CRITERION 7 – INSTITUTIONAL VALUES AND BEST PRACTICES

METRIC	PARTICULAR
7.1.4	Water conservation facilities available in the Institution: Rain water harvesting Borewell /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

HEI Input	A. Any 4 or All of the above

DVV Suggested Input	C. 2 of the above

DVV CLARIFICATION	HEI RESPONSE
HEI needs to provide the geo tagged photographs, Bills for the purchase of equipment for the facilities created under this metric. and Any other relevant proof for the selected options.	Geo tagged photographs of Rain water harvesting, borewell, open well recharge, construction of tanks and bunds, waste water recycling, Maintenance of water bodies and distribution system in campus are provided. Bills for the purchase of equipment for the facility Rain water harvesting, open well recharge, Waste water recycling (Sewage water treatment) are provided. Bills for purchase for the equipment for construction of tanks and bunds, Maintenance of water bodies and distribution system in the academic year 2021-22 are provided.

Options	A. Any 4 or All of the above

Writeup:

The institute have Rain water harvesting in six places and 30,60,000 Liters can be stored in the pond near to SJ Block. The institute have two borewells and one open well recharge. Each block has water tanks. Two RO plants used to purify the drinking water and it is distributed to all the blocks. Waste water recycled and used for watering the plant.

List of documents

Sl. No.	Particular	Links
1.	**Rain Water Harvesting** The college depends on ground water for all its water needs. The daily requirement of water in the campus is around 215000 liters. Our Institution has Rain water harvesting facility within the campus. Several rainwater harvesting pits are constructed in the campus to improve the groundwater level which quells the water scarcity problems in our campus. Percolation pits are made with perforated concrete slabs through which the rainwater enters the underground tank where filiation takes place through Grating. The rain water is collected from the rooftop buildings and in open areas with a high run off coefficient. The collected rain water is directed in the percolation pits located at feasible points inside the campus to recharge the ground water. The rain water harvesting sumps has a provision of collecting almost eighty percentage of the rainfall. The filtered water is then collected through perforated pipe and directly gets mixed with the underground water table. The college campus depends on ground water for all its needs and the daily need of water in the campus is around l,20,000 liters (approx.,). The stored water percolates into the ground to recharge ground water. The rain water coming from roof tops and that flowing within the campus are collected in ten numbers of percolation pits of 4m x 4m size each, constructed at all feasible points in the campus recharge ground water. The rainwater harvesting pit is located in the SJ Block, PG Block, GG Block, Mechanical block, civil lab and ladies hostel	Click Here
2.	**Bore Well / OPEN Well Recharge** Water crisis as a result of climate change though altered annual rainfall and river flow regimes, affected the groundwater recharge rate. Prevention of stress on ground water can be made possible by way of recharging the ground water through scientific watershed management.	Click Here

	The college campus depends on ground water for all its needs and the daily need of water in the campus is around 1,20,000 liters (approx.,). To compensate the mentioned daily need we had constructed bore wells with different depths as per the sub soil water position and all are recharge regularly with harvesting ponds and soak pits. Bore wells are constructed in feasible points inside the college premises near rainwater harvesting sumps for easy recharge. Bore wells are constructed inside the college premises for easy recharge. The stored rain water can be effectively utilized to revive the bore wells. The bore wells are periodically monitored and kept in good condition by the plumbers with necessary actions to rectify the problems. **Location of bore wells** Bore well 1- Infront of SJ Block Bore well 2- Near Parking Area	
3.	**Construction of Tanks and Bunds** As the water crisis continues to become severe, there is a dire need of reform in water management system and revival of traditional systems. As a part of revival to traditional wisdom, in this institute we built ground tanks to collect and storage the rainwater for reuse on-site, rather than allowing it as run off. Overhead water tanks are constructed at the top of the buildings for the purpose of holding water supply which is a part of drinking water distribution system. For storage of water in the overhead tanks, the water is pumped from the sump. The water stored in the tanks is used for daily requirements in the campus such as rest rooms, hand wash, cleaning purposes, gardening etc. The tanks are periodically monitored and maintained for leakage and blocks and immediate necessary action are taken for maintenance. **The location of water tanks located within the campus is listed below:** • Overhead water tanks - SJ Block	Click Here

	• Overhead water tanks - PG Block • Overhead water tanks - GG Block • Overhead water tanks - Girls Hostel • Overhead water tanks- Boys Hostel • Overhead water tanks- APJ Block • Overhead water tanks- EEE Lab • Overhead water tanks- MECH Lab	
4.	**Waste Water Recycling** Sewage treatment plant (STP) prevents the environment from waste produced by human beings. The raw sewage is first collected through sewer and sent to STP for purification. Treated water sample is collected and tested in the laboratory for satisfying Indian Effluent disposal standards. Once it satisfies, treated water is used for domestic propose. The waste water from the college campus is collected in the sewage treatment plant. The waste water is subjected to three main stages of waste water treatment processes namely primary treatment, secondary headmen and tertiary water fitment. The treated waste water is used for gardening purposes and watering the lawn. This will incidentally drastically reduce the usage of fresh water.	Click Here
5.	**Maintenance of Water Bodies and Distribution System in the Campus** Our Institute is well equipped with established water distribution systems to facilitate the needs of the users. Rain water is also one of the sources of water available in the college premises. The rain harvesting tanks are available within the campus to collect rain water. Ground water from the overhead tank is distributed to all buildings inside the campus through taps. A well laid pipe network is arranged to distribute the water. This ground water is pumped into storage tanks located at	Click Here

	various places inside the campus. A separate committee is available to ensure that there are no leakages and wastages. Plumbers are available at any time for the maintenance and systematic functionality of the distribution system. There is continuous monitoring of leakages and wastages and immediate actions are taken to prevent wastage of water. As a precautionary measure to control wastage of water automatic water level controllers are installed in the storage water tank to avoid overflow of water. RO plants which form the drinking water distribution system are installed in front of APJ abdul kalam block and SJ Block. The purified water from the RO plants are used for drinking purpose and the rejected water from the RO is collected and used for campus gardening purposes.	
6.	**Policy Document** Policy document on water conservation available in HR policy	Click Here