

JSS Academy of Higher Education & Research (JSS AHER), Mysore, India

# Compendium

# SDG Goal 12



# **GOAL 12**

**RESPONSIBLE CONSUMPTION AND PRODUCTION** 

### 1. Introduction to the goal:

Our planet has provided us with an abundance of natural resources. But we have not utilized them responsibly and currently consume far beyond what our planet can provide. We must learn how to use and produce in sustainable ways that will reverse the harm that we have inflicted on the planet.

It consists of Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries. Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle. Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

Achieving economic growth and sustainable development requires that we urgently reduce our ecological footprint by changing the way we produce and consume goods and resources. Agriculture is the biggest user of water worldwide, and irrigation now claims close to 70 percent of all freshwater for human use. The efficient management of our shared natural resources, and the way we dispose of toxic waste and pollutants, are important targets to achieve this goal. Encouraging industries, businesses and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030.

A large share of the world population is still consuming far too little to meet even their basic needs. Halving the per capita of global food waste at the retailer and consumer levels is also important for creating more efficient production and supply chains. This can help with food security, and shift us towards a more resource efficient economy.

#### 2. A glance at efforts:

- Abiding by JSS AHER Green policy
- Ensuring greenery in the college and hospital campus
- Rain water harvesting
- Signboards on efficient use of water and energy
- Kitchen garden in the campus
- Scientific disposal of biomedical waste from all health centers
- Regular training of health care workers and students on biomedical waste management

### 3. Green Policy and Green Campus

Our JSS AHER has its Green Policy which emphasizes on the following to be strictly followed in all its campuses.

• Maintenance of clean, green and smart campus – waste segregation and planned disposal of waste through authorized agencies only

• Disposal of biomedical waste, Chemicals, and e-waste as per the norms of the Karnataka State Pollution control Board

• Energy conservation strategies – For e.g. use of CFL/LED lights and Solar heaters and Air source heat pumps in the hostels

- Plastic-free campuses
- Conservation of water resources Rainwater harvesting and wastewater treatment
- Reducing paper communication
- The HEI actively organizes Swachh Bharat Abhiyan and creates awareness and consciousness amongst students.
- Provision for natural light in all its buildings

The Institution also has included a subject Environmental Sciences in all courses as stipulated by UGC and organizes Environment Day and Water Day. The Institution believes in preserving traditional medicine and has established medicinal plants garden and promotes eco-friendly cultivation practices by organizing medicinal plants exhibition in JSS Urban Health Centre. To meet the needs and sustainable management of fresh water, the rainwater harvesting, and utilisation systems have been established in all the campuses of the university to aid towards the greater objectives of water management and conservation and increasing recharge of groundwater by capturing and storing rainwater, rainwater harvesting from rooftop run-offs and natural waterbodies and the community development. The below mentioned models are established in the various buildings based on the size of the building and the extent and topography of the land.

• Simple roof water collection systems - Most of the rooftop rainwater harvesting has been completed by constructing five water storage structures with a storage capacity of 1000 m3.

• Land surface catchments – a simple way of collecting rainwater by retaining the flows (including flood flows) of small creeks and streams in small storage reservoirs (on surface or underground) created by low-cost dams

• Collection of storm water – The surface runoff collected in stormwater ponds/reservoirs is subject to a wide variety of contaminants and every effort is made to keep these catchments clean.

The University supports green practices in all its initiatives. It has well-defined policies for its sustainable green practices which include its energy conservation policy, water conservation policy, transport policy, the SMART and Green campus policy and many such policies and practices that inculcate the importance of conserving the present for the future generations. Towards the same some of the practices include - Students, staff using Bicycles – the staff and students are encouraged to use bicycles on its campuses and students residing in the hostels of the university are discouraged from having automobiles and live on campus. Battery operated vehicles too are available on the campus to help students transport their belongings. Public Transport – the university maintains a fleet of buses that are available to the students

for travel between campuses and public places at fixed timings. Pedestrian friendly roads – all roads are paved and landscaped and are pedestrian friendly Plastic-free campus – All its campuses are plastic free Paperless office – the utilization of papers for administrative purposes is minimized and ecommunications are encouraged. Green landscaping with trees and plants – all the campuses are beautifully landscaped which have won appreciation, admiration, and awards for the aesthetic and green environment of its campuses. The Green campus committee ensures that the above principles are strictly complied with and provides feedback to the university on its efforts and the future directions.



Greenery in the campus





# Greenery in the campus



# Sign boards for environmental protection



Sign boards for environmental protection and energy conservation



Kitchen garden in the hostel

# 4. Biomedical waste management in Hospital

A process is developed by the hospital for safe handling and disposal of infectious and hazardous materials.

# PURPOSE

- To minimize the health and equipment hazard in any related process
- To provide a safe and healthy environment for staff, patient and visitors

# SCOPE

• The procedure for collection, segregation, treatment and disposal of biomedical waste generated during routine work in wards, OPDs, OT's, laboratories and other places where biomedical waste is generated.

# RESPONSIBILITY

- Safety Committee, Quality Assurance Team, Bio Medical Waste Management Department, Laboratory, Clinical and Non clinical staff.
- Document of BMW management approval from state Pollution control available with management

#### **BIOMEDICAL WASTE MANAGEMENT**

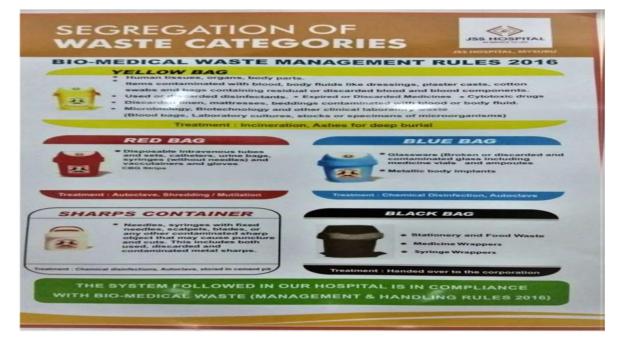
- Biomedical Waste management HIC-8b
- The SOP has been based on the policy direction issued in Gazette of India notification of 2018 Environment Protection Act guidelines
- All wards and departments will follow the under mentioned instructions meticulously
- Heads of departments and hierarchy of wards will be legally and morally responsible for effective functioning of health care waste management system at JSS Hospital.
- HIC members during rounds ensure appropriate disposal of BMW. If any deviation from the protocol is noticed, photographs are clicked and discussed with the concerned personnel to take necessary corrective measures.

# COLOUR CODING AND TYPE OF CONTAINER FOR DISPOSAL OF BIO-MEDICAL WASTES-2018

COLOUR CODING	TYPE OF CONTAINER	TYPE OF WASTE	TREATMENT OPTIONS
Yellow	Plastic bag	(a) Human Anatomical Waste:	Incineration
		Human tissues, organs, body parts and foetus below	
		the viability period (as per the Medical Termination of	
		Pregnancy Act 1971, amended from time to time	
		(b)Animal Anatomical	
		(c) Waste :	
		Experimental animal carcasses, body parts, organs,	
		tissues, including the waste	
		generated from animals used in experiments or testing	
		in veterinary hospitals or colleges or animal Houses.	
		(d) Soiled Waste:	
		Items contaminated with blood, body fluids like	
		dressings, plaster casts, cotton swabs	
		(e) Expired or Discarded Medicines:	
		Pharmaceutical waste like antibiotics, cytotoxic drugs	
		including all items contaminated with cytotoxic drugs	
		along with glass ampoules, vials etc	
		(g) Discarded linen, mattresses, beddings Contaminated	
		with blood or body fluid	

Red	Red	Contaminated	Autoclave &
	coloured	Waste	Shredding
	non-	(Recyclable)	Autoclaving or
	chlorinated	(a) Wastes generated from disposable items such as	micro-waving
	plastic bags	tubing, bottles, intravenous tubes and sets, catheters,	followed by
	or	urine bags, syringes (without needles and fixed needle	shredding or
	containers	syringes) and	mutilation or
	containers	vaccutainers with their needles cut) and gloves.	combination of
		Microbiology cultures in plastic containers,	sterilization and
		Vacutainers with blood samples	shredding.
			Treated waste
			to be sent to
			registered or authorized recyclers or for energy recovery or plastics to diesel or fuel oil or for road making, whichever is possible
White	Puncture	Waste sharps including Metals:	Autoclaving or
	proof, Leak	Needles, syringes with fixed needles, needles from	Dry Heat
	proof,	needle tip cutter or burner, scalpels, blades,	Sterilization
	tamper	or any other contaminated sharp object that may cause	followed by
	proof	puncture and cuts. This includes both used,	shredding or
	containers	discarded and contaminated	mutilation or
			encapsulation in
			metal container
			or cement
			concrete;
			combination of
			shredding cum autoclaving; and sent for final disposal to iron foundries(having consent to

			operate from the State Pollution Control Boards or Pollution Control Committees) or sanitary landfill or designated concrete waste sharp pit.
Blue	Cardboard box With blue	(a) Glassware:	Disinfection (by
		Broken or discarded and contaminated glass including	soaking the
	marking	medicine vials and ampoules except those contaminated	washed glass
	/covers	with cytotoxic wastes.	waste after
		(b) Metallic Body Implants	cleaning with Detergent and Sodium Hypo chlorite treatment) Or through autoclaving or microwaving and then sent for recycling.



Segregation, containment and packing of hospital waste in wards and departments HIC-8c The waste should be segregated at source, all health care personnel – doctors, nurses, interns medical and nursing and paramedical students, lab personnel, helper staff, patients, attendants of patients are responsible for this. Clinical and nursing staff apart from meticulous exertion needs to oversee proper operation. Waste collection is done in each ward / department in colour coded labelled bins of capacity 20 to 35 litres of each category and placed at the points of generation in respective wards/departments at accessible, user friendly and safe location.

Sharps will be collected in white puncture proof containers in each department / ward. Sharps should be decontaminated with 1% sodium hypochlorite solution after disfiguring the same, the hypochlorite solution should be changed every 24 hours. Once 2/3rd full the container should be dispatched for disposal.

Intact glassware will be collected in the cardboard boxes lined with blue boxes and can be handed over to the common treatment facilities.

The waste collected by housekeeping staff is stored in colour coded rooms situated in the back yard of the hospital.

The waste is transported to Shree consultancy in closed vans within stipulated time limits in a secure manner.

HIC-8d:

#### STAFF SAFETY CONSIDERATIONS:

To ensure the safety of personnel involved in Bio-medical waste treatment and disposal, we follow certain policies and guidelines.

1. There are dedicated trolleys for transporting waste within the hospital.

2. All workers involved in this work are aware of the hazardous nature of this work.

3. The workers are provided with gumboots, rubber aprons, caps, masks and thick rubber gloves.

4. All workers are immunized against Hepatitis B.

#### TRAINING

1. JSSH hospital has a well-designed awareness and training program for all categories of workers involved in Bio-medical waste disposal and management.

2. Regular pre induction training shall be conducted for appropriate categories of staff before joining to the concerned department.

3. We have charts displayed at strategic points in all patient care areas depicting our Bio-medical waste management policy.

4. We have frequent workshops and training programs to promote awareness of our Bio-medical waste management policy.

#### HIC-9a:

HIC-9a: The management provides man-power, money and materials to carry out Infection control programmes. Regularly classes are conducted by ICNs and members of HIC committee to all the staff of the Hospital. Induction programme for new comers includes sessions on HIC HIC-9b: BUDGET: The organization earmarks an annual budget for Infection control programme. Based on the scope of HIC activities and the previous years experience, this budget is allocated. HIC-9c & d: TRAINING: Organization provides induction training and In-service training sessions for all staff in regular sessions.

For doctors, Medical education unit conducts induction programme with HIC as one of the topics.

For nurses and other para medical staff, training is conducted by ICNs and HIC members.

All the policies and protocols defined and approved by the HIC committee is being taught repeatedly and any change in the protocol also is immediately informed to all the concerned staff. Pop up messages on HIS are flashed to enforce the new changes into action.

#### **GREEN CAMPUS**



**SIGN BOARDS** 



#### SOLAR POWERED ENERGY



#### Sign Boards And Equipments for Managing Fire Accidents



#### **Biomedical waste management in Hospital**

- JSS Dental College and Hospital gives utmost importance to controlling and prevention of infection in patients, visitors, healthcare providers and community by adopting appropriate safety measures.
- JSS Dental College and Hospital has an organized Infection Control Committee and Infection Control Team which formulates policies and measures aimed at reducing and eliminating infection risks to patients, housekeeping staff, visitors and to the environment.
- JSS Dental College and Hospital has an infection control and elimination programs and policies that are well documented.
- Infection control and elimination programs are performed regularly with yearly upgradations.
- JSS Dental College and Hospital has a well-coordinated Infection Control Committee that supervises all infection control and elimination programs.

# 5. Responsibilities of Infection Control Committee & Infection Control team

# Aim of Infection Control Committee (ICC): Aim of Infection Control Committee of JSS Dental College

and Hospital is to adopt policies and practices that help to prevent and eliminate hospital related

infections in patients, health care providers, visitors and the environment.

#### **Duties of Infection Control team:**

- Infection Control Team coordinates to formulate infection control policies and practices for control and elimination of infection.
- ITC introduce standard operating procedures that aim toward infection control.
- The team organizes training and appraisal of all members of the staff regularly regarding the policies and protocols for infection control and elimination.
- The team streamlines the documentation of the outcome of policies and practices.
- ICT performs the periodical auditing of the infection control practices outcome.
- Team formulates appropriate protocols for biomedical waste management.
- The team is responsible for periodic monitoring and documentation of water supply, air supply and other engineering works.

### Definition:

Biomedical waste means any waste which is generated during diagnosis, treatment or immunization of human being or animals or in the research activities pertaining there to or in the production of testing of biological

Purpose: to ensure safe and secure biomedical waste disposal or handling in JSSDCH.

JSSDCH has obtained consent from pollution control board to operate. JSSDCH has outsourced biomedical waste collection and disposal to Shree consultancy.

JSSDCH adheres to policies in manual for waste handling and management inside the working area and outside till it is collected.

