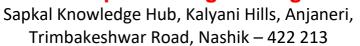


## Late G. N. Sapkal College of Engineering





### **Criteria No. 7: Institutional Values and Social Responsibilities**

#### 7.1.2 The Institution has facilities and initiatives for

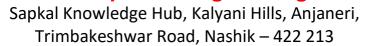
- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and non-degradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

### **Index**

Sr. No.	Facilities and Initiatives	Page No.
1	Alternate sources of energy	2
2	Waste management	9
3	Water conservation	10
4	Green campus initiatives	12
5	Disable-friendly environment	29



## Late G. N. Sapkal College of Engineering





#### 1. Alternate sources of energy and energy conservation measures

#### 1.1 Solar Hybrid Water Heating System

Solar power is the conversion of renewable energy from sunlight into electricity, either directly using photovoltaic, indirectly using concentrated solar power, or a combination.

Solar water heater is the most competitive alternative to conventional water heating methods such as electric geysers and fuel-fed boilers. Solar water heater save's electricity, helps in preservation of the environment as it is a non-polluting source of energy, involves zero running cost safe as electricity or gas is not required.

In LGNSCOE campus premises solar water heating facilities with solar panels were installed on the roof tops of boys and girls' hostel which helps to reduce electrical power to heat the water. Solar panel cleaning by chemical replacement carried out properly.





Solar water heater



### Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213



#### 1.2 Purchase order of Solar Hybrid Water Heating System of 5000 LPD

#### **Purchase Order**

1

Requisition No :Nil	P.O.No: KCT/ADMIN/2014-15/02
Department: Kalyani Charitable Trust	Date: 14/07/2014
To: HSS Heat Pump Pvt. Ltd.	Ref No: Your quotation no :HSS/FEB/3014-15/29
Office No. 2, E-Building'	Date: 14/07/2014
Mantri Market, Hadapsar,	
Pune-411038. Maharashtra, India	
Email: sales@hssshp.com Web: www.hssshp.com	

Please supply the under mentioned goods subject to terms and conditions mentioned below and overleaf.

Sr.	Description	Qty. in nos.	Rate Per Unit Rs.	Discount	Total Amt. Rs.
1.	Water Heater-Heat Pump-HS-5 of capacity 5000LPD	1 No.	3,48,000.00		2,95,800.00
2.	Primary Hot Water circulation pump	1 No.		15%	
3.	Control Panel for Heat Pump & Water circulation pumps	1 No.			
	Rs. Two Lakh Ninety-five Thousand and Eight Hundred only			Total	2,95,800.00

Terms & Conditions:-

1. LBT

: LBT is not applicable.

2. VAT

: Price is inclusive of all taxes.

Transportation

: Transportation is paid by buyer.

Warranty

: 18 months from the date of dispatch (in case of any part failure it will be

replace by seller without any charges)

5. Payment

:1) 25% Advance along with order

2) 25% Against supply & installation

3) 25% After completion of 30 days and

4) 25% After completion of 60 days of complete installation and satisfactory trail.

Note: Please send the obove material and bill in the name of

Kalyani Charitable Trust

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri-Wadholi, Trimbakeshwar Road,

Tal-Trimbakeshwar, Dist-Nashik - 422213

Dr. Madhav Deo Saraswat

CEO

Hon. Ravindra G. Sapkal Chairman & MD

Prof.(Dr.) Sahebrao B. Bagal

Principal
Late G. N. Sapkal College of Engineering
Anjaneri, Nashik-422 213.



## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213



#### 1.3 Tax Invoice Solar Hybrid Water Heating System of 5000LPD



#### TAX INVOICE

		2107 2014
KALYANI CHARITABLE TRUST,	Invoice No: 01/V/2014-2015	Date: - 24.06.2014
Sapkal Knowledge Hub, Trimbakeshwar Rd, Nashik.	P.O. No:- KCT/ADMIN/13-14	Date:- 26.04.2014

Sr.	DESCRIPTION	QTY	UNIT RATE	AMOUNT
1,	SOLAR HYBRID Water Heating System of 5000 LPD	01 Set.	2,95,000	2,95,800
				2,95,800

Amount in words: Rs. Two Lakh Ninety Five Thousand Eight Hundred Only.

