

National Occupational Skill Standard (NOSS)

Occupational Title : River Raft Guide
Level : 1
Sector : Hospitality
Sub - Sector : Outdoor Recreation
NOSS ID/NSCO ID :
ISCO NO :



Council for Technical Education and Vocational Training
NATIONAL SKILL TESTING BOARD
Madhyapur Thimi-17, Sanothimi, Bhaktapur, Nepal

Developed: 27-02-2022 (15-11-2078)



DACUM Panel:

S. No.	Name	Designation	Organization
1.	Mr. Birendra Khanal	Member	Deputy Superintendent of Police, Armed Police Force, Sunsari
2.	Mr. Santosh Basnet	Member	Sub Inspector of Police, Armed Police Force, Sunsari
3.	Mr. Pradumna Thapa	Member	Police Inspector, Armed police force, Siraha
4.	Mr. Surya Prasad Dhamala	Member	Police Inspector, Armed Police Force, Siraha
5.	Mr. Mani Prasad Gurung	Member	Canyoning Adventure, Kathmandu
6.	Mr. Mohan Singh Limbu	Member	Green Horizon Multipurpose Pvt. Ltd., Udayapur
7.	Mr. Gobinda Prasad Adhikari	Member	Paddle Nepal, Lakeside, Pokhara
8.	Mr. Prakash Gurung	Member	SWISSA Trekking Expedition Pvt. Ltd. , Thamel Kathmandu
9.	Mr. Jeevan Silwal	Member	Holiday Adventure, Kathmandu
10.	Mr. Chet Prasad Sapkota	Member	Ex. Sr. Police Head Constable, Armed Police Force, Nepal
11.	Mr. Bhupendra Chamling	Member	Dharan Sky Adventure Pvt. Ltd, Dharan
12.	Mr. Suresh Kumar Basnet	Member	Green Horizon Multipurpose Pvt. Ltd, Udayapur
13.	Mr. Lal Kumar Rai	Member	Koshi Adventure, Itahari

DACUM Coordinator /Facilitator:

Mr. Mister Kanta Mainali, Director, Curriculum Division

Ms. Sharada Ghimire, Deputy Director, Curriculum Division

Ms. Shova Khanal, Deputy Director, Curriculum Division

DACUM Workshop on 22 and 23 Chaitra 2077

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The National Occupational Skill Standard Developed by:

No	Name	Designation	Organization
1.	Mr. Narendra Bajracharya	Coordinator	Hospitality Technical Sub Committee National Skill Testing Board, Sanothimi, Bhaktapur
2.	Mr. Tek Bahadur Malla	Director	National Skill Testing Board Sanothimi, Bhaktapur
3.	Ms. Samjhana Basnyat	Member	International School of Tourism & Hotel Management Gyaneshwor, Kathmandu
4.	Mr. Churamani Aryal	Member	Navigate Outdoor Pvt. Ltd. Thamel, Kathmandu
5.	Mr. Bishnu Gurung	Member	Big Smile Rafting and Kayaking Pvt. Ltd. Maharajgunj, Kathmandu
6.	Mr. Shankar Kumar Shrestha	Member	Mountain River Rafting Pvt. Ltd. Thamel, Kathmandu
7.	Mr. Durja Ojha	Member-Secretary	Hospitality Technical Sub Committee National Skill Testing Board, Sanothimi, Bhaktapur
8.	Mr. Tulsi KC	Member	Sr. Skill Testing Officer National Skill Testing Board, Sanothimi, Bhaktapur
9.	Mr. Suresh Maharjan	Member	Skill Testing Officer National Skill Testing Board, Sanothimi, Bhaktapur
10.	Mr. Kishor Chandra Sharma	Member	Skill Testing Assistant National Skill Testing Board, Sanothimi, Bhaktapur

Recommended by Hospitality Technical Sub Committee: 27 February 2022 (15 Falgun 2078)

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1	Occupational Title: River Raft Guide Level: 1
2	Job Description: River Raft Guide, L-1 prepares for rafting trip, conducts rafting and performs basic rescue operation.
3	UNITS OF COMPETENCY: 1. Prepare for rafting trip 2. Conduct rafting 3. Perform basic rescue operation 4. Perform communication 5. Develop professionalism <i>*Note: Units 4 and 5 are not for testing purpose.</i>
4	Qualifying Notes/Prerequisites: <ul style="list-style-type: none"> • Physical Requirements: Sound health • Entry Requirements: As per NSTB rules Additional Information: <ul style="list-style-type: none"> • Assessment Types: Performance test only • Assessment Duration: 4 to 5 hours (Full Competency) • Recommended Group Size: 6 to 8 candidates