#### **Classification of waste**

Classification of waste: (According to Environmental Protection Agency, EPA)

Regulated Waste: They require special disposal care. Sharps:	Toxic Wastes: It is a waste that can have poisonous effect. Eg: mercury, extracted teeth with silver amalgam filling.
-Disposable needles	All waste containers that hold potentially infectious materials (regulated or non regulated)
-Scalpel blades	must be labeled with biohazard symbol. JSSDCH outsources BMW disposal to Shree consultancy.
-Contaminated broken glass	As per the guidelines of Shree consultancy the
-Disposable dental burs	waste generated should be segregated into different colored containers. Colored containers

	are provided to each department and each color				
-Endodontic files or reamers	are provided to each department and each color is designated to collect specific type of waste as				
Sharps:	mentioned below.				
-Disposable needles	Non chlorinated yellow bags (Incinerable waste only) :				
-Scalpel blades	-Human tissue				
-Contaminated broken glass	- Placenta				
-Disposable dental burs					
-Endodontic files or reamers	- Infected cotton and dressing				
Others:	- Soiled plaster casts				
-Blood	- Body parts				
-Blood soaked items	- Blood bags				
	- Cotton swabs				
-Human tissues -Pathological wastes	<ul> <li>Bedding items contaminated with blood and body fluids</li> </ul>				
Non regulated Wastes:	- Expired pharmaceutical wastes (eg: expired				
-Contaminated materials	analgesics and antibiotics)				
-Saliva soaked gauze	- Lab cultures				
-Patient bibs	<ul><li>Waste specimens</li><li>Cytotoxic drugs</li></ul>				
-Surface barriers					
	Non chlorinated red bags (plastic waste only):				
	-Catheter -IV sets				
	-Gloves				
	- Tubings				
	- Syringe without needles etc				
	Non chlorinated blue bags (glasswares and metals only):				
	-Broken bottles				
	-Discarded or contaminated glass vials and ampules.				
Black colored bags (not to be sent to BMW management facility): -Food wastes	Non chlorinated white transluscent bags or bin with disinfectant (only sharps):				
-Tender coconut	-Glass pieces slides				
-Leaves wrapping -Office paper waste	-Needles, lancets				
	1				

-Dustings -Paper and plastic cups -Syringe wrapper	-Syringe with fixed needles -Scalpel blades
-Vegetables	-Overused and underused sharps
-Fruits or fruit peels etc	

- All the colored bags or bins should be closed tightly in order to prevent spillage or contamination.
- All the waste should be collected in central waste collection centre from where it will be collected by BMW management agency.
- All the staff handling the biomedical waste will be provided with PPE which should be used mandatorily while handling BMW.
- Syringe or needle burner must be used for syringe needles and then the syringe must be disposed into the designated colored bin.
- Radiographic fixer and developer are considered hazardous wastes. It can be handles on site or offsite treatment. JSSDCH manages them by offsite management, where it is outsourced to a company

Category	Definition	Examples
Medical waste	Waste generated as part of	Contaminated barriers
	treatment;	
	can be contaminated or infectious	
Contaminated waste	Waste that has been in contact with	Contaminated patient bibs
	blood or other body fluids; in most	
	states, disposed of as general waste.	
Infectious waste	Contaminated waste that is capable	Blood and blood saturated
	of	materials
	causing an infectious disease.	
Chemical waste	Waste that poses a threat to humans	Pathological waste: tissue,
	or	extracted teeth.
	environment.	
Hazardous waste	Usually refers to toxic chemicals or materials.	Sharps: needles, burs.
Toxic waste		Scrap amalgam.
General waste	Non hazardous, non regulated waste	Lead foil,
		radiographic
		solution, paper
		waste
		generated at front
		desk, discarded
		lunch bags or wraps

#### Segregation:

Proper segregation of BMW:

• BMW has been segregated into different color coded containers as per the guidelines provided by Shree consultancy.

• Waste from the working or patient care area is removed once a day or more if required.

• The containers of waste are closed tightly and stored in central waste collection bay from where it is collected and carried out of the campus.

11.4 Handling of mercury, extracted teeth and sharps

- a. Precautions When Working With Mercury.
- Work in a well ventilated space.
- Avoid direct skin contact with mercury.
- Avoid inhaling mercury vapour.

• Store mercury in unbreakable, tightly sealed containers away from heat.

• When preparing amalgam for restorations, use preloaded capsules (this avoids exposure while measuring mercury).

• When mixing amalgam, always close the cover before starting the amalgamator.

• Reassemble amalgam capsules immediately after dispensing the amalgam mass ( the used amalgam capsule is highly contaminated with mercury and is a significant source of mercury vapour if left open).

• Left over scrap amalgam (that has been retrieved from dental unit traps) is disinfected in a solution of bleach and water. Then it is placed in the container with other scrap amalgam. Never rinse a dental unit trap in the sink. (waste water plants are not equipped to removed mercury from waste, and the mercury will enter the environment via the water ways)

• Clean spills using appropriate procedure and equipment. Do not use a household vacuum cleaner or the high volume evacuator (dangerous fumes from the mercury can be released into the air)

• Place the contaminated disposable materials into polyethylene bags and seal. Dispose according to regulations specific to your area.

b. CDC guidelines for handling extracted teeth:

• Dispose of extracted teeth as regulated waste unless returned to the patient.

• Do not dispose of expose teeth that contain amalgam as regulated medical waste intended for incineration.

• Heat-Sterilize teeth that do not contain amalgam before they are used for educational purposes.

c. Handling sharps

#### Safe injection practices:

These procedures should meet below mentioned criteria,

- -Do not harm the recipient.
- -Do not expose the provider to any avoidable risk.
- -Do not generate waste that is dangerous for other people. Eg:IV,IM,Lancet procedures etc.

#### **Purpose:**

Promotes, implementation of practices associated with,

-Intradermal, subcutaneous, IM needles

-IV infusions and injections

-Lancet procedures

#### **Guidelines on Use of Injection Devices**

#### Syringes:

-Preferably use new devices for each procedure.

-Use disposable syringes.

- -Before use inspect packing, whether there is breach in protective barrier.
- -If package is punctured, torn, damaged, discard and use new one.

Always check for expiry date.

#### **Medication:**

-Do not use single loaded syringe for medication administration to several patients.

- -Always follow single patient, single needle, single syringe policy.
- -Avoid changing needle inorder to reuse syringe.
- -Avoid using same mixing syringe to reconstitute several vials.
- -Avoid combining left over medication for later use.
- -Preferably use single dose vial for each patient to avoid contamination between patients.
- -Open only one vial of medication at a time in each patient area.
- -Do not store multidose vial in open ward where they may be contaminated.
- -If sterility of vial is compromised discard immediately.

### **Practical Guidelines for Injection Administration**

-Always check the prescription for medication/drug chart and corresponding patient's name.

-Check for the dosage prescribed.

-Check for the expiry date.

-Perform hand hygene procedures.

-Use 60-70% alcohol swab to clean the top of vial.

-Always open the syringe pack in front of patient to reassure them the syringe and needle have not been used previously.

-Use sterile syringe or needle to withdraw medications from ampule.

### Injection site preparation:

-Use alcohol based (60-70%)solution or a single use swab or cotton wool ball to disinfect the site of injection.

-Wipe the area from centre of injection site outward without going over the same.

-Solution should be applied for 30 seconds and allow it to dry completely.

#### **Delay in Administration**

-If medication cannot be given immediately for some reasons it should be capped using scoop technique.

-It should be store safe dry place, it should be labelled.

#### Precautions

-Needle should not touch any contaminated surfaces.

-Syringe should not be reused even if needle is changed.

-Do not use same needle/syringe to enter multiple multidose vials.

-Do not use syringe/needle to reenter the vial once used on a patient, even if it is for same patient or other.

#### **Guidelines to Prevent Sharp Injuries**

- Avoid bending/breaking, manipulating or manually remove the needle before disposal.

- Use scoop technique when needle has to be recapped.

- Sharps, glass ampules should be discarded immediatetly after use into a sharp container which is leak/puncture proof.

- Sharp container should be sealed and replaced when it is three quarters full.

- NOTE: In the event of sharp injuries immediately report to the concern IC team person and follow the post exposure protocol.

#### Storage and transport

- JSSDCH has been designated as central waste collection bay where all the BMW from different departments are transported via closed containers or bags in safe and secure manner.
- Shree consultancy people collect the BMW in a closed vehicle without contaminating the campus.
- The quantity of waste and timings of BMW collection is all documented on day to day basis
- Shree consultancy is paid fee for collection of BMW. The details of which are maintained.
- Personal protective equipments are used mandatorily for handling BMW by all staff in accordance with manual to prevent cross infection or other accidental injuries.
- JSSDCH has equipment for disposing used syringes, blades, suture needles etc.. Handling of sharps are done using appropriate PPE and in accordance with JSSDCH ICM.



# Training of all concerned staffs

- JSSDCH ICC recommends the required resources to carry out infection control programme.
- JSSDCH Management ensures availability of resources to carry out infection programme.
- Management decides the budget as per requirement.
- For efficient functioning of the policies and programmes all the staff concern with IC will be given training periodically.
- New staff will be given induction programme before joining departments.
- Charts giving information regarding post exposure protocol and prophylaxis will be displayed in all working areas, documentation and follow up of any such incident will be done.

# PEP protocol, prophylaxis and immunization

Requirements for employee medical records:

- 1. Employee's name and social security number
- 2. Proof of employee's hepatitis B virus (HBV) vaccination or signed refusal

3. Circumstances of any exposure incident (such as needle stick) involving the employee and the name of the source individual (eg: a patient whose blood or bodily fluid was involved in the incident)

4. A copy of the postexposure follow up procedures for any injuries sustained by that employee

These records must be retained by the employer for the duration of the employment plus
 years

#### Follow up measures for exposed workers:

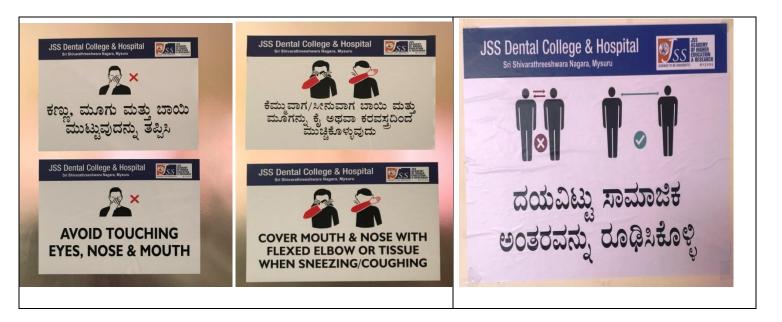
The following services must be offered to the employee without charge:

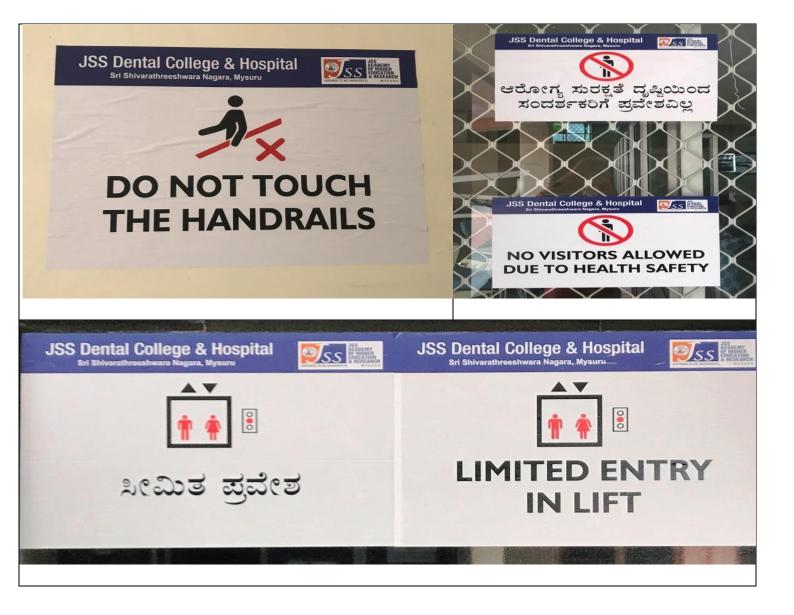
- Confidential medical counseling
- Human immunodeficiency virus (HIV) test series immediately and at 6 weeks, 12 weeks and 6 months
- Hepatitis B virus (HBV) immune globulin (if no prior HBV vaccination)
- Tetanus booster
- Documentation of incident on appropriate Occupational Safety and Health Administration (OSHA) form.

# **Dentistry amidst Covid Pandemic**

Under the guidance of JSS AHER and infection control committee, JSS dental College & Hospital, the staff and student of our college are educated and equipped to provide safe and efficient dental treatment amidst Covid pandemic. All the essential safety and infection control protocols are being followed. Sign boards have been put up in the hospitals for patient education and safety.

# SIGN BOARDS TO EDUCATE PATIENTS REGARDING SAFETY MEASUREMENTS DURING COVID PANDEMIC







Work Shop On Infection Control And Dental Safety In Dental Schools By Dr.Raghunath Puttaiah, BDS, MPH, FICD

The infection control committee and team in association with the NABH team, JSS Dental College and Hospital, JSS Academy of Higher Education and Research, organized a Continuing Dental Education program titled "Infection Control and Dental Safety in Dental schools" on 26th February 2019 at Sri Gowrishankara auditorium. The program was attended by good number of delegates comprising of undergraduate students, post graduates and the faculty members. Dr.Ravindra. S Principal, JSS Dental College and Hospital, delivered the welcome address. In thekey note address the chief guest for the program Dr. P.A. Kushalappa, Director (Academics), JSS Academy of Higher Education and Research stressed the importance of infection control and safety at the dental schools and also highlighted the importance of organizing scientific events on a regular basis that helps to update the knowledge with current practices. Dr.Shruthi .S, Member, organizing committee introduced the guest speaker Dr.RaghunathPuttaiah. Dr.RaghunathPuttaiah is a Professor, Diagnostics Sciences at Texas A&M College of Dentistry, USA. He is a renowned international speaker and first infection control specialist. Various aspect of infection control in dental clinics was well explained to the audience. It was a very interactive session and lot of take home messages were instilled to the young minds. It was suggested during the talk to submit proposal to dental council of India for including infection control and dental safety in the undergraduate curriculum. Emphasis on antibiotics abuse was addressed and the audiences were sensitized to various equipments and materials for the infection safety. The Continuing Dental Education program concluded with the recommendation for forming a local safety organization and to conduct train the trainer sessions on regular basis. Dr.Satish. R, Convenor, Infection Control Committee proposed the vote of thanks. The programme was coordinated by Dr. Jai Shankar H.P and Dr.Sushma.R, Members, organizing committee.



Programme On Sterlization Instrument Processing And Documentation For NABH

Mr. Shanthamurthy from CSSD JSSMCH had come to JSS Dental College to enlighten the infection control committee members and nursing staff of JSS Dental College and Hospital regarding Instrument processing and Documentation which is required for NABH. He spoke about various processing actions of ultrasonic bath and sterilization, documentation of CSSD. The next day on 14 th January 2020 a visit to CSSD Department of Medical College was arranged by Mr. Shanthamurthy to infection control committee members. There they showed the CSSD of medical college , how it works in the Dirty area and Clean area. Gained the knowledge of separation, packing and sterilizing of instruments according to NABH

requirement. The SOP's of each procedure to be put up in each particular area of packing and Sterilization, Very well-maintained documentation of sterilization was noticed. There we were able to see CSSD with state of art equipments and we got few ideas which can be implemented in our CSSD. We thank to principal and management for giving this opportunity

# 6. WEBINARS CONDUCTED

Precautions & Essential Safety Practices For Health System Management Personnel

# 7. Disinfection For Safe Dental Practice During The Age Of COVID-19

As we anticipate opening of dental clinical services, we prepare ourselves with basics of disinfection -One of the most relevant procedures that we should adopt to prevent infection,



which is of prime importance in the age of COVID 19.