V.A.T.NO.: 27810996226V W.e.f. :15/06/2013 C.S.T.NO.: 27810996226C W.e.f. : 15/06/2013

I/We hereby certify that my/our registration certificate under the Maharashtra Value Added Tax Act, 2002 is in force on the date on which the sales of the goods specified in this 'Tax Invoice' is made by me/us and that the transaction of sale covered by the due tax. Invoice has been effected by me/us and shall be accounted for in the turnover of sales while filing of return and due tax if any, payable on the sale has been paid or shall be paid.

#### TERMS AND CONDITIONS.

- 1. Any discrepancy noted should be reported with in a week of Receipt of the consignment.
- 2. All payment is made by DD on HSS Heat Pumps Pvt. Ltd. at Pune.
- 3. All disputes subjected to Pune Jurisdiction only.

Receiver's Signature

For HSS Heat Pumps Pvt Ltd

Authorized Signatory

Prof.(Dr.) Sahebrao B. Bagal Principal

Late G. N. Sapkal College of Engineering Anjaneri, Nashik-422 213.

Flat No. 2. E Building, Mantri Market, Hadapsar, Pune - 411028

Page | 4



## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213



1.

#### 1.4 Purchase order of Solar Hybrid Water Heating System of 3000LPD



Regd. No. Mah / 179 / Mumbai / Pub / Trust No.F / 23935 / Mumbai

#### Purchase Order

P. O. No: KCT/ADMIN/2015-16/03

Date: 04/05/2015 Department: Kalyani Charitable Trust

Ref No: Your quotation no :HSS/FEB/3014-15/3-A To: HSS Heat Pump Pvt. Ltd. Date: 19/04/2014 Office No. 2, E-Building'

Mantri Market, Hadapsar, Pune-411038. Maharashtra, India

Email:- sales@hssshp.com Web: www.hssshp.com Please supply the under mentioned goods subject to terms and conditions mentioned below and overleaf.

Sr. No.	Description	Qty. in nos.	Rate Per Unit Rs.	Discount	Total Amt. Rs.
1.	Water Heater-Heat Pump-HS-5 of capacity 3000LPD	2 No.	2,48,000.00	0.00 15%	4,21,600.00
2.	Primary Hot Water circulation pump	2 No.			
3.	Control Panel for Heat Pump & Water circulation pumps	2 No.			
	Rs. Four Lakh Twenty-One Thousand and Six Hundred only			Total	4,21,600.00

#### Terms & Conditions:-

Requisition No :Nil

- 1. LBT
- VAT
- 3. Transportation
- Warranty
- 5. Payment
- : LBT is not applicable.
- : Price is inclusive of all taxes.
- : Transportation is paid by buyer.
- : 18 months from the date of dispatch (in case of any part failure it will be replace by seller without any charges)
- :1) 25% Advance along with order
  - 2) 25% Against supply & installation
  - 3) 25% After completion of 30 days and
  - 4) 25% After completion of 60 days of complete installation and satisfactory

Note: Please send the above material and bill in the name of

Kalyani Charitable Trust

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri-Wadholi, Trimbakeshwar Road,

Tal-Trimbakeshwar, Dist-Nashik - 422213

Prof.(Dr.) Sahebrao B. Bagal

Principal
Late G. N. Sapkal College of Engineering
Anjaneri, Nashik-422 213.

Chairman & MD Kalyani Charitable Trust Sapkal Knowledge Hub

HEAD OFF.: Ravi Communication, J. J. Hospital Campus, Byculla, Mumbai - 400 008. Ph.: 022-23774545, 23745031, Fax: 022-23708310. MUMBAI OFFICE: Sapkal Knowledge Hub, Unit No. 22, 1st Floor, Shubhada Tower Shopping Center, Sir Pochkanwaia Road, Near R.T.O. Office, World, Mumbal - 400 030. Ph.: 022-24938914 / 15, Fax: 022-24938919.

