

**Requirements of Rate for Clean Drinking Water Project**

| S.N. | Product Name                                                                | Unit | Quantity | Rate |
|------|-----------------------------------------------------------------------------|------|----------|------|
| 1    | 50 Liter Purifier (RO+ UV) with Water Cooler as per attached specification  | Set  | 1        |      |
| 2    | 50 Liter Purifier (RO+ UV) as per attached specification                    | Set  | 1        |      |
| 3    | 100 Liter Purifier (RO+ UV) with Water Cooler as per attached specification | Set  | 1        |      |
| 4    | 100 Liter Purifier (RO+ UV) as per attached specification                   | Set  | 1        |      |
| 5    | 150 Liter Purifier (RO+ UV) with Water Cooler as per attached specification | Set  | 1        |      |
| 6    | 300 Liter WVM (with RO+ UV) with KIOSK as per specification                 | Set  | 1        |      |
| 7    | 300 Liter Water ATM (with RO + UV) with KIOSK as per specification          | Set  | 1        |      |

*[Signature]*

*[Signature]*

**Krishna Prasad Rajbanshi**  
 Division Chief  
 Irrigation & Energy Development Division

# Technical Specification of Clean Drinking Water Plants



## 1. 50-liter Water Purifier (RO + UV) with Water Cooler

| S. N. | CRITERIA                           | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                                              | OFFERED SPECIFICATION |
|-------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                            | Floor standing, self-contained Water Purifier with integrated RO + UV purification and water-cooling system, suitable for continuous operation in institutional/office use under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                       | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                                            |                       |
| 3.    | Structure / Body Construction      | SS (Stainless Steel) or similar corrosion resistant Metal                                                                                                                                                                                                                                                                           |                       |
| 4.    | Purifying Capacity                 | At least 50 litre/hour                                                                                                                                                                                                                                                                                                              |                       |
| 5.    | Storage Capacity                   | Minimum 50 liters of treated water, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                       |                       |
| 6.    | Cooling and Normal Water Container | Minimum 25 L each, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                                        |                       |
| 7.    | Compressor                         | Reciprocating type compressor                                                                                                                                                                                                                                                                                                       |                       |
| 8.    | Condenser and Refrigerant          | Fin and tube type or using environment friendly (ODP-zero) refrigerant                                                                                                                                                                                                                                                              |                       |
| 9.    | Temperature of Chilled Water       | At least 15°C below ambient / chilled water temperature not more than 15°C, whichever is applicable.                                                                                                                                                                                                                                |                       |
| 10.   | Dispensing Unit / Tap              | Minimum 2 taps for cold and normal water, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                  |                       |
| 11.   | Stages of Filtration               | At least 7 stages, including RO + UV                                                                                                                                                                                                                                                                                                |                       |
| 12.   | RO Membrane                        | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                                              |                       |
| 13.   | UV Sterilization Unit              | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                                    |                       |
| 14.   | Flow Control Mechanism             | Inlet water technology must have control flow mechanism. An automatic float valve/level sensor shall be provided for auto shut-off at full tank level and low-water cut-off protection for the pump.                                                                                                                                |                       |
| 15.   | Water Recovery                     | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                                         |                       |

| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                               | OFFERED SPECIFICATION |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 16.   | Electrical Safety                        | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                   |                       |
| 17.   | Instructions                             | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                     |                       |
| 18.   | Manuals                                  | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                          |                       |
| 19.   | After Sales Service and Warranty         | <b>Warranty for at least One year with spare parts and remaining 4 years' service warranty only (Spare parts not included)</b>                                                                                                                                                       |                       |
| 20.   | Manufacturer's Certification             | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate</b> suitable for the scope of Manufacturing and Supply and installation of Water Purification System and same shall be submitted along with bid. |                       |
| 21.   | Delivery, Installation and commissioning | The 50-liter Water Purifier (RO + UV) with Water Cooler, complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance.                                                                                       |                       |

