7.2.1 Describe two Institutional Best Practices as per NAAC format provided in the manual

(Respond within 1000 words)

Response:

1. Title of the practice:

Earn while you learn

2. Objectives:

- i. To provide financial assistance to economically backward and needy students.
- ii. To make them learn Clinical, Professional, library and financial management.
- iii. To make students develop a multidimensional personality.
- iv. To motivate students for self-employment.
- v. To promote the dignity of labor and social commitment among the students.
- vi. To increase access to higher education for students from economically weaker society sections.
- vii. To support all deserving poor students financially without any discrimination of caste, creed, or gender.
- viii. To help the students develop and inculcate work ethics, self-discipline, confidence building.

3. The Context:

The vision of our Founder, the late Dr. Hon. Dr. Eknathrao alias Balasaheb Vikhe Patil Padmabhushan Awardee (10 April 1932 - 30 December 2016), was Social Transformation through Education, with this realization; he adopted a strategy to raise awareness among the small peasants and the rural poor, through the spread of technical and non-technical education. This scheme is basically undertaken to benefit students from rural areas, who are economically backward, intelligent and meritorious but cannot afford higher education. The scheme is addressed in a planned manner. It thus provides financial assistance to economically backward and needy students and motivates them for self-employment, to develop multidimensional personality and confidence building. Even though rural students get admission to various courses at the University, they need help to afford accommodation, payment of fees, boarding and related facilities. This scheme was formulated as a solution to all these problems and is a revolutionary step in that direction.

4. The Practice:

It is imperative to cater to the educational needs of this region's underprivileged and financially marginalized students. All students have been informed regarding the submission of applications for the Earn and Learn scheme. Interested students must fill out the necessary form and submit it to the Student welfare coordinator. A committee is constituted for the selection of the students and recommends the aspiring students on the basis of their academic caliber, credentials and financial needs. The coordinator and the Committee scrutinize the collected forms and shortlist the candidates on the basis of performance, attendance during the academic

year, category of students, the income of parents, needs etc. The Principal approves the list of selected students and submits it to the University. Office work includes library-related work such as stacking, tagging and sorting books or any administrative office work. While fieldwork includes garden work, internet center, photocopying center, public relation office and academic departments, maintenance of playgrounds and cleanliness of the campus etc. Each student is expected to work two hours daily, i.e., 12 hours per week, without affecting their academics. Students working under this scheme are paid Rs.50 per hour, subject to a maximum of Rs. 2000/ month.

Another scheme introduced by the management is open to all students who have been admitted to the institution. The parent hospital provides the opportunity for them to work in clinical after academic hours, i.e., from 6.00 pm to 12.00 am and pays about 13,000-16,000/ month. The students are posted in different clinical areas like ICUs, OTs, Casualty, Medical wards, Surgical wards and Pediatric wards without affecting their academics. Ahmednagar is the largest district in Maharashtra. Due to geographical location and diversity, it is among the weaker drought and famine-prone districts. This district has the least number of industries and job opportunities which is leading to socioeconomic backwardness and farmer suicides. The majority of students who are seeking higher education are from weaker socioeconomic backgrounds and cannot afford the cost of education. This scheme helps students for supporting their living expenses. The students expressed that though this scheme is helpful to them but they are unable to enjoy the recreational life.

5. Evidence of Success:

This scheme proves to be a boon for economically weaker students. A good number of beneficiaries of this scheme are leading successful life in every way. The students can learn and complete their education. Higher education for the deprived is evidence of the success of the scheme.

The following data shows the number of beneficiaries of the 'Earn and Learn scheme during the last five academic years:

		Beneficiaries			
Sr. No.	Academic Year	Basic B.Sc. Nursing	Post Basic B.Sc. Nursing	PG	Total
1.	2021-2022	06	26	07	39
2.	2020-2021	06	24	10	40
3.	2019-2020	05	27	11	43
4.	2018-2019	11	15	09	35
5.	2017-2018	Nil	11	04	15

- It is a better option to give opportunity to eligible students who are not able to pursue the course for the reason of financial crisis.
- Students get additional experience in office, clinical and fieldwork.
- Students are also absorbed in the parent institute after passing out.
- It offers exposure to different areas of experience; the students easily get selected in competitive exams like CHO.
- Their multidimensional abilities got improved.

6. Problems Encountered and Resources Required:

In the case of U.G. Students, only limited number of students can be benefited from this scheme. Periodic reporting and monitoring of students' placement are to be done by the Student Welfare Coordinator. It is difficult to provide work for each student as per their choices. Students have to work after college hours, so we are facing difficulty in managing the manpower for their supervision. Students will be engage in non-academic hours and it is difficult for them to participate in co-curricular activities. Students cannot benefit throughout the year as the process by the university is very lengthy.

1. Title of the practice:

Solar Plant – 'Empowering Future with Solar Energy'

2. Objectives:

- I. To minimize the expenditure on electricity and bring down the energy bill
- II. To provide uninterrupted and economical electricity to the college, hospital and other areas on the campus.
- III. To design and implement practices, processes, and material selection to promote campus energy efficiency and ecological sustainability.
- IV. To prevent air pollution by reducing carbon dioxide emissions to protect and preserve the environment.
- V. To encourage a healthy and eco-friendly environment in and around the institute.
- VI. To look out for the future of our planet and reduce the impact of fossil fuels.