JSS Dental College & Hospital, JSS Academy of Higher Education & Research with IDA, Mysore branch, organizes a webinar for all our dentist colleagues.

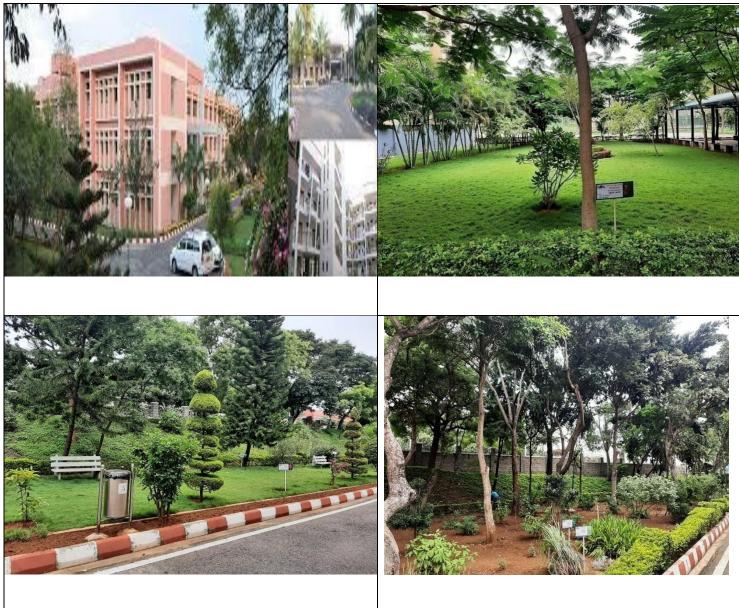
Speakers : Dr Jaishankar H P , Associate Professor , Department of Oral Medicine & Radiology and Mr Dasprasad V , Senior Territory Manager , Bioshields - A division of Tulip Diagnostics (Pvt) Ltd.

# A COVID 19 Pandemic Awareness Program by Department of Oral Pathology & Microbiology



A COVID 19 pandemic awareness program was organized by the Department of Oral Pathology & Microbiology on July 3rd for non-teaching staff- house-keeping, ayahs, security and attenders of JSS Dental College & Hospital. The resource person was Mr. Bopanna Pattada, life skill & sports motivator form ARIVU school. The program started with an inaugural function followed by a very informative and

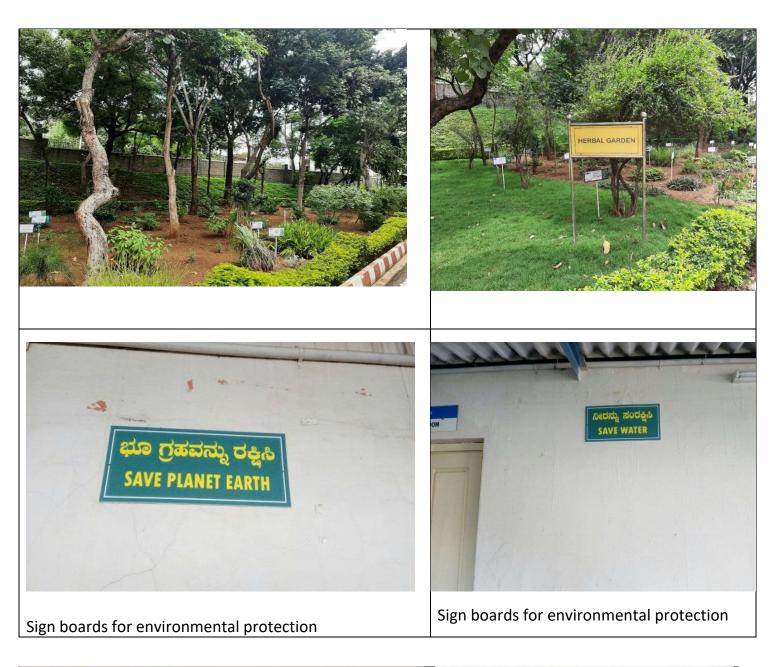
interactive session by the resource person and the audience. Awareness videos regarding spread of COVID 19, symptoms, precautions to be taken, preventive measures were some of the topics covered. The program concluded with vote of thanks and photo sessions. Feedback about the content of the program were collected. The program was well appreciated by all the participants and they requested for similar programs.



8. Provision for natural light in all its buildings.

Greenery in the campus

The campus has ample lung space with lush green landscaps to maintain oxygen levels. Endemic trees are planted and a medicinal garden is maintained which has around 130 medicinal plants that explores the traditional medicinal applications





Sign boards for environmental protection and energy conservation

# 9. Tree plantation and protection of plants

JSSAHER Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries. achieve the sustainable management and efficient use of natural resources.

The JSSCPO NSS Volunteers along with the official of the Forest Department organized the "Tree Plantation Program" under the scheme of "JalasakthiAbiyan" to create an awareness on tree plantation in Thalaikunda forest area which was initiated by The Nilgiris District Collector Miss. Innocent Dhivya and Assistant Conservative Forest officer

The awareness and plantation of indigenous and solar grass varieties in The Nilgiris Library, Ooty which was organized by the Youth Red Cross. Thirty of JSSCPO NSS Volunteers were took part in that event and planted the indigenous and solar grasses in The Nilgiris Library.



Glimpses of treeplantation program

JSSAHER is working towards achieving the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.Campus has 335 medicinal plant . JSS CPO participating yearly in the medicinal plants exhibition conducted by Nilgiri Horticulture Department for promoting the medicinal plants values for the public



#### **Medicinal Plant Graden**

JSSAHER will substantially reduce waste generation through prevention, reduction, recycling and reuse. Encourages companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle, promote public procurement practices that are sustainable, in accordance with national policies and priorities.

The campus has a lush green campus with seasonal trees and maintenance of garden has been done from time to time to keep it neat and clean. For promoting green environment resilience we initiated car and scooter pooling for the staff and students who resides in same locality.

JSSAHER ensures that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

The JSSCPO NSS Volunteers along with the official of the Forest Department organized the "Tree Plantation Program" under the scheme of "JalasakthiAbiyan" to create an awareness on tree plantation in Thalaikunda forest area which was initiated by The Nilgiris District Collector Miss. Innocent Dhivya and Assistant Conservative Forest officer



Tree plantation program

JSSAHER Supports to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production by developing and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products and taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

#### **10. JSSAHER SOCIAL RESPONSIBLITY**

Economic and social progress over the last century has been accompanied by environmental degradation that is endangering the very systems on which our future development and very survival depend. If we don't act to change our consumption and production patterns, we will cause irreversible damage to our environment. There are two main ways to help the Goal: 1. Reducing our waste and 2. Being thoughtful about what we buy and choosing a sustainable option whenever possible.

JSS Academy of Higher Education & Research (JSSAHER) is committed to its "JSSAHER Social Responsibility Statement & Vision" to provide sustainable, eco friendly smart campus. The "Food & Supplies Policy" is related to procurement, storage and maintenance of food at (JSSAHER), which is a part of "Smart Campus Policy". This policy provides provisions through which food to be procurement, stored, maintained and delivered to all the constituent colleges and departments of JSSAHER.

JSSAHER and its constituent colleges and departments are responsible in working with suppliers, contractors and partners to minimize environmental effects related to services and supports local suppliers and that all procurements represent value for money. All stakeholders shall assist JSSAHER in meeting the sustainable food & supply policy.

#### **JSSAHER ensures that:**

- Procurement, storage and maintenance of food is reliable, safe and represent value for money.
- Environmental and social responsibility is factored in to all tenders and contracts and encourages small sized businesses.
- Suppliers are committed to sustainable use of transport, packaging, storing etc. Communication on progress made during the contract period.
- Recycling process for quantities and effective waste reduction.
- Usage of biodegradable packaging whenever possible.
- Recycling and reuse where applicable
- Minimizing wastage while procurement, storage, maintenance and deliver.
- To serve sustainable food and to reduce plate waste.

#### Details of Expenditure Incurred towards Maintenance of JSSAEHR Hostel & Allied Services during the FY 2017 - 18 to 2019 - 20

#### <u>2019-20</u>

SINO	Particulars	JSSMC		JSSCPM		ISSCPO	Total
31 NU	r ai ticulai s	Boy's Hostel	Girl's Hostel	Boy's Hostel	Girl's Hostel	JSSCFU	Total
1	Purchase of Furniture & Fixture	-	-	-	78,992.00	238,280.00	317,272.00
2	Instrument & Equipment	-	141,600.00	781,277.00	563,746.00	1,171,795.00	2,658,418.00
3	Computers	52,950.00	-	-	-	-	52,950.00
4	Repair & Maintenance of Building	618,806.00	508,725.00	47,135.00	95,907.00	2,131,599.00	3,402,172.00
	Total	671,756.00	650,325.00	828,412.00	738,645.00	3,541,674.00	6,430,812.00

#### <u>2018-19</u>

Sl No	Particulars	JSSMC		JSSCPM		ISSCPO	Total
31 NO	Faiticulais	Boy's Hostel	Girl's Hostel	Boy's Hostel	Girl's Hostel	JSSULO	TOLAI
1	Purchase of Furniture & Fixture	933,337.00	110,848.00	126,143.00	510,220.00	134,988.00	1,815,536.00
2	Instrument & Equipment	-	555,197.00	1,246,954.00	2,377,446.00	1,221,960.00	5,401,557.00
3	Computers	-	16,550.00	-	-	-	16,550.00
4	Repair & Maintenance of Building	1,508,011.00	470,972.00	2,494,500.00	800,000.00	3,380,758.00	8,654,241.00
	Total	2,441,348.00	1,153,567.00	3,867,597.00	3,687,666.00	4,737,706.00	15,887,884.00

#### <u>2017-18</u>

Sl No	Particulars	JSSMC		JSSCPM		ISSCDO	Total
31 NO	Fai ticulai s	Boy's Hostel	Girl's Hostel	Boy's Hostel	Girl's Hostel	JSSCPO	Total
1	Purchase of Furniture & Fixture	2,650,191.00	29,413.00	126,456.00	799,240.00	679,255.00	4,284,555.00
2	Instrument & Equipment	-	593,390.00	358,945.00	219,345.00	207,616.00	1,379,296.00
3	Computers	-	-	-	-	-	-
4	Repair & Maintenance of Building	568,398.00	823,843.00	10,940.00	18,000.00	1,205,147.00	2,626,328.00
	Total	3,218,589.00	1,446,646.00	496,341.00	1,036,585.00	2,092,018.00	8,290,179.00

Abstract of the Expenditure Incurred by ISSAHER towards Maintennace of Hostel & Allied Services during the
<u>FY 2017 - 18 to 2019 - 20</u>

Sl No	Particulars	2019-20	2018-19	2017-18	TOTAL
1	Purchase of Furniture & Fixture	317,272.00	1,815,536.00	4,284,555.00	6,417,363.00
2	Instrument & Equipment	2,658,418.00	5,401,557.00	1,379,296.00	9,439,271.00
3	Computers	52,950.00	16,550.00	-	69,500.00
4	Repair & Maintenance of Building	3,402,172.00	8,654,241.00	2,626,328.00	14,682,741.00
	Total	6,430,812.00	15,887,884.00	8,290,179.00	30,608,875.00

Sl. No.	Particulars	Jan -	TOTAL	
51. NO.		2019-20	2020-21	TOTAL
1	JSS CPM	8,400.00	4,200.00	12,600.00
2	JSS DCH	219,324.00	109,494.00	328,818.00
3	JSS CPO	14,000.00	14,000.00	28,000.00
4	JSS MC	148,078.00	117,054.00	265,132.00
	Total	389,802.00	244,748.00	634,550.00

# Details of Expenditure Incurred Towards Maintenance of Bio-Medical Wastage

# Details of Expenditure Incurred by JSSAHER Towards Purchases of Provisions for its Hostels

**Rupees in Lakhs** 

Sl.	Particulars	JSSMI Campus		JSSCPM Campus		JSSCPO Campus		тоты
No.		Girls Hostel	Boys Hostel	Girls Hostel	Boys Hostel	Girls Hostel	Boys Hostel	TOTAL
1	MYSURU MILK DAIRY	16.53	18.09	9.93	11.26	8.33	7.49	71.63
2	VEGETABLES & FRUITS	21.54	18.55	23.65	26.51	19.28	20.12	129.65
3	GAS SERVICES	7.47	7.71	8.54	8.47	8.88	9.36	50.43
4	S.L.V IYENGAR BAKERY	10.06	6.04	14.05	9.69	4.83	8.97	53.64
5	JSS ENTER PRISES	30.07	36.48	31.34	34.65	38.70	38.75	209.99
6	OTHERS	14.34	13.11	12.49	9.41	15.56	15.30	80.21
7	TOTAL	100.01	99.98	100.00	99.99	95.58	99.99	595.55