*[Handwritten signatures]*

*[Handwritten signature]*

**Krishna Prasad Rajbanshi**  
**Division Chief**  
 Irrigation & Energy Development Division

## 2. 50-liter Water Purifier (RO + UV)

| S. N. | CRITERIA                         | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                            | OFFERED SPECIFICATION |
|-------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                          | Floor standing, self-contained Water Purifier with integrated RO + UV purification system, suitable for continuous operation in institutional/office use under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                     | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                          |                       |
| 3.    | Structure / Body Construction    | <b>SS (Stainless Steel) or similar corrosion resistant Metal</b>                                                                                                                                                                                                                                                  |                       |
| 4.    | Purifying Capacity               | <b>At least 50 litre/hour</b>                                                                                                                                                                                                                                                                                     |                       |
| 5.    | Storage Capacity                 | <b>Minimum 50 liters of treated water, made up of SS or corrosion resistant food grade material.</b>                                                                                                                                                                                                              |                       |
| 6.    | Dispensing Unit / Tap            | Minimum 2 taps, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                          |                       |
| 7.    | Stages of Filtration             | <b>At least 7 stages, including RO + UV</b>                                                                                                                                                                                                                                                                       |                       |
| 8.    | RO Membrane                      | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                            |                       |
| 9.    | UV Sterilization Unit            | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                  |                       |
| 10.   | Water Recovery                   | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                       |                       |
| 11.   | Electrical Safety                | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                                                |                       |
| 12.   | Instructions                     | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                                                  |                       |
| 13.   | Manuals                          | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                                                       |                       |
| 14.   | After Sales Service and Warranty | <b>Warranty for at least One year with spare parts and remaining 4 years' service warranty only (Spare parts not included)</b>                                                                                                                                                                                    |                       |
| 15.   | Manufacturer's Certification     | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate suitable for the scope of</b>                                                                                                                                                 |                       |

| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                      | OFFERED SPECIFICATION |
|-------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|       |                                          | Manufacturing and Supply and installation of Water Purification System and same shall be submitted along with bid.                                                          |                       |
| 16.   | Delivery, Installation and commissioning | The 50-liter Water Purifier (RO + UV) complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance. |                       |

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*



**Krishna Prasad Rajbanshi**  
Division Chief  
Irrigation & Energy Development Division

### 3. 100-liter Water Purifier (RO + UV) with Water Cooler

| S. N. | CRITERIA                           | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                                              | OFFERED SPECIFICATION |
|-------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                            | Floor standing, self-contained Water Purifier with integrated RO + UV purification and water-cooling system, suitable for continuous operation in institutional/office use under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                       | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                                            |                       |
| 3.    | Structure / Body Construction      | SS (Stainless Steel) or similar corrosion resistant Metal                                                                                                                                                                                                                                                                           |                       |
| 4.    | Purifying Capacity                 | At least 100 litre/hour                                                                                                                                                                                                                                                                                                             |                       |
| 5.    | Storage Capacity                   | Minimum 100 liters of treated water, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                      |                       |
| 6.    | Cooling and Normal Water Container | Minimum 50 L each, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                                        |                       |
| 7.    | Compressor                         | Reciprocating type compressor                                                                                                                                                                                                                                                                                                       |                       |
| 8.    | Condenser and Refrigerant          | Fin and tube type or using environment friendly (ODP-zero) refrigerant                                                                                                                                                                                                                                                              |                       |
| 9.    | Temperature of Chilled Water       | At least 15°C below ambient / chilled water temperature not more than 15°C, whichever is applicable.                                                                                                                                                                                                                                |                       |
| 10.   | Dispensing Unit / Tap              | Minimum 4 taps for cold and normal water, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                  |                       |
| 11.   | Stages of Filtration               | At least 7 stages, including RO + UV                                                                                                                                                                                                                                                                                                |                       |
| 12.   | RO Membrane                        | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                                              |                       |
| 13.   | UV Sterilization Unit              | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                                    |                       |
| 14.   | Flow Control Mechanism             | Inlet water technology must have control flow mechanism. An automatic float valve/level sensor shall be provided for auto shut-off at full tank level and low-water cut-off protection for the pump.                                                                                                                                |                       |
| 15.   | Water Recovery                     | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                                         |                       |
| 16.   | Electrical Safety                  | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper                                                                                                                                                                                                                                           |                       |

| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                               | OFFERED SPECIFICATION |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|       |                                          | grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                                                                                                             |                       |
| 17.   | Instructions                             | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                     |                       |
| 18.   | Manuals                                  | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                          |                       |
| 19.   | After Sales Service and Warranty         | <b>Warranty for at least One year with spare parts</b> and remaining 4 years' service warranty only (Spare parts not included)                                                                                                                                                       |                       |
| 20.   | Manufacturer's Certification             | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate</b> suitable for the scope of Manufacturing and Supply and installation of Water Purification System and same shall be submitted along with bid. |                       |
| 21.   | Delivery, Installation and commissioning | The 100-liter Water Purifier (RO + UV) with Water Cooler, complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance.                                                                                      |                       |



*[Handwritten signature]*

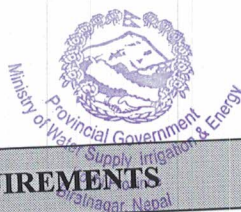
*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