3. The Context:

Every Institution makes huge expenses to provide electricity for its infrastructure. Due to load shedding and interruption in electricity, the institute has to utilize alternative sources such as diesel generators, increasing expenses and environmental pollution. The ever-renewable source of energy from the sun is a boon for mankind. We cannot imagine Life on Earth without the sun. This amazing resource radiates energy and provides heat and light by fusing hydrogen into helium at its core; we call this solar radiation. Fossil fuels will eventually run out, but sunlight won't. For this reason, solar energy is highly reliable. Solar energy power from the sun is a vast, inexhaustible and clean resource. The Institution consumes 60,000 units of electricity, costing about 8-9 lakh per month. To minimize the expenses on electricity, to avail uninterrupted electricity and to maintain an eco-friendly campus, the institute installed a solar plant on 22nd October 2021 with Grid Interactive captive 500 kWp.

4. The Practice:

With the long vision of energy conservation and cutting down on our electricity bill, the institute installed 500 kWp solar plants on 22nd October 2021 by Deserve –Renew Sys Company. After installation, it started functioning from 1st November 2021. It was noticed that there is a huge variation in electricity bill after installation

The cost of installing a solar plant was around 3.50 Crores. 200 panels were installed on a sloped area in the north-south direction as the sunlight will be flashing the whole day (8-10 hrs) throughout the panel and can generate energy as much as possible. The solar plant area covers about 60 hectares and 20 panels are attached to one single inverter and 10 such inverters are placed in our solar plant. Each inverter capacity is about 100 kWp and 10 such inverter generates 500 kWp of solar energy. These 10 inverters are connected to a grid of power supply called

RYBN - first 1,2 and 3 number inverter connects to R, next 4,5,6 gets connected to Y and 7,8,9,10 get connected to B and N. From this, RYBN grid power is supplied to the necessary locations. Solar-generated energy is supplied to our Nursing College, Hospital, girl's and boy's hostel and the campus. The main street lights and many semi-integrated street lights function from our solar energy.

One of the main advantages is as it is a continuous current supply of express feeder type, there is no load shedding. Another main quality of the solar plant is it acts as a green energy power plant. The conventional nonrenewable energies operate by a steam boiler fueled by coal, uranium (nuclear), diesel, oil natural gas, or heating oil. These processes generate large amounts of carbon dioxide, a main contributor to air pollution. There is no carbon dioxide emission in solar energy, so it is as good as planting a tree. This solar power plant provides us with an eco-friendly atmosphere and is also part of our green initiative. A high amount of energy is produced in the summer season (April-June) and spring season (February -March) and in less amount in Monsoon (July-September) and Winter (December- January); as the different season comes, the solar energy produced in excess is exported to Maharashtra electricity board and taken from them when the production is less, so the balance can be maintained the whole year.

5. Evidence of Success:

Due to solar plant installation, Institutions can meet energy demands without paying high electricity bill costs.

Year	2021		2022		
Sr	Month	Amount	Month	Amount	Saving
no.		in Rs		in Rs	
1.	January	49134/-	January	283357	-Rs.234,223/-
2.	February	645531/-	February	278272	Rs.367259/-
3.	March	825103/-	March	322690	Rs.502413/-
4.	April	697036/-	April	342262	Rs.354774/-
5.	May	664318/-	May	343827	Rs.320491/-
6.	June	695364/-	June	373507	Rs.321857/-
7.	July	699876/-	July	341377	Rs. 358499/-
8.	August	647847/-	August	334550	Rs.313297/-
9.	September	594807/-	September	361174	Rs.233633/-
10.	October	471758/-	October	418107	Rs.53651/-
11.	November	228284/-	November	347010	Rs.118726/-
12.	December	249170/-	December	356974	Rs.107804/-

The amount saved due to the solar energy plant from the installation date is as follows.

Amount saved due to solar energy plant from the date of installation is as follows

It can be seen that saving to the tune of Rs. 25, 99,344/- have taken place in just one year.

The difference between solar energy and conventional electricity is that solar energy does

not rely on the use of fossil fuels, does not pollute air or water, and does not contribute to global warming, making it the preferable option for many. Moreover, solar energy works with the earth's natural resources, whereas conventional electricity depletes or harms them by causing air pollution, so it's a part of green energy.

6. Problems Encountered and Resources Required:

The institute has invested a heavy amount of 3.5 Crores for installing a solar plant with 500 kWp capacity, but the excess electricity which is produced during the summer season cannot be stored. For the storage of surplus electricity, lithium-ion- batteries are required, which cost a high amount that is not affordable currently. Due to unavailability/interrupted sunlight at night and during the rainy season, we have to depend on the Maharashtra Electricity Board accordingly. A large area is needed for installation with a north-south direction for a long duration (8-10 hrs) of exposure to sunlight. As the institute is located in a hilly region, it is another challenge to modify the available land as per the requirements.