	n balan dalam yang kalan da dalam kalan katika da dalam dan persalah dalam kalan kalan dari bara kalam da dari Nati					
		G	overnment of I	ndia / ಭಾರತ ಸರ್ಕಾರ		
	Food Safety	and Standard	s Authority of I	ndia / ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಪ	್ರಧಿಕಾರ	
			Form 'C'	/ ನಮೂನೆ		
			License	/ ಪರವಾನಗಿ		
		(See Regula	ation 2.1.4 (6))	/ (ನಿಯಂತ್ರಣ 2.1.4 (6) ನೋಡಿ)		
		Gover	nment of Karna	itaka / ಕರ್ನಾಟಕ ಸರ್ಕಾರ		
	Licens	e under FSS A	Act,2006 / ಎಫ್.	ಎಸ್.ಎಸ್. ಕಾಯ್ದೆ, ೨೦೦೬ ರಡಿಯಲ್ಲಿಪರವಾನಗ	1	
	Licens	e Number / a	ಪರವಾನಗಿ ಸಂಖ್ಯೆ	11219335000512		
	gistered Office ೊಂದಾಯಿತಕಛೇರಿಂ		censee	JSS ACADEMY OF HIGHER EDUCAT JSS Academy of Higher Education for Men and Women, JSS Hospital Agrahara, Mysuru - 04, Mysore Cit 570004	& Research, PG Hoste Campus, M G Road,	
2. Address of ಅಧಿಕೃತ ವ್ಯಾಪಾ	Authorized Pre ಾರದ ವಿಳಾಸ	emises		JSS Academy of Higher Education for Men and Women, JSS Hospital Agrahara, Mysuru - 04, Mysore Ma Circle , Mysore City(Karnataka) -5	Campus, M G Road, hanagar Palike II	
3. Kind of Bus	siness / ವ್ಯಾಪಾರಣ	ದ ವಿಧ		Manufacturer, Club/Canteen		
capacity of Cooling Cer Packaging U ಡೈರಿ ವ್ಯಾಪಾರಂ	usiness details Milk Chilling C nters (BMCs)/N Unit owned by ವ ಸ್ಥಳದ ವಿಳಾಸ/ಹಾ ಬು ಶಿಥಲೀಕರಣ ಕೇಂ	Centers (MCC)/ Milk Processing the holder of ಎಲು ಶಿಥಲೀಕರಣದ ನ	J Unit/Milk licensee/RC / ಸಾಮಥ್ರ್ಯ /ದೊಡ್ಡ	No		
-	ರಒಡೆತನದಲ್ಲಿರುವ ಕ	0				
	m		-,			
5. Category of	f License / ಪರಾ	ವಾನಗಿಯ ವಿಧ :		State		
the licensee. /		ತಹಾರ ಸುರಕ್ಷತೆ ಮಂ		ons of FSS Act, 2006 all of which m ನಿಬಂಧನೆಗಳಿಗೆ ಒಳಪಟ್ಟು ನೀಡಲಾಗಿದೆ ಹಾಗೂ ಆಕ		
Place / ಸ್ಥಳ : Date / ದಿನಾಂಕ	Mysore City ਵ :25/09/2019		<b>Validation</b>	Stamp and Signature of the f ಅಂಕಿತ ಆರ್ಥಿಕ್ರಾಖಿಗಳುನ್ನಣಾಗ ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಗು And Renewal ಮೃಸೂರು ಮಹಾನಗರ ಕ	<b>ರಿಕ್ಷ ಮಾಹರು</b> ಣಮಟ್ಟ ಕಾಯ್ದೆ	
			ಉರ್ಜಿತ ಮ	ತ್ತು ನವೀಕರಣ	0	
		License Fee				
Date va ನವೀಕರಣ ಅಂ	eriod of alidity ಂಗೀಕಾರಾರ್ಹತೆಯ	Paid ಪರವಾನಗಿ ಶುಲ್ಕಗಳನ್ನು	Manufa ಆಹಾರ ಉತ್ಪನ್ನಗಳ	Food products authorized to acture/ Re-pack/ Re-label ಐಟಂಗಳನ್ನು / ಮತ್ತೆ ಮೂಚೆಕಟ್ಟು / ಪುನಃ ಹೆಸರು	Signature Of Designated Officeı ಗೊತ್ತುಪಡಿಸಿದ ಅಧಿಕಾರಿಯ ಸ	
	ವಧಿಯನ್ನು	ಪಾವತಿ		್ವೆ ಅಂಚಿಸು ತಯಾರಿಕೆ ಅಧಿಕಾರ.		
25/09/2019 24	4/09/2022	Rs.9000	Please r	efer to annexure for details.		
above after v	which Rs.	and up to the	date of evni	mitted 30 days prior to the ಅತಕಾ ಆಹಾರ ಸುರಕ್ಷತೆ ry. ry on food businesses and not fo	ವುತ್ತು ಗುಣಮಟ್ಟ ಕಾಯ್ದೆ	

#### Annexure

Government of India / ಭಾರತ ಸರ್ಕಾರ

Food Safety and Standards Authority of India / ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಪ್ರಾಧಿಕಾರ

Form `C' / ನಮೂನೆ

License / ಪರವಾನಗಿ



Government of Karnataka / ಕರ್ನಾಟಕ ಸರ್ಕಾರ License under FSS Act,2006 / ಎಫ್.ಎಸ್.ಎಸ್. ಕಾಯ್ದೆ, ೨೦೦೬ ರಡಿಯಲ್ಲಿಪರವಾನಗಿ

License Number / ಪರವಾನಗಿ ಸಂಖ್ಯೆ: : 11219335000512

Items of Food products with capacities Installed authorized to Manufacture/ Re-pack/Re-label

#### Other food processing units

SI.No.	Product Description	Quantity (MT/Day)	Kind of Business
1	Vegetarian Food Only 16	0.1	Manufacturer

#### Kind of Business : Food Business Operator

#### Club/Canteen

SI.No	I.No Food Product Category					
1 16 - Prepared Foods						
2 14 - Beverages, excluding dairy products						

Stamp and Signature ignated Officer ಅಂಕಿತ ಅಥಿಗತ್ರಾರಿಗಳು ಹಹಿದ್ರಾಪು ಮೊಹರು

<u>ಅಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಗುಣಮಟ್ಟ ಕಾಯ್ದೆ</u> ಮೈಸೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ವ್ಯಾಪ್ತಿ ಮೆ,ಸೂರು-10

		G	overnment of I	ndia / ಭಾರತ ಸ	ರ್ಕಾರ	
	Food Safety	and Standard	ls Authority of I	india / ಆಹಾರ	ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಪ	್ರಾಧಿಕಾರ
			Form 'C'	/ ನಮೂನೆ		
				/ ಪರವಾನಗಿ		
		(See Regula	ation 2.1.4 (6))	/ (ನಿಯಂತ್ರಣ 2.	1.4 (6) ನೋಡಿ)	
		Gover	mment of Karna	ataka / ಕರ್ನಾಣ	ವಕ ಸರ್ಕಾರ	
	Licen	se under FSS /	Act,2006 / ಎಫ್	.ಎಸ್.ಎಸ್. ಕಾಯೆ	್ದು, ೨೦೦೬ ರಡಿಯಲ್ಲಿಪರವಾನಗಿ	1
	Licens	se Number / a	ಪರವಾನಗಿ ಸಂಖ್ಯೆ	: 1121933500	00513	
	Registered Office ನೊಂದಾಯಿತಕಛೇರಿಂ		censee	JSS Academ Men and Wo	MY OF HIGHER EDUCAT y of Higher Education men, JSS College of Pl eshwara Nagara, Mysur - 570015	& Research, Hostel of harmacy Campus, Sri
	of Authorized Pr ಹಾರದ ವಿಳಾಸ	emises		Men and Wo Shivarathree	y of Higher Education men, JSS College of Pl eshwara Nagara, Mysu cle , Mysore City(Karna	harmacy Campus, Sri ru, Mysore Mahanagar
3. Kind of B	usiness / ವ್ಯಾಪಾರ	ದ ವಿಧ		Manufacture	er,Club/Canteen	
Cooling C Packagin ಡೈರಿ ವ್ಯಾಪಾ ಪ್ರಮಾಣದ ಕ	of Milk Chilling ( Centers (BMCs)/ g Unit owned by odದ ಸ್ಥಳದ ವಿಳಾಸ/ಹ ಕಾಲು ಶಿಥಲೀಕರಣ ಕೇಂ ಾರರಒಡೆತನದಲ್ಲಿರುವ	Milk Processing 7 the holder of ನಾಲು ಶಿಥಲೀಕರಣದ ನಾದ್ರ , ಹಾಲು ಸಂಸ್ಕರ	g Unit/Milk licensee/RC / ಸಾಮಥ್ರ್ಯ /ದೊಡ್ಡ ರಣಘಟಕ/			
	of License / ಪರ	0				
5. Category	of License / add	പെഡ്ഡ് പറ്റം		State		
the licensee		ಆಹಾರ ಸುರಕ್ಷತೆ ಮಾ			t, 2006 all of which mu ಳಪಟ್ಟು ನೀಡಲಾಗಿದೆ ಹಾಗೂ ಆಹ	
	ೆ : Mysore City ಾಂಕ :25/09/2019	)		Stamp	and Signature of the L පංදිය පුණුලිෆ්ප්ලිණීකි	ುಡ್ತು ವೊಹರು
			Validation	And Renewal	ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಗುಣ ಮೈಸೂರು ಮಹಾನಗರ ಪ	ಾಲಿಕೆ ವ್ಯಾಪ್ತಿ
			ಉರ್ಜಿತ ಮ	ತ್ತು ನವೀಕರಣ	ಿ ಮೆ.ಸೂರು-10	,
ನವೀಕರಣ ಅಂಗೀಕಾರಾರ್ಹತೆಯ ಪರವಾನಗೆ ಆಹಾರ ಉತ್ಪನ್ನಗಳ ಐಟಂಗಳನ್ನು / ಮತೆ ಮೂಟೆಕಟ್ಟು / ಪುನಃ ಹೆಸರು Designated C				Signature Of Designated Officer ಗೊತ್ತುಪಡಿಸಿದ ಅಧಿಕಾರಿಯ ಸ		
	ಅವಧಿಯನ್ನು		ಪಕ	ಸ್ತಿ ಅಂಟಿಸು ತಯಾರಿ	)ಕೆ ಅಧಿಕಾರ.	
ದಿನಾಂಕ	4	ಪಾವತಿ				

ಮೆ,ಸೂರು-10

#### Annexure

Government of India / ಭಾರತ ಸರ್ಕಾರ

Food Safety and Standards Authority of India / ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಪ್ರಾಧಿಕಾರ

Form `C' / ನಮೂನೆ

License / ಪರವಾನಗಿ



Government of Karnataka / ಕರ್ನಾಟಕ ಸರ್ಕಾರ License under FSS Act,2006 / ಎಫ್.ಎಸ್.ಎಸ್. ಕಾಯ್ಲೆ, ೨೦೦೬ ರಡಿಯಲ್ಲಿಪರವಾನಗಿ

License Number / ಪರವಾನಗಿ ಸಂಖ್ಯೆ: : 11219335000513

Items of Food products with capacities Installed authorized to Manufacture/ Re-pack/Re-label

#### Other food processing units

SI.No. Product Description		Quantity (MT/Day)	Kind of Business	
1	Vegetarian Food Only 16	0.1	Manufacturer	

#### **Kind of Business : Food Business Operator**

### Club/Canteen SI.No Food Product Category 1 16 - Prepared Foods

Stamp and Signature of the Designated Officer ಅಂಕಿತ ಅಧಿಪ್ರಹ್ಮಾರಿಗಟ್ಟ್ ಸ್ಟಕ್ಟ್ ಮಾಸ್ಟ್ರಮೊಹರು

> ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಗುಣಮಟ್ಟ ಕಾಯ್ಯ ಮೈಸೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ವ್ಯಾಪ್ತಿ ಮೆ,ಸೂರು-10

Food Safety			ndia / ಭಾರತ ಸರ್ಕಾರ ndia / ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಷ / ನಮೂನೆ	ಸ್ರಾಧಿಕಾರ					
Food Safety	and Standards			ರಕರಿದ					
		Form `C'	/ ನಮೂನೆ						
		License ,	/ ಪರವಾನಗಿ						
	(See Regulation 2.1.4 (6)) / (ನಿಯಂತ್ರಣ 2.1.4 (6) ನೋಡಿ)								
Government of Karnataka / ಕರ್ನಾಟಕ ಸರ್ಕಾರ									
Licens				n					
LICENS	e Number / a	ပ်င်္သားကို ကိုက်မှု	11219355000510						
		ensee	JSS ACADEMY OF HIGHER EDUCA JSS AHER HOSTELS,JSS Medical I Campus,S.S.Nagar,Mysore., Myso 570015	nstitutions					
Authorized Pre oರದ ವಿಳಾಸ	mises		JSS AHER HOSTELS, JSS Medical I Campus, S.S. Nagar, Mysore. , Myso Circle , Mysore City (Karnataka) -5	ore Mahanagar Palike I					
iness / ವ್ಯಾಪಾರಡ	ನ ವಿಧ		Manufacturer, Club/Canteen						
capacity of Milk Chilling Centers (MCC)/Bulk Milk Cooling Centers (BMCs)/Milk Processing Unit/Milk Packaging Unit owned by the holder of licensee/RC / ಡೈರಿ ವ್ಯಾಪಾರದ ಸ್ಥಳದ ವಿಳಾಸ/ಹಾಲು ಶಿಥಲೀಕರಣದ ಸಾಮಥ್ರ್ಯ /ದೊಡ್ಡ ಪ್ರಮಾಣದ ಹಾಲು ಶಿಥಲೀಕರಣ ಕೇಂದ್ರ , ಹಾಲು ಸಂಸ್ಕರಣಘಟಕ/									
	0		State						
			State						
ನ್ನು ಅನುಸರಿಸತಕ್ಕದ್ದು	]-								
Mysore City ਫ :25/09/2019		V-lide Aires	Stamp and Signature of the ಅಂಕಿತ ಅಧಿಕಾರಿಗಳ ಸಹಿತ ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಮೆಸೂರು ಮಹಾರಗ	ಮತ್ತು ಮಾಹಕರು					
		Validation	And Kenewal ಮಿ.ಸೂರು	ು-10					
		ಉರ್ಜಿತ ಮ	ುತ್ತು ನವೀಕರಣ						
eriod of alidity ಂಗೀಕಾರಾರ್ಹತೆಯ	License Fee Paid ಪರವಾನಗಿ ಶುಲ್ರ ರಳವು	Manufa	cture/ Re-pack/ Re-label	Signature Of Designated Office ෆ්බෙන්බ්රීය් පරිතවර්ග න්					
ವಧಿಯನ್ನು	ಪಾವತಿ	ಪಟ	ಚ್ಚೆ ಅಂಟೆಸು ತಯಾರಿಕೆ ಅಧಿಕಾರ.						
4/09/2022	Rs.9000	Please I	refer to annexure for details.						
tion for rene	wal of license	e shall be sub							
which De				TA MAL TOTAL					
which Rs. / will be char	ged up to the	date of expi	ry. ಆಹಾರ ಸುರಕ ry on food businesses and not f	ಕಿತ ಅಧಿಕಾರಿಗಳು					
	License gistered Office nocaradusetediedod Authorized Pre- odd ವಿಳಾಸ iness / ವ್ಯಾಪಾರಡ usiness details Milk Chilling C hters (BMCs)/N Jnit owned by d ಸ್ಥಳದ ವಿಳಾಸ/ಹಾ u ಶಿಥಲೀಕರಣ ಕೇಂ d ವಿಳಾಸ/ಹಾ d ವಿಳಾಸ/ಹಾ d ವಿಳಾಸ/ಹಾ d ವಿಳಾಸ/ಹಾ d add add add f License / ಪರವ f License / ಪರವ f License / ಪರವ granted under e ಪರವಾನಗಿಯುಆ d add add add granted under e i add add add i add add add add add add add add i add add add add add add add add add add	License under FSS A License Number / a gistered Office Address of Lic nocmoWestered Premises odd Deraw Authorized Premises odd Deraw iness / anyamodd Da usiness details of location with Milk Chilling Centers (MCC)/ nters (BMCs)/Milk Processing Unit owned by the holder of I of xgwd Derawton Baddretond a u Baddreton Becol, ameu Nord, o otadeandd2dda ameu anyatorrated f License / addanafhadda Da granted under and is subject dr addanafhadweamod Abd : granted under and is subject dr addanafhadweamod Abd 2 y entix087854 ator Mysore City f :25/09/2019	License under FSS Act,2006 / ಎಫ್. License Number / ಪರವಾನಗಿ ಸಂಖ್ಯೆ gistered Office Address of Licensee aoದಾಯಿತಕಛೇರಿಯ ವಿಳಾಸ Authorized Premises ರದ ವಿಳಾಸ iness / ವ್ಯಾಪಾರದ ವಿಧ usiness details of location with address and Milk Chilling Centers (MCC)/Bulk Milk hters (BMCs)/Milk Processing Unit/Milk Jnit owned by the holder of licensee/RC / 3 ಸ್ಥಳದ ವಿಳಾಸ/ಹಾಲು ಶಿಥಲೀಕರಣದ ಸಾಮಥ್ಯ, /ದೊಡ್ಡ ಬು ಶಿಥಲೀಕರಣ ಕೇಂದ್ರ , ಹಾಲು ಸಂಸ್ಕರಣಘಟಕ/ ರಒಡೆತನದಲ್ಲಿರುವ ಹಾಲು ಪ್ಯಾಕಿಂಗ್ಘಟಕ/ಆರ್.ಸಿ. f License / ಪರವಾನಗಿಯ ವಿಧ : granted under and is subject to the provisi ಈ ಪರವಾನಗಿಯುಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟಕಾಯ್ದೆಯ ಖ್ನ ಅನುಸರಿಸತಕ್ಕದ್ದು. Mysore City 5 :25/09/2019 Validation ಯರ್ಜಿತ ವ eriod of alidity ofteಕಾರಾರ್ಹತೆಯ ವಧಿಯನ್ನು ಪಾವತಿ Kicense Fee Paid ಪರವಾನಗಿ ಖಲ್ಯಗಳನ್ನು ಪಾವತಿ 4/09/2022 Rs.9000 Please n	Authorized Premises المعنفية المعنفية المعنفي المع					