5	Unit No:1 Unit Title: Prepare for rafting trip	Unit code:	
	Elements of competency	Performance standards	
	1.1 Prepare rafting equipment	1.1.1 Safety and serviceability of rafting gears checked as per safety checklist and packed. 1.1.2 Rescue kit and first aid kit checked and packed as per trip requirement. 1.1.3 Food and utensils packed as per requirement of trip.	
	1.2 Coordinate with clients	1.2.1 Transportation providers informed for pickup as per agreement. 1.2.2 Clients received and verified as per pickup schedule . 1.2.3 Clients briefed regarding trip itinerary.	
6	Task Performance Requirements (Tools, Equipment and Materials): <ul style="list-style-type: none"> Raft, rafting gear, rope, Oar, Oar frame, paddle, paddle top, pump, whistle, dry box, dry bag, river knife, mallet, hammer, screw driver, Allen key, sand stick, rope, cloths, duct tape, D-ring, O-ring, Oar locks, carabiners, rubber adhesive, sand paper, sewing kit, scissors, chain saw, tubular webbing, messenger line, torch, first aid kit and personal protective equipment (PPE). 		
7	Safety and Hygiene (Occupational Health and Safety): <ul style="list-style-type: none"> Use personal protective equipment. Safe handling of materials, tools and equipment. Hazards involved in lifting tools, equipment and materials. Prevent from river hazard and lightning hazard hazards. Dispose waste properly. 		



8	Required Knowledge		
	Technical Knowledge	Applied Calculation	Graphical Information
	<ul style="list-style-type: none"> • Rafting tools and equipment: <ul style="list-style-type: none"> ○ Types ○ Uses ○ Safe handling • Rafting fundamentals • Introduction and types of crafts • Raft <ul style="list-style-type: none"> ○ Introduction ○ Types of rafts ○ Parts and pieces ○ Raft preparation ○ Proper inflation of raft • River <ul style="list-style-type: none"> ○ Introduction ○ Types ○ Grading ○ River hydrology ○ River map ○ River features 		<ul style="list-style-type: none"> • Read and interpret manufacturer's instruction • Read and interpret river flow diagram



	<ul style="list-style-type: none"> • Knot <ul style="list-style-type: none"> ○ Types of knots ○ Importance and use of knot ○ Static and dynamic rope • Importance of rescue and first aid • Communication and briefing technique • Waste management • Daily log • Occupational health and safety rules and regulations 		
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9	Assessment of Competency					
Unit: 1						
Unit Title: Prepare for rafting trip						
Candidate Details			Assessors Detail			
Candidate's Name:			Assessors' Name		ID/License No:	
Registration Number:			1.			
Symbol No:			2.			
Test Centre:			3.			
Test Date:						
Element of competency	Performance Standards		Standard Met	Standard Not Met	Evidence Type	Comments
1.1 Prepare rafting equipment	1.1.1 Safety and serviceability of rafting gears checked as per safety checklist and packed.					
	1.1.2 Rescue kit and first aid kit checked and packed as per trip requirement.					
	1.1.3 Food and utensils packed as per requirement of trip.					
1.2 Coordinate with clients	1.2.1 Transportation providers informed/reminded for pickup as per agreement.					
	1.2.2 Clients received and verified as per pickup schedule .					
	1.2.3 Clients briefed regarding trip itinerary.					

WT- Written Test

OQ- Oral Question

PT- Practical Test

DO – Direct Observation

SR- Supervisor's report

SN–Simulation

RP- Role Play

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Range Statement

Variable	Range
Rafting gears	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Raft • Personal Flotation Devices (PFDs) • River helmet • Paddles • Throw bag • Life line • Foot pump • Hand pump • Oar frame • Oars • Paddle top • Kayak • Rope
Rescue kit	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Throw bag • Flip line • Pulleys • Locking carabiner • Prusik cord • River knife



	<ul style="list-style-type: none"> • Whistle • Webbing • Messenger line • Folding saw
First aid kit	<p><i>May include but are not limited to:</i></p> <ul style="list-style-type: none"> • Bandage • Gauze pads • Antiseptic • Adhesive tape • Cotton • Thermometer • Anaesthetic spray/lotion • Medicine • Gloves • Betadine • Bandaid • CPR kit • Safety pins • Scissors • Tweezers
Pickup schedule	<p><i>May include but are not limited to:</i></p> <ul style="list-style-type: none"> • Location • Pickup time • Number of clients



