done as per the given prescription; • Application of medicine is as per the standard procedure. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of fungal diseases in fishery; • Points to be considered while treating fungal diseases; • Types of different fungal diseases found in fishery; • Signs and symptoms of different fungal fish diseases; • Control measures of different fungal fish diseases. 		
Safety/precaution	<ul style="list-style-type: none"> • Prescription and specification of medicine are critical 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Medicine, feed, soybean oil ,turmeric salt, water; • Basket, jug, tarpaulin/ plastic sheet, wheel barrow and shovel. 		

Task number:	65.		
Task statement:	Collect market demand		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Market; • Available fish and its quality and quantity. Task: Collect market demand. Time: 1 hour (for one market) Standard/Criteria: <ul style="list-style-type: none"> • The collected demand is as per the given fish species; • The collected demand is as per the quantity and quality to be sold; • Documentation of market demand is done. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of collecting market demand; • Common types of consumer's desire; • Prevailing competitive market price; • Procedure of market survey. 		
Safety/precaution	<ul style="list-style-type: none"> • Apply safety wear; • Consumer's desire and quality are critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Phone/ mobile, • Internet, pen; • Paper and • Demand form / format. 		

Task number:	66.		
Task statement:	Harvest fish by casting net		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location of pond; • Fish pond, required quantity; • Size and species of fish to be harvest. Task: Harvest fish by casting net Time: N/A Standard/Criteria: <ul style="list-style-type: none"> • Fishes are harvested as per the required quantity, size and species. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of harvesting by casting net • Merits and demerits; • Procedure of applying casting net. 		
Safety/precaution	<ul style="list-style-type: none"> • Safely handle the fishes; • Small fishes are safely re-released in the pond; • Undesired size and species of fishes are re-released in the pond. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Casting net; • Bucket; • Container; • Sac and weighing balance. 		

Task number:	67.		
Task statement:	Harvest by drag net		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Site or location of pond; • Required quantity; • Size and species of fish. Task: Harvest by drag net. Time: 1hour /kattha. Standard/Criteria: <ul style="list-style-type: none"> • Fishes are harvested as per the required quantity, size and species. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of harvesting by drag net; • Merits and demerits of harvesting by drag net; • Procedure of of harvesting by drag net. 		
Safety/precaution	<ul style="list-style-type: none"> • Safely handle the fishes; • Small fishes are re-released in the pond; • Undesired size and species of fishes are re-released in the pond. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Drag net; • Bucket; • Container; • Sac; • Weighing balance and human resource. 		

Task number:	68.		
Task statement:	Catch fish by scoop net		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish pond; Required quantity; Size and species of fish. Task: Catch fish by scoop net. Time: 1-2 minutes /fish. Standard/Criteria: <ul style="list-style-type: none"> Caught fish is safe or free from injuries; The fishes caught are as per the required quantity size and species. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of catching fish by scoop net; Merits and demerits of catching fish by scoop net; Procedure of of catching fish by scoop net. 		
Safety/precaution	<ul style="list-style-type: none"> Handle the fishes safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Scoop net; Bucket; Sac and weighing balance, 		

Task number:	69.		
Task statement:	Harvest fish by trap net		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Stocking fish ponds or lake; Required quantity and size of fish species needed. Task: Harvest fish by trap net. Time: 30 minutes /2kg net. Standard/Criteria: <ul style="list-style-type: none"> The fishes caught are as per the required quantity, size and species. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of harvesting fish by trap net; Points to be considered while harvesting fish by trap net; Merits and demerits of harvesting fish by trap net; Procedure of harvesting fish by trap net. 		
Safety/precaution	<ul style="list-style-type: none"> Safely handle fish. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Trap net; bucket; Sac and Weighing balance. 		

Task number:	70.		
Task statement:	Separate fish species		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Harvested fish species; Quantity of fish to be separated. Task: Separate fish species. Time: 1hour /quintal.		

	Standard/Criteria: <ul style="list-style-type: none"> The fishes are separated as per the desired size, species and quantity; Separated fish are kept in different container.
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of separating fish species; Points to be considered while separating fish species; Physical characteristics / appearance of fish.
Safety/precaution	<ul style="list-style-type: none"> Apply safety wares
Tools, equipment and materials	<ul style="list-style-type: none"> Safety wares, fishes, net, bucket and wheel barrow.