CORPORATE OFFICE: Sapkal Knowledge Hub, "Parag" 46, Ashwin Sector, Opp. Hotel Sai Palace, Mumbal - Agra Highway, Nashik - 422 009. Ph: 0253 2392450/ 51, Fax: 0253 - 2375557

CAMPUS: Sapkal Knowledge Hub, Kalyani Hills, Anjaneri - Wadholi, Trimbakeshwar Road, Nashik - 422 213, Ph. 02594-220167 - 70. CAMPUS: 31/10/20162 Email: cmd@sapkalknowledgehub.org | Website: www.sapkalknowledgehub.org



## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213



#### 1.5 Tax Invoice Solar Hybrid Water Heating System of 3000LPD



#### TAX INVOICE

KALYANI CHARITABLE TRUST, Sapkal Knowledge Hub, Trimbakeshwar Rd, Nashik.

Date: - 07.07.2015 Invoice No: 05/V/2015-2016

P.O. No:- KCT/ADMIN/2015-16/03

Date: - 04/05/15

Sr. No	DESCRIPTION	QTY	UNIT RATE	AMOUNT
1	Water heater heat pump HS-5 of capacity 3000LPD	2 Nos		3,74,756.00
2	Primary hot water circulation pump	2 Nos		
3	Control panel for heat pump & water circulation pump	2 Nos		
			VAT 12.5% Round off	<b>46,844.5</b> (0.5)
			TOTAL	4,21,600.00

Amount in words: Rs. Four Lakh Twenty One Thousand Six Hundred Only.

V.A.T.NO.: 27810996226V W.e.f.:15/06/2013 C.S.T.NO.: 27810996226C W.e.f.: 15/06/2013



I We hereby certify that my our registration certificate under the Maharashtra Value Added Lax Act, 2002 is in force on the date on which the sales of the goods specified in this "Lax Invoice" is made by me us and that the transaction of sale covered by the due tax Invoice has been effected by me us and shall be accounted for in the turnover of sales while filing of return and due tax if any payable on the sale has been paid or shall be paid

#### TERMS AND CONDITIONS.

- 1. Any discrepancy noted should be reported within a week of Receipt of the consignment.
- 2. All payment is made by DD on HSS Heat Pumps Pvt. Ltd. at Pune

3. All disputes subjected to Pune Jurisdiction only.

Receiver's Signature

Principal Late G. N. Sapkal College Anjaneri, Nashik-422 213 For HSS Heat Pumps Pvt Ltd

Authorized Signatory

Flat No. 2: E Building Mantri Market, Hadapsair Pune - 411028 Ceil: +91 91588 97762 / 63 / 64 Email: sales@hsshp.com service@hsshp.com. Web \_ www.hsshp.com



## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213



#### 1.6 Use of Light Emitting Diode (LED)

The institute has provided LED bulbs, tubes and power efficient equipment for conserving energy. Master switches provided in departments for each room to shut down power of entire room when it is not in use.





**LED Bulbs in Building** 



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#### 1.7 Display Boards of Energy conservation

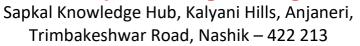




# SAPKAL KNOWLEDGE HUB

#### Kalyani Charitable Trust's

### Late G. N. Sapkal College of Engineering





# 2. Management of the various types of degradable and nondegradable waste 2.1 Solid waste management

The solid waste before disposal is categorized into degradable and non-degradable waste. The waste like remains of plants and kitchen waste are disposed by means of composting. Non-degradable waste like, plastic wrappers, sheets, etc., are collected at source by placing trash bins at suitable locations. This plastic waste is then disposed safely through a plastic recycling agency.



Solid Waste Management by composting method





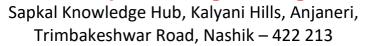
Dustbins for collection of non-degradable waste

#### 2.2 Liquid waste management

Although being situated in the hilly terrain with no support from the local government authorities, the institute disposes its liquid waste into the environment safely. A septic tank has been built to separate solid waste. The liquid waste is then discharged into a leach field



## Late G. N. Sapkal College of Engineering





where the dissolved solids are absorbed by soil and clear water then moves by gravity deep into the earth to rejuvenate the ground water level.