**Krishna Prasad Rajbanshi**  
**Division Chief**  
 Irrigation & Energy Development Division

#### 4. 100-liter Water Purifier (RO + UV)



| S. N. | CRITERIA                         | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                            | OFFERED SPECIFICATION |
|-------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                          | Floor standing, self-contained Water Purifier with integrated RO + UV purification system, suitable for continuous operation in institutional/office use under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                     | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                          |                       |
| 3.    | Structure / Body Construction    | <b>SS (Stainless Steel) or similar corrosion resistant Metal</b>                                                                                                                                                                                                                                                  |                       |
| 4.    | Purifying Capacity               | <b>At least 100 litre/hour</b>                                                                                                                                                                                                                                                                                    |                       |
| 5.    | Storage Capacity                 | <b>Minimum 100 liters of treated water, made up of SS or corrosion resistant food grade material.</b>                                                                                                                                                                                                             |                       |
| 6.    | Dispensing Unit / Tap            | Minimum 4 taps, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                          |                       |
| 7.    | Stages of Filtration             | <b>At least 7 stages, including RO + UV</b>                                                                                                                                                                                                                                                                       |                       |
| 8.    | RO Membrane                      | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                            |                       |
| 9.    | UV Sterilization Unit            | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                  |                       |
| 10.   | Water Recovery                   | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                       |                       |
| 11.   | Electrical Safety                | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                                                |                       |
| 12.   | Instructions                     | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                                                  |                       |
| 13.   | Manuals                          | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                                                       |                       |
| 14.   | After Sales Service and Warranty | <b>Warranty for at least One year with spare parts and remaining 4 years' service warranty only (Spare parts not included)</b>                                                                                                                                                                                    |                       |
| 15.   | Manufacturer's Certification     | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate suitable for the scope of Manufacturing and Supply and installation of</b>                                                                                                    |                       |

| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                       | OFFERED SPECIFICATION |
|-------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|       |                                          | Water Purification System and same shall be submitted along with bid.                                                                                                        |                       |
| 16.   | Delivery, Installation and commissioning | The 100-liter Water Purifier (RO + UV) complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance. |                       |

*[Handwritten signatures]*

*[Handwritten signature]*  
**Krishna Prasad Rajbanshi**  
 Division Chief  
 Irrigation & Energy Development Division



## 5. 150-liter Water Purifier (RO + UV) with Water Cooler

| S. N. | CRITERIA                           | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                                              | OFFERED SPECIFICATION |
|-------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                            | Floor standing, self-contained Water Purifier with integrated RO + UV purification and water-cooling system, suitable for continuous operation in institutional/office use under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                       | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                                            |                       |
| 3.    | Structure / Body Construction      | SS (Stainless Steel) or similar corrosion resistant Metal                                                                                                                                                                                                                                                                           |                       |
| 4.    | Purifying Capacity                 | At least 150 litre/hour                                                                                                                                                                                                                                                                                                             |                       |
| 5.    | Storage Capacity                   | Minimum 150 liters of treated water, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                      |                       |
| 6.    | Cooling and Normal Water Container | Minimum 75 L each, made up of SS or corrosion resistant food grade material.                                                                                                                                                                                                                                                        |                       |
| 7.    | Compressor                         | Reciprocating type compressor                                                                                                                                                                                                                                                                                                       |                       |
| 8.    | Condenser and Refrigerant          | Fin and tube type or using environment friendly (ODP-zero) refrigerant                                                                                                                                                                                                                                                              |                       |
| 9.    | Temperature of Chilled Water       | At least 15°C below ambient / chilled water temperature not more than 15°C, whichever is applicable.                                                                                                                                                                                                                                |                       |
| 10.   | Dispensing Unit / Tap              | Minimum 4 taps for cold and normal water, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                  |                       |
| 11.   | Stages of Filtration               | At least 7 stages, including RO + UV                                                                                                                                                                                                                                                                                                |                       |
| 12.   | RO Membrane                        | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                                              |                       |
| 13.   | UV Sterilization Unit              | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                                    |                       |
| 14.   | Flow Control Mechanism             | Inlet water technology must have control flow mechanism. An automatic float valve/level sensor shall be provided for auto shut-off at full tank level and low-water cut-off protection for the pump.                                                                                                                                |                       |
| 15.   | Water Recovery                     | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                                         |                       |
| 16.   | Electrical Safety                  | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper                                                                                                                                                                                                                                           |                       |

| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                               | OFFERED SPECIFICATION |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|       |                                          | grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                                                                                                             |                       |
| 17.   | Instructions                             | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                     |                       |
| 18.   | Manuals                                  | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                          |                       |
| 19.   | After Sales Service and Warranty         | <b>Warranty for at least One year with spare parts and remaining 4 years' service warranty only (Spare parts not included)</b>                                                                                                                                                       |                       |
| 20.   | Manufacturer's Certification             | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate</b> suitable for the scope of Manufacturing and Supply and installation of Water Purification System and same shall be submitted along with bid. |                       |
| 21.   | Delivery, Installation and commissioning | The 150-liter Water Purifier (RO + UV) with Water Cooler, complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance.                                                                                      |                       |



