

# R.K. (PG.) COLLEGE SHAMLI



## GREEN AUDIT REPORT

2020-2021

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## **INTRODUCTION:**

Green audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyses environmental practices within and outside of the concerned place, which will have an impact on the eco- friendly atmosphere. Green audit is valuable means for a college to determine how and where they are using the most energy or water or other resources, the college can then consider how to implement changes and make savings. It can Create health, consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. It becomes essential to adopt the system of the green campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO<sub>2</sub> from the environment.

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an Annual Green Audit Report. It is a part of Social responsibility of the higher educational institutions to ensure that they contribute towards the reduction of global warming that they contribute towards the reduction of global warming.

## **OBJECTIVES:**

In recent time, the Green Audit of an institution has been becoming a paramount important for self assessment of the institution to know the present environmental green and clean. The main objectives of carrying out Green Audit are:

- a- To map the geographical Location of the College.
- b- To document the floral and faunal diversity of the College.
- c- To record the metrological parameter of R.K. (PG.) College is situated.
- d- To document the ambient environmental condition of weather, air, water and noise of the College.
- e- To document the waste disposal system.
- f- To estimate the energy requirement of the College.
- g- To report the expenditure on green initiatives during the last five years.

## **METHODOLOGY:**

The purpose of the Green Audit of R.K. (PG.) College is to ensure that the practices followed in the campus are in accordance with the Green policy of the country. The methodology includes collective of data, physical inspection of the campus, observation and revenue of the documentation and data analysis. Presentation of various photograph related to Green Audit.

## **ABOUT THE COLLEGE:**

R.K. (PG.) College, Shamli was established in the year 1958 with the approval of U.P.Govt. The College is affiliated to C.C.S. University, Meerut. Presently, the college runs with Agriculture facility, Science and Commerce facility. College has pollution free campus of 44258.94 sq.m. (64.8 Bigha) area and located at Shamli-Karnal on Road. It is one of the leading institutions in Agricultural Education of West U.P.

## **VISSION & MISSION VISION STATEMENT:**

### **OUR VISION:**

To evolve as an eminent centre of learning with aimed at excellence in interdisciplinary education research and innovation in order to produce socially responsible and synergetic leaders with a global profile.

### **OUR MISSION:**

R.K. (PG.) College seeks to enrich the academic experience of student to help them meet the evolving needs of society. We aspire to realise our mission as follows:

- (i) Conduct UG and PG programs to provide career focused excellence education.
- (ii) To provide interdisciplinary Graduate education programs.
- (iii) Provide good atmosphere to the students in an environment that values diversity and community.
- (iv) Provide state-of the- art facilities and effective delivery of high quality content by qualified faculty members to build the nation of lifelong learning.
- (v) Conduct various activities that create and transfer knowledge to the students.
- (vi) Create a highly successful alumni base that contributes to global society.

### **Land use Analysis of R. K. (PG.) College, Shamli:**

Land use refers to man's activities and the various uses which are carried on and derived from land. Observation of the earth from space give the information of human activities and utilization of the landscape. Satellite imagery particularly is a valuable tools for generating land use map.

### **Methodology Adopted for Land use Mapping:**

Three types of data GPS point, filed survey data and Google earth data for geo referencing have been used in the study. Land use map of the study area have been prepared using the above three data with the help of Arc Gis Pro software.


### **Data Processing and Analysis:**

Geo- coding and Geo- referencing of satellite imageries by extracting the ground control points. Ground trust data collected during field survey. Scanning and digitization of maps and editing of all the Geo referenced map were done using GIS. Creation of GIS output in the form of land use map showing various land use have been prepared.

Therefore, attempt has been made in the study to map land use for R. K. (PG.) College, Shamli, with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

### **Geographical Location with Campus map in scale:**

The college has a pollution free campus spread over 44258.945 Sq. m. (64.80 Bigha) of land in the heart of district Shamli. It has an ideal geographical location with the proximity to the important cities i.e. Meerut, M.Nagar, Saharanpur, Karnal and Panipat. The college is located at 2 Kms from shamli railway station, 65 kms from C.C.S. University, Meerut, 70 Km from Saharanpur, 40 Kms from M.Nagar, 40 Km. from Karnal and 40 Kms from Panipat. The nearest airport is New Delhi. Scaled image of College Campus is shown in Photo 1. Green color in map is representing green area. The Google aerial views of college campus have been shown in Photo 2. which are showing different college buildings.

North: 

**NOTES**  
 1. ALL DIMENSIONS AND LEVELS ARE IN METERS.  
 UNLESS OTHERWISE MENTIONED.  
 2. NORTH SHOWN ON THE DRAWING IS MAGNETIC NORTH.