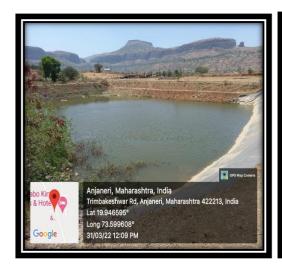


**Liquid Waste Management** 

#### 3. Water conservation

Water the natural resource and the main constituent of our planet earth. Conservation of water mainly refers to protect, preserve, and control the usage of water and its resources. It is the system introduced to manage freshwater, reduce the wastage and protect the water and its resources in order to reduce and to avoid the scarcity. Therefore, we all should come forward to create awareness about conservation of water among our own friends, family, neighbors, society, etc. Conservation of water is very much essential as it saves life on earth. Following conservation of water measures through bund, tanks and reservoirs are initiated by LGNSCOE campus:

#### 3.1 Rain water harvesting





**Reservoir with Harvested rainwater** 

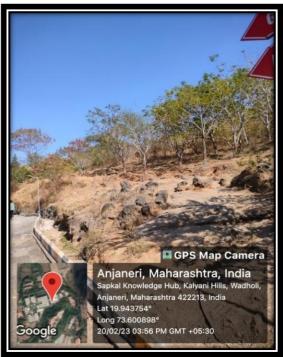


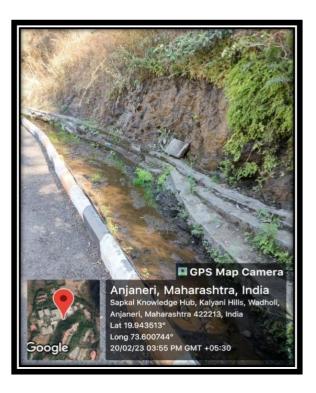
## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213

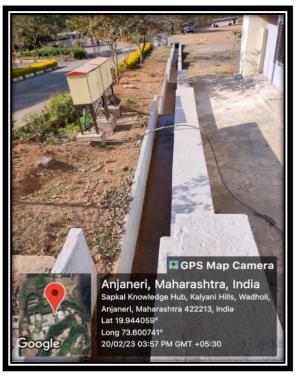


#### 3.2. Construction of tanks and bunds









**Bunds** 

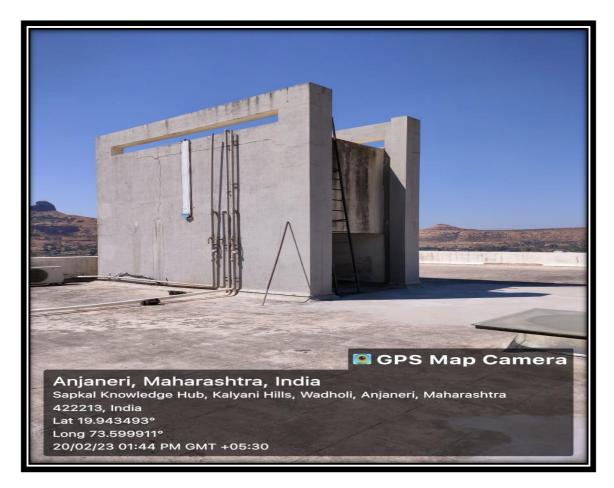


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#### 3.3. Overhead Tanks & Distribution System of Water in Campus



Overhead tanks & distribution system

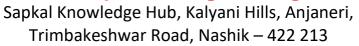
#### 4. Green campus initiatives

The institute initiates environment and eco-friendly practices and education to promote sustainability in the campus. Green campus initiatives prefer to use nonconventional and renewable resources. The green campus initiative also includes proper handling, disposal of waste, harvesting and saving water, purchasing of environment friendly, power saving equipment's. Institute use ERP software to avoid paper use.