Task number:	71.		
Task statement:	Grade fish		
Level of task:	Significance	Ease	Occurrence
	3	3	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Harvested and separated fish species; Quantity to be graded. Task: Grade fish. Time: 1hour /quintal Standard/Criteria: <ul style="list-style-type: none"> The fishes are graded as per the desired size, species and quantity. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of grading; Points to be considered while grading; Procedure of grading. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wares. Uniformity of size is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Safety wares, fishes, net, bucket and wheelbarrow. 		

Task number:	72.		
Task statement:	Perform dry packaging		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Graded and dry fish; Quantity to be packaged Size of fish and packet or weight per packet or size of packet. Task: Perform dry packaging. Time: 5 minutes /packet. Standard/Criteria: <ul style="list-style-type: none"> Fish packet is prepared as per given quantity; Packaging is as per the given size of packet; Packet is labelled. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of dry packaging; Labelling information and recipe; Procedure of dry packaging. 		
Safety/precaution	<ul style="list-style-type: none"> Avoided wet fish and weight and consistency of packet is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Plastic packet, sealing machine, sticker , glue, marker; Weighing machine, dry fish, cartoon, label, cartoon tapes. 		

Task number:	73.		
Task statement:	Perform ice packaging		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Graded dead fish; Quantity and size. Task: Perform ice packaging. Time: 20 minutes /30kg. Standard/Criteria: <ul style="list-style-type: none"> Fish is packed with ice; Ice-packaging is uniform and consistent; Packet is labelled. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of ice packaging; Procedure of ice packaging; Labelling information and recipe. 		
Safety/precaution	<ul style="list-style-type: none"> Apply safety wares; Handle ice safely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Sticker, glue, marker, weighing machines; Dry fish, label Styrofoam (thermocool), ice; Cartoon tape, rope, shovel and hammer. 		

Task number:	74.		
Task statement:	Perform live fish packaging for transport/delivery		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish, quantity, market distance; Quarantine certificate and VCST. Task: Perform live fish packaging for transport/delivery. Time: 1 hour /2.5 quintal. Standard/Criteria: <ul style="list-style-type: none"> Conditioning is done; Density of water and fish is maintained as per the size of fish. All fishes are maintained live and healthy in delivery. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of live fish packaging for transport/delivery; Required certification process/legal process; Packaging procedure of live fish; Label information's required; Transportation process of live fish. 		
Safety/precaution	<ul style="list-style-type: none"> Handle fishes safely; Density of fish in live packaging is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> 500 lit. drum/chamber; Oxygen cylinder, water tank; Air compressor, ice, pipe; Scoop net , weighing machine; Air stone, oxygen delivery pipe and vehicle. 		

Task number:	75.		
Task statement:	Perform boneless packaging		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish, size of package, quantity, market distance; Quarantine certificate and VCST. Task: Perform boneless packaging. Time: N/A Standard/Criteria: <ul style="list-style-type: none"> Packed fishes are boneless; Package are as per the given size and quantity; Packet are uniform and labelled. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of boneless packaging; Procedure of boneless packaging; Required certification process/legal process; Label information. 		
Safety/precaution	<ul style="list-style-type: none"> Handle fishes safely; Making boneless, size and uniformity is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Vacuum pack machine; Knife, refrigerated van; Thermocol box; Defreeze; Weighing machine; Cartoon, sticker; Pen and marker. 		

Task number:	76.		
Task statement:	Keep stocking records.		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish/ pond/ area /routine work; Forms and format. Task: Keep stocking records. Time: 10 minutes /stocking. Standard/Criteria: <ul style="list-style-type: none"> Record is as per the given format; All stocks are recorded and updated. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of stock records; Types of record; Types of forms and format. 		
Safety/precaution	<ul style="list-style-type: none"> Calculation of stocking density is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Stock record book; Pen/pencil; Calculator; Computer/laptop. 		