5	Unit No:2 Unit Title: Conduct rafting	Unit code:	
Elements of competency		Performance standards	
2.1 Prepare for rafting activity		2.1.1 Personal protective equipment (PPE) used in accordance with river condition. 2.1.2 Clients welcomed and introduced with rafting crew. 2.1.3 Clients' personal belongings collected and stored at designated place. 2.1.4 Safety briefing conducted for clients. 2.1.5 Rafting equipment and gear prepared for rafting as per rafting standard. 2.1.6 Rafting gear distributed to clients as per fitting and checked clients' clothing. 2.1.7 Safety and serviceability checked on raft as per safety checklist. 2.1.8 Lunch, lunch spot and take out point fixed in coordination with trip leader. 2.1.9 Medical conditions of clients' rechecked.	
2.2 Perform boarding		2.2.1 Launch site selected as per river condition. 2.2.2 Clients boarded in seating positions as per their paddling, swimming and physical abilities. 2.2.3 Clients' paddling gear crosschecked to ensure comfort and safety. 2.2.4 Clients informed about paddling commands to be used. 2.2.5 Correct paddling stroke demonstrated and clients engaged in practice. 2.2.6 Raft launched using paddling commands as per river conditions and clients' abilities.	
2.3 Perform raft guiding		2.3.1 Raft maneuvered using appropriate paddling commands after trip leader's signal. 2.3.2 River signals and commands used to communicate between clients and other rafts. 2.3.3 Clients engaged, entertained and guided throughout the trip with safety and comfort.	



		<p>2.3.4 Commentary provided on river environment and local culture.</p> <p>2.3.5 Raft stopped in the eddies and briefed.</p> <p>2.3.6 Clients informed about rafting takeout.</p> <p>2.3.7 Raft landed at takeout point.</p>
	2.4 Perform post rafting activity	<p>2.4.1 Clients briefed on finishing of the trip and greetings exchanged.</p> <p>2.4.2 Clients rafting equipment collected, inspected and recorded.</p> <p>2.4.3 Rafting equipment packed as per standard procedure.</p> <p>2.4.4 Personal belongings handed over to clients.</p> <p>2.4.5 Arrangement made for clients' departure.</p>
	2.5 Perform site clearance	<p>2.5.1 Site rechecked and cleared at put-in point.</p> <p>2.5.2 Site rechecked and cleared at lunch point.</p> <p>2.5.3 Site rechecked and cleared at takeout point.</p>
6	<p>Task Performance Requirements (Tools, Equipment and Materials):</p> <ul style="list-style-type: none"> Raft, wet suit, dry suit, neoprene suit, rope, Oar, Oar frame, Oar locks, O-ring, paddle, paddle top, pump, whistle, dry box, dry bag, throw bag, river knife, mallet, hammer, screw driver, Allen key, sand bar, cloths, duct tape, D-ring, carabiners, rubber adhesive, sand paper, sewing kit, scissors, chain saw, tubular webbing, gloves, messenger line, torch, rescue kit, first aid kit and personal protective equipment (PPE). 	
7	<p>Safety and Hygiene (Occupational Health and Safety):</p> <ul style="list-style-type: none"> Use personal protective equipment. Safe handling of materials, tools and equipment. Hazards involved in lifting tools, equipment and materials. 	



- Prevent from river hazard and lightning hazard hazards.
- Dispose waste properly.



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8	Required Knowledge		
	Technical Knowledge	Applied Calculation	Graphical Information
	<ul style="list-style-type: none"> • Rafting tools and equipment: <ul style="list-style-type: none"> ○ Types ○ Uses ○ Safe handling • Raft <ul style="list-style-type: none"> ○ Introduction ○ Types of rafts ○ Parts and pieces ○ Raft preparation ○ Proper inflate • Paddling strokes <ul style="list-style-type: none"> ○ Introduction ○ Types ○ Use • Strokes and maneuvers <ul style="list-style-type: none"> ○ Forward sweep ○ J-strokes ○ Pray ○ Back sweep 		<ul style="list-style-type: none"> • Read and interpret river flow diagram