It needs strategies and planning to implement green campus initiatives at the institute. The institute is implementing different activities among students and promoting awareness about a social responsibility of conservation of natural resources and accelerating the sustainability



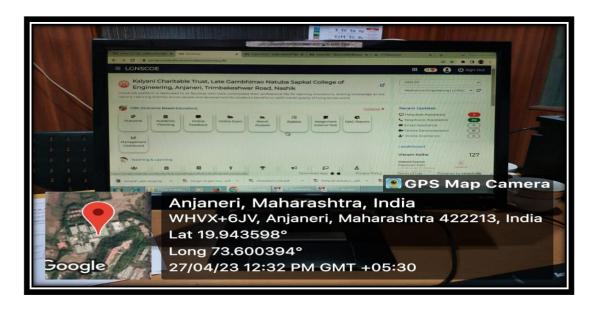
## Late G. N. Sapkal College of Engineering





and environmental protection by tangible initiatives for green campus at LGNSCOE.

#### 4.1 Use of ERP Software to reduce paper work.



#### 4.2 Plantation and landscaping in LGNSCOE Campus.

The campus has significant greenery covering all over and is maintained by a team of around 50 gardeners. All these efforts have been honored by the Government of Maharashtra with 'Chatrapati Shivaji Maharaj Vanashree Award.'



Landscaping in the campus

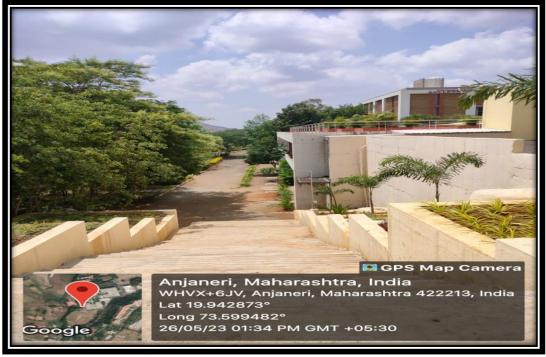


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Landscaping in the campus



Landscaping in the campus



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**Trees in the Campus** 



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Chatrapati Shivaji Maharaj Vanashree Award



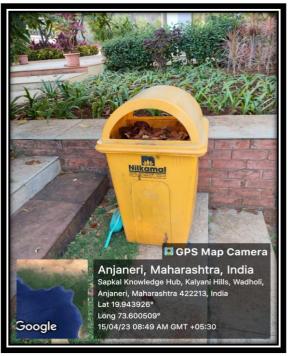
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### 4.3 Segregation of Solid Waste





**Dustbins for collection of Solid waste** 



Segregated food waste in canteen



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### 4.5. Utilization of solar power





**Solar Water Heater in the campus** 

#### 4.6. Use of Light Emitting Diode (LED)





**LED** bulbs



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#### 4.7. Transport facility

The institute has more than 25 buses & 5 passenger vehicles for transportation. The students are charged reasonably and staff members are provided free transport facility to discourage them from using their own vehicles. Institute reduces use of private vehicles by providing transportation facility.





**Bus Facility** 



## Late G. N. Sapkal College of Engineering

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#### 4.8. Use of bicycles/ Battery-powered vehicles

<u>Bicycles:</u> The institute has provided free bicycles in the campus for the residential students and staff.





Use of Bicycles in the campus



Bicycle



## Late G. N. Sapkal College of Engineering

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### 4.9. Tree plantation in the campus





Tree plantation



## Late G. N. Sapkal College of Engineering







Tree plantation

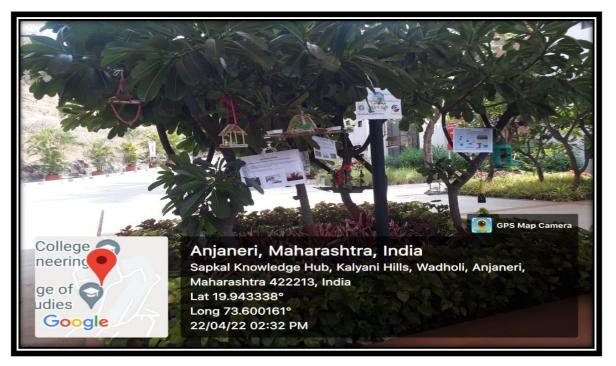


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### 4.10. Promote to Use of eco-friendly material from various activities.