### Annexure

Government of India / ಭಾರತ ಸರ್ಕಾರ

Food Safety and Standards Authority of India / ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತುಗುಣಮಟ್ಟ ಪ್ರಾಧಿಕಾರ

Form `C' / ನಮೂನೆ

License / ಪರವಾನಗಿ



Government of Karnataka / ಕರ್ನಾಟಕ ಸರ್ಕಾರ License under FSS Act,2006 / ಎಫ್.ಎಸ್.ಎಸ್. ಕಾಯ್ದೆ, ೨೦೦೬ ರಡಿಯಲ್ಲಿಪರವಾನಗಿ

License Number / ಪರವಾನಗಿ ಸಂಖ್ಯೆ: : 11219335000510

Items of Food products with capacities Installed authorized to Manufacture/ Re-pack/Re-label

#### Other food processing units

SI.No.	Product Description	Quantity (MT/Day)	Kind of Business	
1	Vegeterian Food 16	0.1	Manufacturer	

#### Kind of Business : Food Business Operator

#### Club/Canteen

SI.No	Food Product Category		
1 16 - Prepared Foods			
2	14 - Beverages, excluding dairy products		

Stamp and Signature of the Designated Officer

ಅಂಕಿತ ಅಥೆಗೆಕಾರಿಗಳು ಸಹಿ ಮತ್ತು ಮೊಹರು ಆಹಾರ ಸುರಕ್ಷತೆ ಮತ್ತು ಗುಣಮಟ್ಟ ಕಾಂತೆ

ಸ್ಸ್ರೆಸೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ವ್ಯಾಪ್ತಿ ಮುಸ್ಸಂನು-10 N.J.Devarajareddy, M.Sc., Hydrogeologist & Rain water harvesting Consultant. Geo Rain Water Board (R) Opp. Ayyappaswamy temple, M.H. Road, Chitradurga, Karnataka,

E-mail: <u>devraj05@gmail.com</u> Blog: http://georainwaterboard.blogspot.com

Date: 21-6-2019

TO JSS Medical College JSS Academy of Higher Education Mysore Karnataka

Dear Sir,

**Sub:** - Rain water harvesting & Bore we recharge works Visit report from Geo Rain Water Board (a NGO) at your esteemed JSS Medical College Campus, Mysore

\* \* \* \* \*

I wish to inform you that, I the undersigned *Sri N.J.Devaraja Reddy* as a Chief Consultant under Geo Rain Water Board (a NGO), Chitradurga since 2000 in and around Karnataka State. I have carried out and served for various types of project works related to Rain Water Harvesting and Ground Water Recharging structures for Rural and Urban Communities. The details of works and projects carried out by our Organization is enclosed for your kind reference.

## **ABOUT OUR ORGANIZATION :**

We take liberty to inform your good self regarding our organization and activities all over Karnataka. We have installed more than 30,000 Bore-wells with recharging system and 5500 Roof Top Rain Water Harvesting System, Ten Lakh different species of plants throughout Karnataka and parts of Andhra Pradesh.

During past 32 years of our operation, Quality and Quantity of water has improved wherever we have applied Rain Water Harvesting system. We took almost 25 years to come through in this method of recharging successfully by continues research.

We have well Trained Team with Technical Expertise to handle the installation of recharging properly.

At some places even dried Bore-wells have become rejuvenated and PH value of water has improved and **salinity**, **TDS and fluoride** content of water has decreased considerably.

We have enclosed list of some of our clients who have installed this system at various places in Karnataka and parts of India.

## **DETAILS OF VISIT :**

With reference to the above-cited subject and reference, I have personally visited Your Esteemed JSS Medical college campus Mysore on 21-6-2019

## **DETAILS :**

Name	•	JSS Medical College.
Location	:	Mysore
Type of soil	:	Red Soil
Water Quality	:	Medium
Rainfall	:	1200 mm (ave.) per year.
Vegetation	:	teak garden well maintained
Rock type	:	Granitic gneiss Hard Rock
No. of Bore-wells Drilled	:	around 10 Nos
Water conservation Works	:	No.
Daily Consumption of Water	:	3 lakh Litters/ Per day.

## **REPORT** :

Based on the Geological, Hydro Geological, Geo Morphological, & Environmental study we have observed the following things. At JSS medical, college campus Mysore Is depending upon the Bore well and corporation water supply.

Due to hard rock in the subsurface water-holding capacity is less. Runoff is more. Almost 95% of rain water sources are moving to nearby tanks.

Water conservation works not done scientifically in the JSS medical college campus premises.

High Intensity of rainfall in these areas.

Water quality in the subsurface is hard water.

The depth of bore wells more than 1000 feet, the Diameter of Bore wells 160 mm

## **MEASURES TO BE TAKEN :**

A) Bore well recharge system for 8 Bore-wells

B) Farm ponds for 4 bore wells 30x60x 8 ft deep

C) Rain water storage tank 1 lakh litters Capacity all the blocks

D) Rooftop Rain water harvesting system for all the blocks

E) Trench cum bunds , Boundary Glirecedia plantation

## A) Bore well Recharge Estimate

Bore well recharge is an ideal concept to improve ground water in the dry bore wells at JSS Medical college campus, 8 No of bore wells are drilled all the bore wells less yield. The bore well site is ideal for recharging. Bore well water quality& TDS is very high; due to continuous pumping the water yield in the bore wells may be reduced. Every year the TDS percentage increasing in your bore well because of depleting the ground water levels. By implementing the above said modern techniques and scientific methods; you will surely gain the sufficient groundwater in the bore wells for Your JSS medical college campus Mysore.

Sl. No.	Description /Quantity	Each BW
1	Bore well recharge pit – Earth work Excavation around bore well JCB/ITACHI/LABOUR	8x8x10 ft Deep
2	Boulders 6" To 8" Size Small Boulder	2 00 CFT
3	40 mm dia jelly	200 CFT
4	20 mm dia jelly	200 CFT
5	6mm chips Jelly	200 CFT
6	Labor Charges for laying all the above materials in layers	8 No
7	5 or 6 ft Dia Concrete Rings 2 No	2 No
8	Lead off drain For rain water Flow, silt Trap, etc, depending upon	Bore well
	the bore well Site condition	
9	Cement 1 Bag/Bore well	1 Bag
10	Charcoal 2 Bags/BW	40 KG/Bw
11	Water Test	
12	Painting to Casing Pipe	
13	Water Flow Meter	
14	Required Quantity of PVC Pipes up to bore well recharge unit	
15	Rain water flow channel stone work etc	

# CONSULTANCY CHARGES FOR ONE BORE WELL RECHARGE WORK

Sl. No.	Description				
1	Consultancy Charges:-Designing one Bore well recharge structure consultancy services				
	supervision for each Borewell, study the litho logy making decisions in the spot.				
2	Bore-well recharge filter materials like AQUAMESH				
3	NYLON MESH FILTER				
4	SAND FILTER				
5	HDPE NET MAT				
6	Casing pipe holding bracket with bolts and nuts				
7	Technical person for preparing filter bed, fixing of filters to the casing pipe Completion of Work				
8	Filters Binding material				
(	Total RS 25,000 /ONE BORE WELL         Conveyance charges Rs 10,000         Preliminary survey charges 21.6.2019         Rs 10,000				

Note: Taxi charges for materials transport not included

## RAIN WATER HARVESTING

Sl. No.	Description	Charges
1	Your scope /Rain water harvesting for Each Building Plumbing work up to sump tank as per our direction pipe size fittings, plumber work etc up to sump tank	Your scope
2	<b>Consultancy Charges:</b> - Plumber charges fixing is our scope	15,000
3	Rain water purification filters	15,000

# **RAIN WATER HARVESTING IS ESSENTIAL BECAUSE :**

1 Surface water is inadequate to meet our demand and we have to depend on ground water.

2 Due to rapid urbanization, infiltration of Rain Water into the sub soil has decreased drastically and recharging of ground water has reduced.

3 Capturing Rain Water in the land and augmenting water supply at a marginal cost.

4 Reducing pollution and contamination

5 Reducing the water bill.

6 Providing clean and safe water

7 Least capital investment with maximum benefits at household, industrial Agriculture levels.

8 To reduce power consumption.

By installing the above methods, conservation of Rain Water Harvesting at your JSS medical college Mysore it can be done effectively.

By implementing Rain Water Harvesting Technology, water quantity and quality gets improved. The water stored in Lakes can be used for Industrial purposes, Drinking, Cooking & Plantation also. This will keep the environment green.

Humidity of surrounding environment automatically improves; Temperature reduces 2-3<sup>o</sup>C compared to adjacent areas (This is called as "**Micro-Climate Area**").

**Note:** Follow-up of work should be done immediately as per our guidelines and measures to be taken in this regard so as to implement effective green belt development & RWH works.

All materials like boulders, sand, jelly, charcoal and works like Earthwork excavation, PVC pipes fittings, plumbing Masin work (For Rain Water Harvesting) should be arranged by your side.

We are planning JSS medical college campus it is one of the Eco-Friendly Education Institution also a resource center for all the above said activities.

## **CONCLUSION :**

Before monsoon rainy season we should complete the work. Scientific way with rain water harvesting with expert guidance Save Rain water save the mother Earth .....

Thanking you,

Yours Truly,

(N.J. DEVARAJA REDDY) CEO Geo Rain Water Board, Chitradurga

## <u>To whomsoever it may concern</u>

We, Cleanmax IPP1 Private Limited (CleanMax) hereby declare that CleanMax is operating the following rooftop solar PV power plants under the provisions of the power purchase agreement executed with JSS Academy of Higher Education and Research (JSS) dated 31.05.2018 (read along with Assignment agreement dated 30<sup>th</sup> January 2019):

S.no	Location/Campus	Capacity (kWp)
1	JSS Medical College	264 kWp
2	JSS Dental College	220 kWp
3	JSS Pharmacy College	132 kWp

Clean Max has not retained any carbon credits in any form from the Solar PV Power Plant, including but not limited to Renewable Energy Certificates (REC) for the period up to 31st March 2020 and JSS is free to claim any such credits as applicable.

On behalf of Cleanmax IPP1 Private Limited

And H

Andrew Hines Authorised Signatory Date: 28<sup>th</sup> August 2020

## <u>To whomsoever it may concern</u>

We, Cleanmax IPP1 Private Limited (CleanMax) hereby declare that CleanMax is operating the following rooftop solar PV power plants under the provisions of the power purchase agreement executed with JSS Academy of Higher Education and Research (JSS) dated 31.05.2018 (read along with Assignment agreement dated 30<sup>th</sup> January 2019):

S.no	Location/Campus	Capacity (kWp)
1	JSS Medical College	264 kWp
2	JSS Dental College	220 kWp
3	JSS Pharmacy College	132 kWp

Clean Max has not retained any carbon credits in any form from the Solar PV Power Plant, including but not limited to Renewable Energy Certificates (REC) for the period up to 31st March 2020 and JSS is free to claim any such credits as applicable.

On behalf of Cleanmax IPP1 Private Limited

And H

Andrew Hines Authorised Signatory Date: 28<sup>th</sup> August 2020

# GREEN CAMPUS –A SMART CAMPUS: A SMALL INITIATIVE FROM JSS ACADEMY OF HIGHER EDUCAITON AND RESEARCH, MYSURU

Solar Roof Top Projects taken up under the ambit of JSS AHER pursuance to the kick off meeting held on 30<sup>th</sup> Jan 2019 and following provisions are made:

## **Details of Solar Power Generation:**

Name of the	Date of Power Solar plant		Details of Feeders used for Solar power generation		Impact of the initiative
Institution	generatio n (SRTP)	0 0 1	No. of feeders	Capacity	Total Power dependency on KEB is reduced by 50% in JSS
JSSDCH	172 kw	19 <sup>th</sup> May 2019	04	50kw*2no's 36kw*2no's	Medical Institution campus of JSS AHER @ Mysuru
JSSMC	200 kw	3 <sup>rd</sup> June 2019	04	50kw*4no's	
JSSCPM	100 kw	19 <sup>th</sup> July 2019	02	50kw*2no's	Total Power dependency on KEB is reduced by 70% in JSS College of Pharmacy campus of JSS AHER @ Mysuru