- River hand and paddle signal
 - Go
 - Stop
 - Eddy out
 - Go right
 - Go left
 - Ok
 - Emergency signal
- Rafting technique
- Communication and briefing technique
- River
 - Introduction
 - Types
 - Grading
 - River hydrology
 - River features
 - River map
- River hazards
 - Hydraulic hole
 - Strainers
 - Waves



	<ul style="list-style-type: none"> ○ Eddies ○ Undercut rock ○ Sieve ○ Low head dam ● Waste management ● Record keeping and documentation ● Occupational health and safety rules and regulations 		
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9	Assessment of Competency				
Unit: 2					
Unit Title: Conduct rafting					
Candidate Details			Assessors Detail		
Candidate's Name:			Assessors' Name		ID/License No:
Registration Number:			1.		
Symbol No:			2.		
Test Centre:			3.		
Test Date:					
Element of competency	Performance Standards	Standard Met	Standard Not Met	Evidence Type	Comments
2.1 Prepare for rafting activity	2.1.1 Personal protective equipment (PPE) used in accordance with river condition.				
	2.1.2 Clients welcomed and introduced with rafting crew.				
	2.1.3 Clients' personal belongings collected and stored at designated place.				
	2.1.4 Safety briefing conducted for clients.				
	2.1.5 Rafting equipment and gear prepared for rafting as per rafting standard.				
	2.1.6 Rafting gear distributed to clients as per fitting and checked clients' clothing.				
	2.1.7 Safety and serviceability checked on raft as per safety				



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	<p>checklist.</p> <p>2.1.8 Lunch, lunch spot and take out point fixed in coordination with trip leader.</p> <p>2.1.9 Medical conditions of clients' rechecked.</p>				
2.2 Perform boarding	<p>2.2.1 Launch site selected as per river condition.</p> <p>2.2.2 Clients boarded in seating positions as per their paddling, swimming and physical abilities.</p> <p>2.2.3 Clients' paddling gear crosschecked to ensure comfort and safety.</p> <p>2.2.4 Clients informed about paddling commands to be used.</p> <p>2.2.5 Correct paddling stroke demonstrated and clients engaged in practice.</p> <p>2.2.6 Raft launched using paddling commands as per river conditions and clients' abilities.</p>				
2.3 Perform raft guiding	<p>2.3.1 Raft maneuvered using appropriate paddling commands after trip leader's signal.</p> <p>2.3.2 River signals and commands used to communicate between clients and other rafts.</p> <p>2.3.3 Clients engaged, entertained and guided throughout the trip with safety and comfort.</p> <p>2.3.4 Commentary provided on river environment and local</p>				



	<p>culture.</p> <p>2.3.5 Raft stopped in the eddies and briefed.</p> <p>2.3.6 Clients informed about rafting takeout.</p> <p>2.3.7 Raft landed at takeout point.</p>				
2.4 Perform post rafting activity	<p>2.4.1 Clients briefed on finishing of the trip and greetings exchanged.</p> <p>2.4.2 Clients rafting equipment collected, inspected and recorded.</p> <p>2.4.3 Rafting equipment packed as per standard procedure.</p> <p>2.4.4 Personal belongings handed over to clients.</p> <p>2.4.5 Arrangement made for clients' departure.</p>				
2.5 Perform site clearance	<p>2.5.1 Site rechecked and cleared at put-in point.</p> <p>2.5.2 Site rechecked and cleared at lunch point.</p> <p>2.5.3 Site rechecked and cleared at takeout point.</p>				

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Range Statement

Variable	Range
Personal protective equipment	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • River helmet • PFDs • River shoes • River knife • Flip line • Whistle • Throw bag • Locking carabiner
Rafting equipment and gear	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Raft • PFDs • River helmet • Paddles • Throw bag • Rope • Foot pump • Hand pump • Oar frame • Oars • Paddle top



Paddling commands

May include but not limited to:

- Forward paddle
- Back paddle
- Right back paddle
- Left back paddle
- Get down
- Get back
- Hold on
- Stop paddle