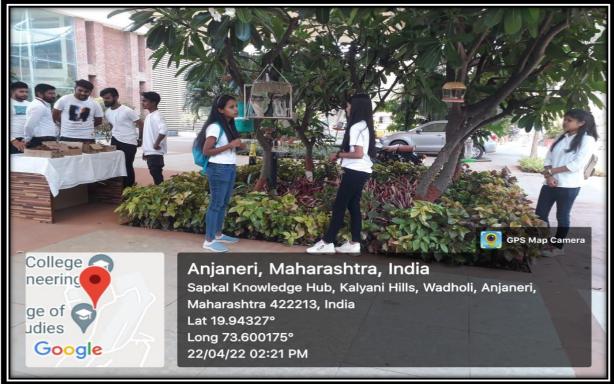
Bird feeder made by students from eco-friendly material



## Late G. N. Sapkal College of Engineering



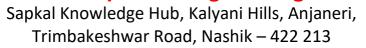




Bird feeder made by students from eco-friendly material



## Late G. N. Sapkal College of Engineering





4.11. Poster competition for Creating awareness of environmental sustainability and saving water among the students.







## Late G. N. Sapkal College of Engineering









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**Posters on Environmental Awarenes** 



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#### 4.12. Plastic free campus and Alternate Measures to minimize Use of Plastic

**Ban on use of plastic:** Instructions are displayed at various locations so that the campus remains plastic free. The institute has also designed their own paper and cotton bags and motivates the faculty and students to use them instead of plastic ones. Alternative measures of use of glassware instead of plastic in cafeteria and use of paper files instead of plastic files.





Boards of ban on use of plastic in campus

**❖** Ban on Use of Plastic- Alternate Measures



Usage of glassware instead of plastic in cafeteria



## Late G. N. Sapkal College of Engineering

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik – 422 213







Usage of Cotton Bags instead of plastic bags

#### 5. Disabled - friendly, barrier free environment

Our institute is taking an effort to enhance the healthy, disabled-friendly, and barrier free built environment of LGNSCOE.

#### The focus of our institute is on policies like:

- Provision of guiding desks for enquiry and information by human assistance, reader, scribe.
- > The design of campus with provision of facilities like ramp for disabled students.
- > Setting up the proper text and pictogram signage such fire exit, lights, notice boards and signposts.
- ➤ The use of signage of male and female symbols, in accordance with standard specifications.
- The college ensures provision of accessible, gender-sensitive, safe, usable and functionalwashroom facilities for disabled students (Divyangjan)
- Provision of wheel chair, vehicles and equipment's for employees and students as pertheir requirement.
- Scribes and additional time at the time of examination as per norms.



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#### 4.2 Ramps



Ramp for easy access Main Engineering, Admin Building



Ramp for easy access to classrooms near Mechanical and Civil engg. building



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Ramps for easy access to classrooms near Electrical Engg. Building

#### 4.3 Wheel Chairs





Wheelchair for disabled persons



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### 4.4 Disabled Friendly Washroom



#### Washroom for disabled persons

#### 4.5 Pedestrian-friendly pathways

**Pedestrian friendly pathways:** The internal roads in the campus are wide and clean, flanked with flower beds and have negligible vehicular movement.





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Pedestrian friendly pathways in the campus

4.6 Signage including tactile path, lights, display boards and signposts





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Signboards in the campus



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Signboards

#### 4.7 Enquiry and Information Desk

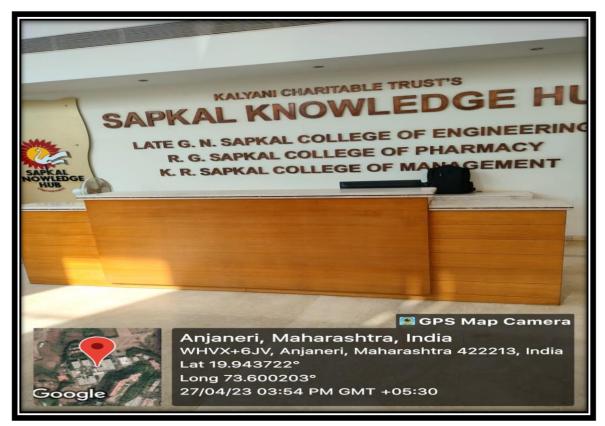


**Enquiry and Information Desk** 



## Late G. N. Sapkal College of Engineering





Reception