A bird's eye view on the progress of Solar Roof Top Project (SRTP) from JSS AHER















#### JSS College of Pharmacy Mysuru ( RR NO : HT - 384 & Contract Demand 150 KVA )

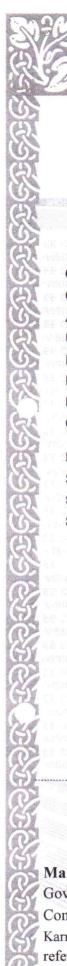
1			2			3		4	5	6	7	,							8					
	КЕВ				Solar units generated		Total= (KEB & Solar)						Remarks (Others charges from KEB)											
Month	А	В	C D A B A B KEB Rate Saving		in % 8			MD Charge (Minimun 85% or MD recorded which ever is higher)			Units Charge		Fuel adjustment charge (FAC)			Tax 9% (8F * 9%)	Arrears	Total Amount						
		Free and Units	Actual				Units	A			Α	В	А	В	С	D	Е	F		1	1	5705		Amount
	Import Units KEB	Export Units from Solar	Consumption of Units (2A-2B)	Amounts	Units	Amounts	(2C+3A)	Amounts (2D+3B)			KEB	SRTP	MD	Rate	Amount	ount Units	Rate	Amount	Units	Paisa	Amount			
Apr-19	44040	0	44040.00	396510	0	0	44040.00	396510	396510	0	100	0	143	200	28600	44040	7.6	334704	44040	0.07	3082.8	30123.36		396510.2
May-19	36502.5	0	36502.50	339779	0	0	36502.50	339779	339779	0	100	0	128	210	26880	36502.5	7.8	284719.5	36502.5	0.07	2555.175	25624.755		339779.4
Jun-19	24750	0	24750.00	251306	0	0	24750.00	251306	251306	0	100	0	128	210	26880	24750	7.8	193050	24750	0.12	2970	17374.5	11031	251305.5
Jul-19	38610	202.5	38407.50	358474	2878	17843.6	41285.50	376317.6	383067	6749.4	93.029	6.971	130	210	27300	38407.5	7.8	299578.5	38610	0.12	4633.2	26962.065		358473.8
Aug-19	29175	1267.5	27907.50	267651	12354	76594.8	40261.50	344245.8	374045	29799.2	69.3156	30.684	128	210	26880	27907.5	7.8	217678.5	29175	0.12	3501	19591.065		267650.6
Sep-19	28245	2032.5	26212.50	259445	14985	92907	41197.50	352352	389382	37030	63.6264	36.374	150 1.5	210 420	31500 630	26212.5	7.8	204457.5	26213	0.17	4456.21	18401.175		259444.9
0ct-19	25732.5	3442.5	22290.00	220003	16046	99485.2	38336.00	319488.2	359330	39841.8	58.1438	41.856	128	210	26880	22290	7.8	173862	22290	0.17	3789.3	15647.58	-176	220002.9
Nov-19	25305	3472.5	21832.50	216211	16689	103471.8	38521.50	319682.8	360938	41255.2	56.6761	43.324	128	210	26880	21832.5	7.8	170293.5	21833	0.17	3711.61	15326.415		216211.5
Dec-19	21997.5	4635	17362.50	176059	15627	96887.4	32989.50	272946.4	310330	37383.6	52.6304	47.37	128	210	26880	17362.5	7.8	135427.5	17363	0.09	1562.67	12188.475		176058.6
Jan-20	18165	9142.5	9022.50	104401	19797	122741.4	28819.50	227142.4	274497	47354.6	31.3069	68.693	128	210	26880	9022.5	7.8	70375.5	9022.5	0.09	812.025	6333.795		104401.3
Feb-20	24382.50	3300	21082.50	208021	18771	116380.2	39853.50	324401.2	369306	44904.8	52.9	47.1	128	210	26880	21082.5	7.8	164443.5	21082	0.09	1897.38	14799.915		208020.8
Mar-20	24082.5	6337.5	17745.00	177748	18764	116336.8	36509.00	294084.8	342320	48235.2	48.6045	51.396	128	210	26880	17745	7.8	138411	17745	0	0	12456.99		177748
Total	340987.5	33832.5	307155	2975608	135911	842648.2	443066	3818256.2	4150810	332553.8					329950	307155		2387001	308626		32971.37	214830.1	10855	2975607



#### JSSAHER Medical Institutions Campus, Mysuru.

( RR NO : HT - 166 & Contract Demand 450 KVA )

1			2				3			4	5	6		7							8					
		КЕВ			Solar units generated			Total= (K	fotal= (KEB & Solar)					Remarks (Others charges from KEB)												
Month	А	В	С	D	A	В	С	D	A	В	KEB Rate	Saving		Energy Denpedancy in %		MD Charge (Minimun 85% or MD recorded which ever is higher)		Uni	its Char	ge	Fuel adjustment charge (FAC)		arge (FAC)	Tax 9% (8F	Arrears	Total Amount
	Import Units KEB	Export Units from Solar	Actual Consumption of	Amounts	Units (MC)	Units (DCH)	Total Units	Amounts	Units (2C+3C)	Amounts (2D+3D)		F	A	B	A	В	С	D	E	F	Nuite Dates			* 9%)	9%]	
	KED	from Solar	Units (2A-2B)	(2A-2B)		(рсп)	Units		(20+30)	(20+30)			KEB	SRTP	MD	Rate	Amount	Units	Rate	e Amount	Units	Paisa	Amount			
Apr-19	144450	0	144450	1314716	0	0	0	0	144450	1314716	1314716	0	100.00	0.00	443	200	88600	100000	7.6	760000	144450	0.07	10111.5	100404		1314715.5
r ·					-	-						-						44450	8.0	355600						
May-19	153225	0	153225	1419601	0	11909	11909	73835.8	165134	1493436.8	1535134	41697.2	92.79	7.21	395	210	82950	100000	7.8	780000	153225	0.07	10725.8	109480.1		1419600.8
																		53225	8.2	436445						
Jun-19	118150	75	118075	1096122	10033	14675	24708	153189.6	142783	1249311.6	1332678	83366.4	82.70	17.30	395	210	82950	100000	7.8	780000	118150	0.012	1417.8	83539.35		1096122.2
																		18075	8.2	148215				<u> </u>		
Jul-19	109425	450	108975	1023980	10152	12727	22879	141849.8	131854	1165829.8	1231164	65334.2	82.6482	17.352	383	210	80430	100000	7.8	780000	109425	0.12	13131	76823.55		1023979.6
,																		8975	8.2	73595						
Aug-19	101250	1025	100225	944791	12687	22920	35607	220763.4	135832	1165554.4	1267196	101641.6	73.79	26.21	383	210	80430	100000	7.8	780000	101250	0.12	12150	70366.05		944791.05
0																		225	8.2	1845						
Sep-19	93125	4325	88800	850504	20623	25592	46215	286533	135015	1137037	1266547	129510	65.7705	34.23	383	210	80430	88800	7.8	692640	88800	0.17	15096	62337.6		850503.6
0ct-19	96375	7275	89100	852928	25170	28585	53755	333281	142855	1186209	1337953	151744	62.3709	37.629	383	210	80430	89100	7.8	694980	89100	0.17	15147	62548.2	-177	852928.2
Nov-19	89025	10125	78900	764651	31703	29270	60973	378032.6	139873	1142683.6	1310793	168109.4	56.4083	43.592	383	210	80430	78900	7.8	615420	78900	0.17	13413	55387.8		764650.8
Dec-19	83575	9025	74550	720964	27321	27491	54812	339834.4	129362	1060798.4	1204710	143911.6	57.629	42.371	383	210	80430	74550	7.8	581490	74550	0.09	6709.5	52334.1		720963.6
Jan-20	85600	3975	81625	781752	38715	33948	72663	450510.6	154288	1232262.6	1429742	197479.4	52.9043	47.096	383	210	80430	81625	7.8	636675	81625	0.09	7346.25	57300.75		781752
Feb-20	81425	17675	63750	628170	37266	31738	69004	427824.8	132754	1055994.8	1235333	179338.2	48.0212	51.979	383	210	80430	63750	7.8	497250	63750	0.09	5737.5	44752.5		628170
Mar-20	76300	19800	56500	560793	39232	26854	66086	409733.2	122586	970526.2	1132504	161977.8	46.0901	53.91	383	210	80430	56500	7.8	440700	56500	0	0	39663		560793
Total	1231925	73750	1158175	10958972	252902	265709	<b>518611</b>	3215388	1676786	14174360	15598470	1424110					978370	1158175		9054855	1159725		110985	814937	-177	10958970





#### **INDIA NON JUDICIAL**

# **Government of Karnataka**

e-Stamp

Rs. 2

IN-KA82477273401156R Certificate No. Certificate Issued Date 26-Mar-2019 06:46 PM NONACC (FI)/ kacrsfl08/ KORAMANGALA8/ KA-BA Account Reference SUBIN-KAKACRSFL0895759107787190R Unique Doc. Reference EXECUTIVE SECRETORY JSS MEDICAL COLLEGE Purchased by **Description of Document** Article 12 Bond POWER PURCHASE AGREEMENT Description Consideration Price (Rs.) 0 (Zero) First Party EE O AND M N R MOHOLLA DIVISION CESC MYSORE Second Party EXECUTIVE SECRETORY JSS MEDICAL COLLEGE Stamp Duty Paid By EXECUTIVE SECRETORY JSS MEDICAL COLLEGE 200 Stamp Duty Amount(Rs.) (Two Hundred only) न्त्यमव जयत

#### POWER PURCHASE AGREEMENT FOR ROOFTOP SOLAR PV PLANTS WITH NET METERING ARRANGEMENT

Please write or type below this lin

FOODER

- Statutory Alert: 3. 5000 Construction of the verified at "www.shcilestamp.com". Any discrepancy in the details on this Certificate and available on the website renders it invalid. 2. The onus of checking the legitimacy is on the users of the certificate.
- In case of any discrepancy please inform the Competent Authority.

#### AND

**Executive Secretory** the consumer of CESC, Mysore. Residing at **JSS Medical College**, **Shivaratreshwara Nagara, Bannimantapa & Mysore-570015** hereinafter referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include it successors and permitted assigns), as party of the second part.

#### Whereas,

a. The Seller intends to connect and operate the Solar Roof Top Photo Voltaic (SRTPV) system with CESC, Mysore HT/LT Distribution system for sale of Solar Power to CESC, Mysore in terms of the Karnataka Electricity Regulatory Commission (KERC) Order No. S/03/01 dated: 18.05.2018.

b. The Seller intends to install a SRTPV system of 372 KW (Three Hundred Seventy Two KW) capacity on the existing roof top of the premises situated at Executive Secretory, JSS Medical College, Shivaratreshwara Nagara, Bannimantapa & Mysore-570015 and bearing RR No: HT-166 in the same premises under NR Moholla Sub-Division of CESC, Mysore.

c. The Seller intends to sell the energy generated from the SRTPV system to CESC, Mysore on net metering concept, from the date of commissioning of the SRTPV system.

**Explanation**: 'The Commissioning' means the stage at which the SRTPV system status generation the power for the use by the seller and injects surplus power if any, into the grid.

d. CESC, Mysore intends to purchase the energy generated by such SRTPV system, on net metering basis, at the tariff determined by the KERC.

Now therefore, in consideration of the foregoing premises, the parties, hereto, intending to be legally bound, hereby, agree as under:

#### 1. Technical and Interconnection Requirements:

Seller shall ensure his SRTPV system complies with the following, technical and Inter connection requirement and shall:

1.1 Comply with the applicable standards and conditions in respect of integrating the SRTPV system with the distribution system.

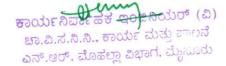
1.2 Connect and operate the SRTPV system to CESC, Mysore's distribution system, in accordance with the State Grid Code and Distribution Code as amended from time to time.

1.3 Install, prior to connection of SRTPV system to CESC, Mysore distribution system, an inverter with an automatic inbuilt isolation devise.

1.4 Provide external manual isolation mechanism with suitable locking facility so that SRTPV system will not back-feed into the CESC, Mysore's network, in case of power outage of the CESC, Mysore's distribution system, and it shall be accessible for CESC, Mysore to operate, if required, during maintenance / emergency conditions.

IVESECRETARY

J.S.S. Mahavidyapeeta. Ramanuja Road, Milente



1.5 Install all the equipment of the SRTPV system, compliant with relevant International (IEEE/IEC) and Indian standards (BIS).

1.6 (a) SRTPV system shall be designed, engineered and constructed and operated by the seller or any other person on his behalf, with reasonable diligence subject to all applicable Indian laws, rules, Regulations as amended from time to time and orders having the force of law.

(b) The seller, shall commission the SRTPV system within six months from the date of approval of the PPA.

1.7 Adhere to the following power quality measures as per the International and Indian standards and/or such other measures stipulated by the KERC/ CESC, Mysore:

- a. Harmonic current: Harmonic current injections from a generation unit shall not \exceed the limits specified in IEEE 519.
- b. Voltage at the injection point should be in the operating range of 80% to 110% of the nominal connected voltage.

c. Flicker: Operation of Photovoltaic system shouldn't cause voltage flicker in excess of the limits stated in the relevant sections of IEC standards or other equivalent 3Indian standards, if any

d. Frequency: When the system frequency exceeds the upper limit specified in the IEGC, as amended from time to time, the SRTPV system shall shift to island mode.

e. DC Injection: Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.

f. Power Factor: While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 shall be maintained.

g. The SRTPV system in the event of voltage or frequency variations must island/disconnect itself as per IEGC/KEGC Regulations within the stipulated Period.

#### 2. Safety:

The seller shall comply with the following safety measures:

2.1 The seller shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010.

2.2 The seller shall ensure that, the design, installation, maintenance and operation of the SRTPV system are in a manner conducive to the safety of the SRTPV system as well as the CESC, Mysore's distribution system.

2.3 If the Seller's SRTPV system either causes damage to and/or produces adverse effects on the other consumers' or CESC, Mysore's assets, Seller will disconnect SRTPV system immediately from the distribution system by himself or upon directions from the CESC, Mysore and rectify the same at his own cost be before reconnection.

tory maked fig

J.S.S. Mahavidyapeeta, Ramanuja Road, MYSURI

ಕಾರ್ಯನಿವಾಣಹಕ ಇಂಜಿನಿಯರ್ (ವಿ) ಚಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾಲನೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು

#### 3. Clearances and Approvals

The Seller shall obtain CESC, Mysore's and other statutory approvals and clearances before connecting the SRTPV system to the distribution system.

#### 4. Access and Disconnection

4.1 CESC, Mysore shall have access to metering equipment and disconnecting device of SRTPV system, both automatic and manual, at all times.

4.2 In emergency or outage situation, where there is no access to a disconnecting device either automatic or manual, the CESC, Mysore shall have the right to disconnect power supply to the premises.

#### 5. Liabilities

The Seller shall be solely responsible for availing any fiscal or other incentive provided by the State/ Central government, at his own expenses.

#### 6. Commercial Settlement

a. The CESC, Mysore shall pay for the Net energy at **<u>Rs. 3.56 per</u>** KWh as determined by the KERC in the Order dated 18.05.2018, for the term of this agreement.

b. If for any reason the date of commissioning is delayed, beyond the date of commissioning agreed, the tariff payable by the CESC, Mysore shall be lower of the:

- i) Tariff agreed to in this agreement
  - OR
- ii) Any revised tariff, determined by the commission, prevailing on the date of commissioning. OR
- iii) 90% of tariff agreed to in this agreement.

c. The Seller shall pay the Electricity tax and other statutory levies, pertaining to SRTPV generation, as may be levied from time to time.

d. The seller shall not have any claim for compensation, if the Solar power generated by his SRTPV system could not be absorbed by the distribution system due to failure of power supply in the grid/ distribution system for the reasons, such as line clear, load shedding and line faults, whatsoever.

#### 7. Metering:

7.1

The seller shall arrange to shift the existing meter to the generation side of SRTPV plant to measure solar power generation and install Bi-directional meter (whole current/CT operated) at the point of interconnection to the distribution system, at a suitable place in the premises accessible for recording export of energy from the SRTPV system to the grid and import of energy to the premises of the consumer from the grid. The bi directional meter shall comply with the Central Electricity Authority (Installation and operation of meters) Regulations, 2006 and shall have the following features:

ಹಕ ಇರಜನಿಯರ್ (ವಿ) ಕಾರ್ಯನವಾ ಚಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತು ಪಾಲನೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು

inp. mp. body

J.S.S. Mahavidyapaota, Ramanuja Road, MYSURI

i. Separate registers, for recording export and import energy with facility to download by Meter Reading Instrument (MRI).

ii. KVA, kW and kVAR measuring registers for both import and export of energy.

iii. The meter shall have RS232 (or higher) communication optical port / Radio Frequency (RF) port to support Automatic Meter Reading (AMR).