5	Unit No:3 Unit Title: Perform basic rescue operation	Unit code:	
Elements of competency		Performance standards	
3.1 Prepare for rescue		3.1.1 Personal protective equipment (PPE) used in accordance with river condition. 3.1.2 Rescue kit prepared and placed in designated place. 3.1.3 Knots prepared as per requirement of rescue.	
3.2 Perform self-rescue		3.2.1 Body position maintained to minimize injury or entrapment. 3.2.2 Defensive and aggressive swimming technique used to reach nearest safety points . 3.2.3 Swimmer reached to raft and recovered capsized raft to re-right position. 3.2.4 Raft rowed to safe points.	
3.3 Rescue swimmer		3.3.1 Voice contact and eye contact maintained with swimmer. 3.3.2 T grip of paddle extended to swimmer in case swimmer is within reach to raft and pulled safely. 3.3.3 Raft rowed to swimmer. 3.3.4 Rescue rope thrown within reach to swimmer. 3.3.5 Swimmer safely pulled on raft. 3.3.6 Client condition assessed and first aid provided as per the requirement.	
6	Task Performance Requirements (Tools, Equipment and Materials): <ul style="list-style-type: none"> Raft, wet suit, dry suit, neoprene suit, rope, Oar, Oar frame, Oar locks, O-ring, paddle, paddle top, pump, whistle, dry box, dry bag, throw bag, river knife, mallet, hammer, screw driver, Allen key, sand bar, cloths, duct tape, D-ring, carabiners, rubber adhesive, sand paper, sewing kit, scissors, chain saw, tubular webbing, gloves, messenger line, torch, rescue kit, first aid kit and personal protective equipment (PPE). 		



7

Safety and Hygiene (Occupational Health and Safety):

- Use personal protective equipment.
- Safe handling of materials, tools and equipment.
- Hazards involved in lifting tools, equipment and materials.
- Prevent from river hazard and lightning hazard hazards.
- Dispose waste properly.



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8	Required Knowledge		
	Technical Knowledge	Applied Calculation	Graphical Information
	<ul style="list-style-type: none"> • Rescue tools and equipment: <ul style="list-style-type: none"> ○ Introduction ○ Types ○ Preparation ○ Safe handling • Rescue <ul style="list-style-type: none"> ○ Introduction ○ Types of rescues ○ Rescue technique • Knot <ul style="list-style-type: none"> ○ Types of knots ○ Knot tying technique • White water swimming <ul style="list-style-type: none"> ○ Introduction ○ Defensive and aggressive swimming • Raft flip drill <ul style="list-style-type: none"> ○ Climb on raft ○ Re-right raft • First aid 		<ul style="list-style-type: none"> • Read and interpret river flow diagram



	<ul style="list-style-type: none"> ○ Introduction ○ Importance ○ Kit preparation ○ First aid technique ● Occupational health and safety rules and regulations 		
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9	Assessment of Competency				
Unit: 3					
Unit Title: Perform basic rescue operation					
Candidate Details			Assessors Detail		
Candidate's Name:			Assessors' Name		ID/License No:
Registration Number:			1.		
Symbol No:			2.		
Test Centre:			3.		
Test Date:					
Element of competency	Performance Standards	Standard Met	Standard Not Met	Evidence Type	Comments
3.1 Prepare for rescue	3.1.1 Personal protective equipment (PPE) used in accordance with river condition.				
	3.1.2 Rescue kit prepared and placed in designated place.				
	3.1.3 Knots prepared as per requirement of rescue.				
3.2 Perform self-rescue	3.2.1 Body position maintained to minimize injury or entrapment.				
	3.2.2 Defensive and aggressive swimming technique used to reach nearest safety points .				
	3.2.3 Swimmer reached to raft and recovered capsized raft to re-right raft.				
	3.2.4 Raft rowed to safe points.				



3.3 Rescue swimmer	<p>3.3.1 Voice contact and eye contact maintained with swimmer.</p> <p>3.3.2 T grip of paddle extended to swimmer in case swimmer is within reach to raft and pulled safely.</p> <p>3.3.3 Raft rowed to swimmer.</p> <p>3.3.4 Rescue rope thrown within reach to swimmer.</p> <p>3.3.5 Swimmer safely pulled on raft.</p> <p>3.3.6 Client condition assessed and first aid provided as per the requirement.</p>				
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WT- Written Test

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Range Statement

Variable	Range
Personal protective equipment	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • River helmet • PFDs • River shoes • River knife • Flip line • Whistle • Throw bag • Locking carabiner
Rescue kit	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Throw bag • Flip line • Pulleys • Locking carabiner • Prusik cord • River knife • Whistle • Webbing • Messenger line • Folding saw



<p>Knots</p>	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Water knot • Figure of eight on a bight • Butterfly • Bowline • Stopper
<p>Safety points</p>	<p><i>May include but not limited to:</i></p> <ul style="list-style-type: none"> • Craft • Shore • Eddy





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