Task number:	77.		
Task statement:	Keep feed records		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Fish, pond, area; • Routine work; • Size and quantity; • Recording format. Task: Keep feed records. Time: 10 minutes /day feed consumption. Standard/Criteria: <ul style="list-style-type: none"> • Feed record is recorded as per the given format; • Feed records are updated. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of feed records; • Types of records; • Types of forms and formats; • Procedure of keeping feed records. 		
Safety/precaution	<ul style="list-style-type: none"> • Calculation is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Stock record book or format; • Pen/pencil; • Calculator, computer/laptop. 		

Task number:	78.		
Task statement:	Keep growth records.		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> • Fish/pond/area; • Forms and format or logbook Task: Keep growth records. Time: 15 minutes /day recording. Standard/Criteria: <ul style="list-style-type: none"> • Growth records recorded as per the given format or logbook; • Growth record is periodical or in equal interval; • Records are updated. 		
Related technical knowledge	<ul style="list-style-type: none"> • Meaning and importance of growth records; • Types of record and forms and format or logbook; • Procedure of keeping growth records. 		
Safety/precaution	<ul style="list-style-type: none"> • Periodical growth observation is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> • Stock record book; • Pen/pencil; • Calculator; • Computer/laptop; • Weighing machine; • Scoop net and bucket. 		

Task number:	79.		
Task statement:	Record disease outbreak and mortality		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish, pond / area and diseases outbreak situation; Recording format. Task: Record disease outbreak and mortality. Time: 10 minutes /case of outbreak or mortality. Standard/Criteria: <ul style="list-style-type: none"> Mortality/outbreak of disease is recorded as per given format. Record is updated as per the observation. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of recording disease outbreak and mortality; Types of diseases outbreak; Procedure of recording disease outbreak and mortality. 		
Safety/precaution	<ul style="list-style-type: none"> Types of diseases, sign and symptoms are critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Record book; Pen/pencil; Calculator; Computer/laptop; Weighing machine and Bucket. 		

Task number:	80.		
Task statement:	Keep treatment records		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish/ pond/ area coverage, forms/format or logbook. Task: Keep treatment records Time: 10 minutes /treatment case. Standard/Criteria: <ul style="list-style-type: none"> Applied given forms/format or logbook; Treatment of each diseases, medicine used are recorded; The treatment record is updated. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of treatment records; Types of treatments and medicines commonly used; Procedure of keeping treatment records. 		
Safety/precaution	<ul style="list-style-type: none"> Treatment is critical and date is critical. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Record book; Pen; Calculator, Computer/laptop; Weighing machine and Bucket. 		

Task number:	81.		
Task statement:	Keep production records		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish/pond/area, desired forms/format/logbook, products and quantity. Task: Keep production records. Time: 10 minutes /products. Standard/Criteria: <ul style="list-style-type: none"> The records are recorded as per the desired forms/format/logbook; Yearly/monthly/ half yearly production is recorded and records are updated. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of production records; Types of production in fishery and procedure of keeping production records. 		
Safety/precaution	<ul style="list-style-type: none"> Given forms / logbook are essential to follow. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Record book, pen; Calculator, computer/laptop; Weighing machine and bucket. 		

Task number:	82.		
Task statement:	Keep productivity records		
Level of task:	Significance	Ease	Occurrence
	3	2	3
Terminal performance standard	Given Condition: <ul style="list-style-type: none"> Fish /pond/area, forms/format or logbook; Production record of the year. Task: Keep productivity records. Time: 10 minutes /lot or production. Standard/Criteria: <ul style="list-style-type: none"> Yearly productivity is calculated; The calculated productivity is as per the productivity calculated by the supervisor. 		
Related technical knowledge	<ul style="list-style-type: none"> Meaning and importance of productivity records; Points to be considered while calculating productivity of the fish pond and species; Procedure of calculation and keeping productivity records. 		
Safety/precaution	<ul style="list-style-type: none"> Calculate precisely. 		
Tools, equipment and materials	<ul style="list-style-type: none"> Record book, pen; Calculator, computer/laptop; Weighing machine and bucket. 		





**Establishing an Employer led
Labour Market Secretariat**

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