#### **8. BILLING AND PAYMENT:**

8.1 CESC, Mysore shall issue monthly electricity bill for the net energy on the scheduled date of meter reading.

8.2 In case, the exported energy is more than the imported energy, CESC, Mysore shall pay for the net energy exported as per Tariff agreed in this agreement within 30 days from the date of issue of bill duly adjusting the fixed charges and electricity duty if any.

8.3 In case, the exported energy is less than the imported energy, the seller shall pay CESC, Mysore for the net energy imported, as per the prevailing retail supply tariff determined by the Commission from time to time.

8.4 CESC, Mysore shall pay interest at the same rates, as is being levied on the consumers, for late payment charges in case of any delay beyond 30 (thirty) days period from the date of issue of bill in payment, for the Net energy exported.

#### **Explanation:**

Net energy means the difference of meter readings of energy injected by the SRTPV system into the grid (export) and the energy drawn from the grid for use by the seller (import) recorded in the bi-directional meter.

#### 9. Term and Termination of the Agreement

9.1 This agreement shall be in force for a period of 25 years from the date of commissioning of the SRTPV system unless terminated otherwise as provided here under.

9.2 If the CESC, Mysore commits any breach of the terms of the Agreement, Seller shall serve a written notice specifying the breach and calling upon the CESC, Mysore to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, Seller may terminate the agreement by delivering the termination notice, if the CESC, Mysore fails to remedy/ rectify the same.

9.3 If the Seller commits any breach of the terms of the Agreement, CESC, Mysore shall serve a written notice specifying the breach and calling upon the seller to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, CESC, Mysore may terminate the agreement by delivering the termination notice, if the seller fails to remedy/ rectify the same.

ಕ್ಷಹಕ ಇಂಜನಿಯರ್ (ವಿ) ಚಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾಲಗೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು

ery mal

J.S.S. Mahavidyapeeta, Ramanuja Road, MYSURI

9.4 Upon termination of this Agreement, seller shall cease to supply power to the distribution system and any injection of power shall not be paid for by the CESC, Mysore.

10. Dispute Resolution: All the disputes between the parties arising out of or in connection with this agreement shall be first tried to be settled through mutual negotiation.

The parties shall resolve the dispute in good faith and in equitable manner.

In case of failure to resolve the dispute, either of the parties may approach the appropriate Forum.

IN WITNESS WHEREOF, the Seller and the CESC, Mysore have entered into this Agreement to be executed as of the date and year first set forth above.

For AND ON	BEHALF OF
For CESC, Mysore	For SELLER
By : Name:	By (Name): Executive Secretory.
	RR No: HT-166
Designation ಕಾರ್ಯನಿರ್ವಹಕ ಇಂಜಿನ್ನ ಚಾ.ವಿ.ಸ.ನಿ.ನಿ ಕಾರ್ಯ ಮತ್ತು	Address: JSS Medical College,
Address: ಎನ್.ಆರ್. ಮೊಸಲಾ ವಿಭಾಗ ಮುಸೂರು	Shivaratreshwara Nagara, Bannimantapa &
Address: ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು	Mysore-570015
	Ramanuja Road, MYSURI
WITNESS:	WITNESS:
In Presence of	In Presence of
Name:	Name:
	1085
Designation :	Designation :
Designation	
WITNESS:	WITNESS:
	In Presence of
In Presence of	l la
Name:	Vergy
	Name:
Designation :	Designation :



Certificate No.

Purchased by

Description

First Party

Second Party

Stamp Duty Paid By

Stamp Duty Amount(Rs.)

Certificate Issued Date

Unique Doc. Reference

**Description of Document** 

Consideration Price (Rs.)

Account Reference

#### INDIA NON JUDICIAL

# **Government of Karnataka**

e-Stamp

SUBIN-KAKACRSFL0895759385561858R

POWER PURCHASE AGREEMENT

NONACC (FI)/ kacrsfl08/ KORAMANGALA8/ KA-BA

EXECUTIVE SECRETORY JSS PHARMACY COLLEGE

EE O AND M N R MOHOLLA DIVISION CESC MYSORE

EXECUTIVE SECRETORY JSS PHARMACY COLLEGE

EXECUTIVE SECRETORY JSS PHARMACY COLLEGE

IN-KA82477145623892R

26-Mar-2019 06:46 PM

Article 12 Bond

(Two Hundred only). सत्यमव जयत

0

200

(Zero)

POWER PURCHASE AGREEMENT FOR ROOFTOP SOLAR PV PLANTS WITH NET METERING ARRANGEMENT

Please write or type below this line

day of March 2019 between Chamundi Electricity Supply Company Limited, Mysore (CESC, Mysore), a Government of Karnataka undertaking, being a company formed and incorporated in India under the Companies Act-1956, with its registered office located at No : 29, Vijaynagar 2<sup>nd</sup> Stage, Hinkal, Mysore-570017/2 Karnataka State, represented by Executive Engineer, O&M Division, NR Moholla CESC, Mysore hereinafter referred to as the "CESC", Mysore" (which expression shall, unless repugnant to the context or meaning there? of include its successors and permitted assigns) as party of the first part ..1..

antime (a) Statutory Alert:

3. In case of any discrepancy please inform the Competent Authority.

The authenticity of this Stamp Certificate savailable on the website renders it invalid ould be verified at "www.shcilestamp.com". Any discrepancy in the details The onus of checking the fegitimacy is on the users of the certificate.

#### AND

**Executive Secretory** the consumer of CESC, Mysore. Residing at **Plot No: 172, JSS Pharmacy College, Shivaratreshwara Nagara, Bannimantapa & Mysore-570015** hereinafter referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include it successors and permitted assigns), as party of the second part.

#### Whereas,

a. The Seller intends to connect and operate the Solar Roof Top Photo Voltaic (SRTPV) system with CESC, Mysore HT/LT Distribution system for sale of Solar Power to CESC, Mysore in terms of the Karnataka Electricity Regulatory Commission (KERC) Order No. S/03/01 dated: 18.05.2018.

b. The Seller intends to install a SRTPV system of 100 KW (One Hundred KW) capacity on the existing roof top of the premises situated at Executive Secretory, Plot No: 172, JSS Pharmacy College, Shivaratreshwara Nagara, Bannimantapa & Mysore-570015 and bearing RR No: HT-384 in the same premises under NR Moholla Sub-Division of CESC, Mysore.

c. The Seller intends to sell the energy generated from the SRTPV system to CESC, Mysore on net metering concept, from the date of commissioning of the SRTPV system.

**Explanation**: 'The Commissioning' means the stage at which the SRTPV system status generation the power for the use by the seller and injects surplus power if any, into the grid.

d. CESC, Mysore intends to purchase the energy generated by such SRTPV system, on net metering basis, at the tariff determined by the KERC.

Now therefore, in consideration of the foregoing premises, the parties, hereto, intending to be legally bound, hereby, agree as under:

#### 1. Technical and Interconnection Requirements:

Seller shall ensure his SRTPV system complies with the following, technical and Inter connection requirement and shall:

1.1 Comply with the applicable standards and conditions in respect of integrating the SRTPV system with the distribution system.

1.2 Connect and operate the SRTPV system to CESC, Mysore's distribution system, in accordance with the State Grid Code and Distribution Code as amended from time to time.

1.3 Install, prior to connection of SRTPV system to CESC, Mysore distribution system, an inverter with an automatic inbuilt isolation devise.

1.4 Provide external manual isolation mechanism with suitable locking facility so that SRTPV system will not back-feed into the CESC, Mysore's network, in case of power outage of the CESC, Mysore's distribution system, and it shall be accessible for CESC, Mysore to operate, if required, during maintenance / emergency conditions.

ಕಾರ್ಯನಿರ್ವಹಕ ಇಂಜಿನಿಯರ್ (ವಿ) ಟಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾಲನೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರ್ರ

..2.. SECRE

J.S.S. Mahavidyapeeta, Ramanuja Road, MYSURI,

1.5 Install all the equipment of the SRTPV system, compliant with relevant International (IEEE/IEC) and Indian standards (BIS).

1.6 (a) SRTPV system shall be designed, engineered and constructed and operated by the seller or any other person on his behalf, with reasonable diligence subject to all applicable Indian laws, rules, Regulations as amended from time to time and orders having the force of law.

(b) The seller, shall commission the SRTPV system within six months from the date of approval of the PPA.

1.7 Adhere to the following power quality measures as per the International and Indian standards and/or such other measures stipulated by the KERC/ CESC, Mysore:

- a. Harmonic current: Harmonic current injections from a generation unit shall not \exceed the limits specified in IEEE 519.
- b. Voltage at the injection point should be in the operating range of 80% to 110% of the nominal connected voltage.

c. Flicker: Operation of Photovoltaic system shouldn't cause voltage flicker in excess of the limits stated in the relevant sections of IEC standards or other equivalent 3Indian standards, if any

d. Frequency: When the system frequency exceeds the upper limit specified in the IEGC, as amended from time to time, the SRTPV system shall shift to island mode.

e. DC Injection: Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.

f. Power Factor: While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 shall be maintained.

g. The SRTPV system in the event of voltage or frequency variations must island/disconnect itself as per IEGC/KEGC Regulations within the stipulated Period.

#### 2. Safety:

The seller shall comply with the following safety measures:

2.1 The seller shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010.

2.2 The seller shall ensure that, the design, installation, maintenance and operation of the SRTPV system are in a manner conducive to the safety of the SRTPV system as well as the CESC, Mysore's distribution system.

2.3 If the Seller's SRTPV system either causes damage to and/or produces adverse effects on the other consumers' or CESC, Mysore's assets, Seller will disconnect SRTPV system immediately from the distribution system by himself or upon directions from the CESC, Mysore and rectify the same at his own cost be before reconnection.

ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜನಿಯರ್ (ಫಿ) ಟಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾಲನೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು

inprygba

J S.S. Mahavidyapeela, Ramanuja Road, MYSURI

#### 3. Clearances and Approvals

The Seller shall obtain CESC, Mysore's and other statutory approvals and clearances before connecting the SRTPV system to the distribution system.

#### 4. Access and Disconnection

4.1 CESC, Mysore shall have access to metering equipment and disconnecting device of SRTPV system, both automatic and manual, at all times.

4.2 In emergency or outage situation, where there is no access to a disconnecting device either automatic or manual, the CESC, Mysore shall have the right to disconnect power supply to the premises.

#### 5. Liabilities

The Seller shall be solely responsible for availing any fiscal or other incentive provided by the State/ Central government, at his own expenses.

#### 6. Commercial Settlement

a. The CESC, Mysore shall pay for the Net energy at **<u>Rs. 3.56 per</u>** KWh as determined by the KERC in the Order dated 18.05.2018, for the term of this agreement.

b. If for any reason the date of commissioning is delayed, beyond the date of commissioning agreed, the tariff payable by the CESC, Mysore shall be lower of the:

i) Tariff agreed to in this agreement

OR

ii) Any revised tariff, determined by the commission, prevailing on the date of commissioning. OR

iii) 90% of tariff agreed to in this agreement.

c. The Seller shall pay the Electricity tax and other statutory levies, pertaining to SRTPV generation, as may be levied from time to time.

d. The seller shall not have any claim for compensation, if the Solar power generated by his SRTPV system could not be absorbed by the distribution system due to failure of power supply in the grid/ distribution system for the reasons, such as line clear, load shedding and line faults, whatsoever.

#### 7. Metering:

7.1

The seller shall arrange to shift the existing meter to the generation side of SRTPV plant to measure solar power generation and install Bi-directional meter (whole current/CT operated) at the point of interconnection to the distribution system, at a suitable place in the premises accessible for recording export of energy from the SRTPV system to the grid and import of energy to the premises of the consumer from the grid. The bi directional meter shall comply with the Central Electricity Authority (Installation and operation of meters) Regulations, 2006 and shall have the following features:

ಕಾರ್ಯನಿರ್ವಹಕ ಇಂಜಿನಿಯರ್ (ಸ್ಸಿ) ಟಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ, ಮೈ

..4..

EXECUTIVE SECRETARY J.S.S. Mahavidyapecia, Ramanuja Road, MYSURI

i. Separate registers, for recording export and import energy with facility to download by Meter Reading Instrument (MRI).

ii. KVA, kW and kVAR measuring registers for both import and export of energy.

iii. The meter shall have RS232 (or higher) communication optical port / Radio Frequency (RF) port to support Automatic Meter Reading (AMR).

#### 8. BILLING AND PAYMENT:

8.1 CESC, Mysore shall issue monthly electricity bill for the net energy on the scheduled date of meter reading.

8.2 In case, the exported energy is more than the imported energy, CESC, Mysore shall pay for the net energy exported as per Tariff agreed in this agreement within 30 days from the date of issue of bill duly adjusting the fixed charges and electricity duty if any.

8.3 In case, the exported energy is less than the imported energy, the seller shall pay CESC, Mysore for the net energy imported, as per the prevailing retail supply tariff determined by the Commission from time to time.

8.4 CESC, Mysore shall pay interest at the same rates, as is being levied on the consumers, for late payment charges in case of any delay beyond 30 (thirty) days period from the date of issue of bill in payment, for the Net energy exported.

#### **Explanation:**

Net energy means the difference of meter readings of energy injected by the SRTPV system into the grid (export) and the energy drawn from the grid for use by the seller (import) recorded in the bi-directional meter.

#### 9. Term and Termination of the Agreement

9.1 This agreement shall be in force for a period of 25 years from the date of commissioning of the SRTPV system unless terminated otherwise as provided here under.

9.2 If the CESC, Mysore commits any breach of the terms of the Agreement, Seller shall serve a written notice specifying the breach and calling upon the CESC, Mysore to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, Seller may terminate the agreement by delivering the termination notice, if the CESC, Mysore fails to remedy/ rectify the same.

**9.3** If the Seller commits any breach of the terms of the Agreement, CESC, Mysore shall serve a written notice specifying the breach and calling upon the seller to remedy/ rectify the same within 30 (thirty) days or at such other period and at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, CESC, Mysore may terminate the agreement by delivering the termination notice, if the seller fails to remedy/ rectify the same.

ಕಾರ್ಯನಿರ್ವಹಕ ಇಂಜನಿಯಠ್ (ಪ್ರಿ) ಚಾ.ವಿ.ಸ.ನಿ.ನಿ.. ಕಾರ್ಯ ಮತ್ತು ಪಾಲ್ಗನೆ ಎನ್.ಆರ್. ಮೊಹಲ್ಲಾ ವಿಭಾಗ. ಮೈಸೂರು

UTTVF SECRET

J.S.S. Manavidyapeeta, Ramanuja Road, MYSURI

9.4 Upon termination of this Agreement, seller shall cease to supply power to the distribution system and any injection of power shall not be paid for by the CESC, Mysore.