*[Handwritten signatures]*

**Krishna Prasad Rajbanshi**  
**Division Chief**  
 Irrigation & Energy Development Division

## 6. 300-liter Water Vending Machine (RO + UV) with KIOSK

| S. N. | CRITERIA                      | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                                                                 | OFFERED SPECIFICATION |
|-------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1.    | General                       | Floor standing, self-contained Automatic water vending machine with RO + UV purification system and KOISK, suitable for continuous operation in public palces under the climatic conditions of Nepal. The complete unit shall be factory assembled and factory tested prior to dispatch as a single integrated system. | Make:<br>Model:       |
| 2.    | Power Source                  | Single phase 220V, 50Hz.                                                                                                                                                                                                                                                                                               |                       |
| 3.    | Structure / Body Construction | <b>SS (Stainless Steel) or similar corrosion resistant Metal</b>                                                                                                                                                                                                                                                       |                       |
| 4.    | Purifying Capacity            | <b>At least 300 litre/hour</b>                                                                                                                                                                                                                                                                                         |                       |
| 5.    | Storage Capacity              | <b>Minimum 300 liters of treated water, made up of SS or corrosion resistant food grade material.</b>                                                                                                                                                                                                                  |                       |
| 6.    | KOISK and Display Interface   | Weather-resistant, corrosion-resistant and suitable for outdoor installation with Digital display/touch panel or push-button interface. Internal LED lighting should be provided for safe operation at night                                                                                                           |                       |
| 7.    | Dispensing Unit / Tap         | Minimum 2 taps, food-grade, leak-proof, easy to operate.                                                                                                                                                                                                                                                               |                       |
| 8.    | Stages of Filtration          | <b>At least 7 stages, including RO + UV</b>                                                                                                                                                                                                                                                                            |                       |
| 9.    | RO Membrane                   | Thin Film Composite (TFC) or equivalent RO membrane with salt/TDS rejection rate of not less than 90%.                                                                                                                                                                                                                 |                       |
| 10.   | UV Sterilization Unit         | UV dose of not less than 30 mJ/cm <sup>2</sup> with food-grade quartz sleeve for disinfection of purified water.                                                                                                                                                                                                       |                       |
| 11.   | Flow Control Mechanism        | Inlet water technology must have control flow mechanism. An automatic float valve/level sensor shall be provided for auto shut-off at full tank level and low-water cut-off protection for the pump.                                                                                                                   |                       |
| 12.   | Water Recovery                | Not less than 70%. A reject/wastewater drain outlet with connecting pipe/hose shall be provided for safe disposal or reuse of reject water.                                                                                                                                                                            |                       |
| 13.   | Electrical Safety             | The unit shall be provided with earth leakage protection (ELCB/RCCB) and MCB, with proper grounding/earthing terminal. Electrical enclosure shall be minimum IP42.                                                                                                                                                     |                       |
| 14.   | Instructions                  | All signs and instructions on the equipment shall be in English.                                                                                                                                                                                                                                                       |                       |



| S. N. | CRITERIA                                 | TECHNICAL REQUIREMENTS                                                                                                                                                                                                                                                               | OFFERED SPECIFICATION |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 15.   | Manuals                                  | One copy of the Operator's and Owner's instructions and maintenance manual in English shall be supplied with the equipment.                                                                                                                                                          |                       |
| 16.   | After Sales Service and Warranty         | <b>Warranty for at least One year with spare parts and remaining 4 years' service warranty only (Spare parts not included)</b>                                                                                                                                                       |                       |
| 17.   | Manufacturer's Certification             | <b>The manufacturer should have valid ISO 9001:2015 OR ISO 14001:2015 OR ISO 45001:2018 OR IS: 16240:2015/2025 or other Certificate</b> suitable for the scope of Manufacturing and Supply and installation of Water Purification System and same shall be submitted along with bid. |                       |
| 18.   | Delivery, Installation and commissioning | The 300-liter Water Vending Machine with (RO + UV) complete with all accessories, shall be delivered, installed and commissioned at the places specified by the client after acceptance.                                                                                             |                       |



**Note:**

- The major items are indicated by bold and highlighted letters/alphabets/figures in the technical specifications. Non-compliance of these major items will result in non-responsiveness of the bid offer.
- The bidder must submit documentary evidences/ manufacturer declaration showing that all the requirements are satisfied.

Bidder's Signature: .....

Date: .....

*(Signature)*  
**Krishna Prasad Rajbanshi**  
 Division Chief  
 Irrigation & Energy Development Division

*(Three handwritten signatures)*