10. **Dispute Resolution**: All the disputes between the parties arising out of or in connection with this agreement shall be first tried to be settled through mutual negotiation.

The parties shall resolve the dispute in good faith and in equitable manner.

In case of failure to resolve the dispute, either of the parties may approach the appropriate Forum.

IN WITNESS WHEREOF, the Seller and the CESC, Mysore have entered into this Agreement to be executed as of the date and year first set forth above.

For AND ON	N BEHALF OF							
For CESC, Mysore	For SELLER							
By : Name:	By (Name): Executive Secretory.							
	RR No: HT-384							
Designation: ಕಾರ್ಯನಿವಾಳಹಕ ಇಂತ್ರಿನಿಯರ್ (ವಿ)	Address: Plot No: 172, JSS Pharmacy College,							
Address: ಚಾ.ವಿ.ಸ.ನಿ.ನಿ ಕಾರ್ಯ ಮತ್ತು ಪಾಲನೆ	Shivaratreshwara Nagara, Bannimantapa &							
	Mysore-570015 EXECUTIVE SECRETARY J.S.S. Mahavidyapeeta, Ramanuja Road, MySuley							
WITNESS:	WITNESS:							
In Presence of	In Presence of							
Name:	Name:							
Ivanic.	Wallet. 1987							
Designation :	Designation :							
WITNESS:	WITNESS:							
	In Presence of							
In Presence of	la la							
Name:	Name:							
Designation :	Designation :							

## STATEMENT SHOWING THE DETILS OF DIFFERENT TYPES OF TREES EXISTING AT ISS AHER CAMPUS

SI. No	Scientific name	Common name	Total no's	Uses
1	Morinda coreia	Indian mulberry ಮಡ್ಡಿ ಮರ	10	The bark is tonic, astringent, febrifuge and antiseptic.
2	Roystonea regia	Royal palm ರಾಯಲ ಪಾಮ್	67	Landscape usages
3	Pithecellobium dulce	Monkey pod ಬೆಟ್ಟದ ಹುಣಸೆ	25	Leaf decoction is taken for leprosy, jaundice and for proper growth of hairs. Plant paste is applied for poisonous bites.
4	Terminalia arjuna	White murdah ಅರ್ಜುನ್ ಮರ	05	Bark decoction is the best cardiac tonic and highly recommended for nervous debility. It also helps to reduce high blood pressure.
5	Terminalia catappa	Indian almond tree ಕಾಡು ಬಾದಾಮಿ	07	Bark powder is used as tooth powder in case of gum diseases, mouth ulcers and thrush in tongue. Leaves cooked with rice are eaten for gastritis.
6	Araucaria columnaris	Christmas tree ಕ್ರಿಸ್ಮಸ್ ಮರ	04	Landscape usages
7	Pongamia pinnata	Hongay oil tree ಹೊಂಗೆ ಮರ	64	Bark cooked with rice is eaten for three days in case of uterine diseases and conception failure. Bath with leaf decoction is recommended for arthritis and rheumatism.
8	Grevillea robusta	Southern silky oak -ಸಿಲ್ವರ್ ಮರ	56	Ornamental Fuel
9	Azadirachta indica	Neem ಬೇವಿನ ಮರ	52	Bark powder is recommended for septic wounds. Neem oil is applied for healing wounds and ulcers.
10	Albizia lebbeck	East Indian walnut ಬಾಗೆ ಮರ	28	Seed decoction is given for piles and to stop purgation. Leaf and bark powder are applied for ulcers as well as snake bite.
11	Swietenia mahagoni	West Indian mahogany ಮಹಾಗನಿ ಮರ	14	Timber
12	Cocos nucifera	Coconut ತೆಂಗಿನ ಮರ	70	Tender coconut water is the antidote for indigestion caused by beaten rice. Paste of leaf ash fried with ghee is applied for old chronic ulcers and wounds
13	Areca catechu	Arecanut palm ಅಡಿಕೆ ಮರ	20	Decoction made of its root, Cocos nucifera root and salt are used as a gargle for toothache. Young fruit (ground) is given as a sour agent for thrush in tongue.
14	Delonix regia	Royal gulmohur ಕತ್ತಿಕಾಯಿ ಮರ	17	Antispasmodic and antirheumatic.

15	Ficus benghalensis	Banyan tree ಆಲದ ಮರ	02	White terminal portion of prop root ground in milk is given for burning sensation and is a general tonic. Paste prepared from its bark, castor oil, bee wax and turmeric are used as a quick healer for cracks in feet.
16	Ficus racemosa	Cluster fig ಅತ್ತಿ ಮರ	02	Fruit juice is used for gastritis. Bark paste is applied to ulcers or boils on body due to excessive heat.
17		ರ್ವೆಟ್ರು ಮರ	10	
18	Wrightia tincto ria	Pala indigo ಬೆಪ್ಪಲ ಮರ	02	Leaf paste is filled into dental cavities for toothache and cavities. Leaf paste in coconut oil is applied for skin diseases.
19	Bauhinia purpurea	Butterfly tree ಬಸವನ ಪಾದ ಮರ	03	Stem bark decoction is given for diarrhoea, ulcers, swellings, leprosy, cough and menstrual irregularities
20	Lagerstroemia microcarpa	Virgin tree of the forest ನಂದಿ ಮರ	02	Leaf or young shoot tip paste is applied for cuts, wounds and for skin diseases
21	Albizia amara	Bitter albizzia ಸುಜಲ್ ಮರ	02	Medicinal and agroforestry
22	Ficus religiosa	Peepal tree ಅರಳಿ ಮರ	08	Young shoot tip ground and boiled in milk is given for dysentery and amoebiasis
23	Millingtonia hortensis	Indian cork tree ಆಕಾಶ್ ಮಲ್ಲಿಗೆ	42	Bark decoction is recommended internally for fever, cold, indigestion and diarrhoea
24	Acacia catechu	Red cutch ತಾರೆ ಮರ	01	Twig is used as toothbrush for strengthening teeth and gums. Bark decoction is used as a gargle for mouth ulcers
25	Plumeria rubra	Temple tree ದೇವಗಣಗಲೆ	32	Bark cooked with rice is taken for jaundice, venereal diseases and joint pain
26	Saraca asoca	Asoka tree ಅಶೋಕ ಮರ	171	Bark decoction is used for menstrual problems, dysentery, diarrhoea and as a blood purifier
27	Ficus benjamina	Golden fig ಜಾವ ಹತ್ತಿ ಮರ	01	Medicinal and agroforestry
28	Artocarpus heterophyllus	Jack fruit tree ಹಲಸಿನ ಮರ	07	Fruit is nutritive and it clears excretory system. Seeds are sweet with aphrodisiac action
29	Aegle marmelos	Bael fruit ಬಿಲ್ವಪತ್ರೆ ಮರ	03	Leaf juice is given to children suffering from stomach-ache. Leaf is eaten for diabetes.
30	Sapindus laurif olia	Soapnut ಅಂಟವಾಳ ಮರ	01	Folk medicine and insecticide
31	Thespesia populnea	Cork tree ಬುಗರಿ ಮರ	05	Fruit and bark decoction is much used to wash for septic wounds and ulcers
32	Prosopis cineraria	Indian mesoquite ಬನ್ನಿ ಮರ	02	Astringent and coolant
33		ತಬ್ಬುಬಿಯ ಮರ	28	

34	Tabebuia aurea	Caribbean trumpet-tree ಹಳದಿ ಪಾದಿ	40	Ornamental and timber
35	Tamarindus indica	Tamarind tree ಹುಣಸೆ ಮರ	09	Leaf decoction is poured over the body parts to relieve rheumatic pain. Steam of boiled fruit juice is given for pain.
36		ಯಾಮಿ ಮರ	02	
37	Cassia javanica	Pink shower ಕ್ಯಾಸಿಯ ಮರ	06	Widely planted as an ornamental. The wood is used for general construction, furniture and cabinet making
38	Cassia fistula	Indian laburnum ಕಕ್ಕೆ ಮರ	09	Bark paste is applied for skin diseases. Juice collected from heated fruit is taken to expel intestinal worms
39		ನೀಲಿ ಪಾದ್ರಿ ಮರ	02	
40	Alstonia schola ris	Indian devil tree ಹಾಲೆ ಮರ	01	Bark is used to treat asthma, heart disease, for chronic ulcers, and other ailments. Powder mixed with ginger is given to new mothers the first day after birthing to cleanse the blood and promote lactation.
41	Santalum album	Indian sandalwood ಗಂಧದ ಮರ	08	Sandalwood oil was used traditionally to treat skin diseases, acne, dysentery, gonorrhea,
42	Callistemon	Bottlebrush tree ಬಠಲ ಬ್ರಶ್	17	Antibacterial and ornamental
43	Holoptelea inte grifolia	Indian elm ತಾವಸೆ ಮರ	04	Oil prepared from its bark is used for chronic ulcers. Bark paste is applied to the spot of pit viper bite and to arrest bleeding from wounds
44	Hevea brasiliensis	Rubber ರಬ್ಬರ್ ಮರ	04	Rubber and timber
45	Mangifera indica	Mango tree ಮಾವಿನ ಮರ	06	Bark cooked with rice is given for gastritis. Seed kernel ground in butter milk is applied on head for dandruff
46	Michalea cham paca	Golden champa ಸಂಪಿಗೆ ಮರ	18	Agroforestry, fuels and oil
47	Elaeocarpus ganitrus	Woodenbegar ರುದ್ರಾಕ್ಷಿ ಮರ	02	Ground seed is given to small children for increasing intellect and memory power. Wearing its seeds as necklace is said to control CNS.
48	Melia dubia	Malabar neem wood ಹೆಬ್ಬೆ ಬೇವು ಮರ	18	Leaf juice or extract is used both externally and internally as a haemostatic agent
49	Annona reticulata	Bullock's heart ರಾಂಪಾಲ್ ಮರ	01	Fruit is beneficial for tuberculosis. Dried fruit extract is given for dysentery
50	Syzygium cumini	Black plum ನೇರಳೆ ಮರ	02	Seed powder or bark decoction is much used for diabetes. Bark decoction is recommended for ulcers in the mouth, diabetes, and liver disorders
51		ಗೋಲ್ಡನ್ ಸ್ವೆಫ್ರಿನ್	35	
52	Tectona grandis	Teak ಟೀಕ್	1450	Fresh leaf and fruit extract are applied for mouth ulcers and itches in the body. Seed and flower decoctions are diuretic

Sl No.	Name of the Tree	Nos. available
1.	Acacia	39
2.	Cypress	10
3.	Eucalyptus	21
4.	Jacaranda	06
5.	Silver Oak	17
6.	Pynes	01
7.	Plums	31
8.	Peaches	10
9.	Bottle Brush	19
10.	Photo Creeper	20
11.	Jungle Wood	75
	TOTAL	249

Various trees available in JSS College of Pharmacy, Ooty campus

Sd/-PRINCIPAL



# **ENERGY CONSERVATION MEASURES**

- Light Bulb Replacement
- Sticker Reminders as part of their 'Energy Awareness Campaign' is placed on switch boards to remind everyone to conserve energy by turning off the lights.
- Small pamphlets emphasizing the importance of energy saving shall be prepared and circulated to all the staff and students of the college.
- Solar water heaters installed in colleges and hostels and in guest houses.

## **ELECTRICITY – UNDERGROUND CABLE WORKS COMPLETED**



## Underground Cable works and power backup



## POWER / ELECTRICITY (Power back up: 24 x 7)

JSSAHE&R has created the facility of providing 24 x 7 power / electric supply either in the form of power connection through CHESCOM / TNEB and in case of failure in power supply, generators are installed in all the campuses for providing uninterrupted electric / power supply.

Campus	RR No.	Contracted Demand in KVA	Motor Constant	Date of Connection / Service	Generator			
JSSMI Campus	HT – 166	450 KVA	2500	May 1995	2 dedicated generators of 450 KVA & 500 KVA capacity is provided with auto switch over facility			
JSSCPM Campus	HT – 384	150 KVA	750	May 1995	82.5 KVA & 160 KVA			
JSSCPO Campus	HT - 107	150 KVA	200	May 1995	100 KVA, 125 KVA & 150 KVA capacity is provided			

# Solar Projects



At the Institution level, solar panels have been installed which has considerably brought down the power consumption by at least 50% compared to earlier years. In order to set an example, the institution shares some of the electricity generated by solar energy to the



local electricity board. Proper signages have been installed advising the users to always switch off the electricity when not in use.

Most of the lights have been replaced by energy saving bulbs and LEDs to save power. Continuous monitoring and maintenance of Air Conditioning, generators and other power appliances are being carried out to ensure that no power is being wasted under any circumstances



# **Emergency Power Backup & Smart Micro Grids**



# JSS Academy of Higher Education & Research (Deemed to be University) Accredited "A+" Grade by NAAC









# **Summary Of Power Generation With The Aid Of Solar Panels**

1			2			3		4	5	6
		]	KEB			r Units erated	Т	otal	KEB Rate	Saving
	Α	В	С	D	А	В	Α	В		
Month	Import Units KEB	Export Units from Solar	Actual Consumptio n of Units (2A-2B)	Amounts	Total Units	Amounts	Units	Amounts (2D+3B)		
Apr-19	144450	0	144450	1314716	0	0	144450	1314716	1314716	0
May-19	153225	0	153225	1419601	11909	73835.8	165134	1493436.8	1535134	41697.2
Jun-19	118150	75	118075	1096122	24708	153189.6	142783	1249311.6	1332678	83366.4
Jul-19	109425	450	108975	1023980	22879	141849.8	131854	1165829.8	1231164	65334.2
Aug-19	101250	1025	100225	944791	35607	220763.4	135832	1165554.4	1267196	101641.6
Sep-19	93125	4325	88800	850504	46215	286533	135015	1137037	1266547	129510
Oct-19	96375	7275	89100	852928	53755	333281	142855	1186209	1337953	151744
Nov-19	89025	10125	78900	764651	60973	378032.6	139873	1142683.6	1310793	168109.4
Dec-19	83575	9025	74550	720964	54812	339834.4	129362	1060798.4	1204710	143911.6
Jan-20	85600	3975	81625	781752	72663	450510.6	154288	1232262.6	1429742	197479.4
Feb-20	81425	17675	63750	628170	69004	427824.8	132754	1055994.8	1235333	179338.2
Mar-20	76300	19800	56500	560793	66086	409733.2	122586	970526.2	1132504	161977.8
Total	1231925	73750	1158175	10958972	518611	3215388	1676786	14174360	15598470	1424110



## **Proper Lighting**

All the institutions campus of JSSAHE&R at Mysuru and Ooty are provided with LED lightings to promote security in the campus and to increase the quality of life by artificially extending the hours in which it is light and for the safety of hostel students.