**LEGEND:**

Sl. No.	Description	Symbol
01	SITE BOUNDARY	_____
02	GATE	_____
03	TBM	⊕
04	STATION	▲
05	ROAD	_____
06	BUILDING	_____

**AREA STATEMENT:-**

**TOTAL AREA**  
 TOTAL AREA IN SQ METER = 38895.2354 SQMT.  
 TOTAL AREA IN SQ YARDS = 46637.9134 SQ YARDS.  
 TOTAL AREA IN ACRE = 9.6359 ACRE.

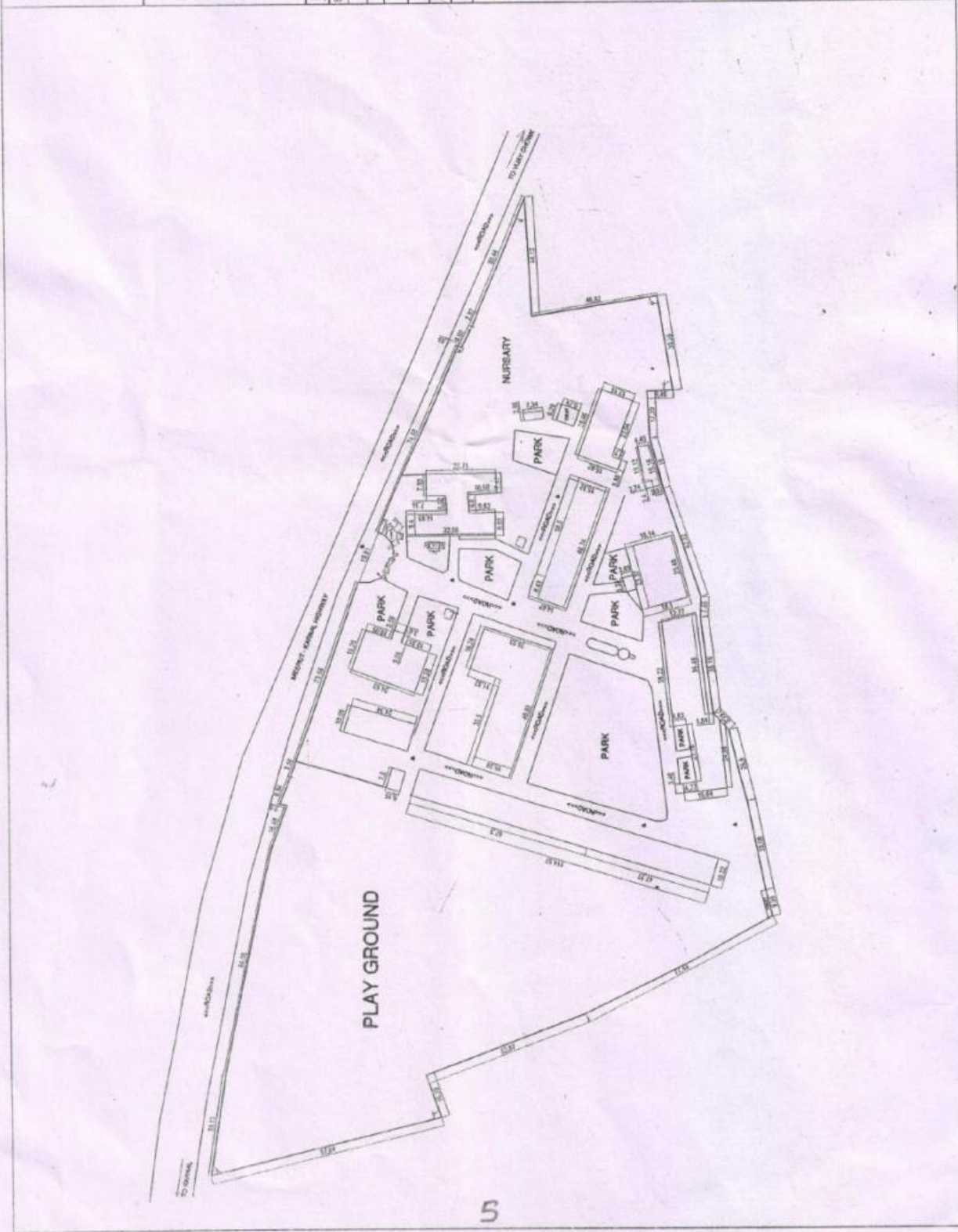
Sl. No.	Date	Description of revision	Printed By
01	15/11/2017		

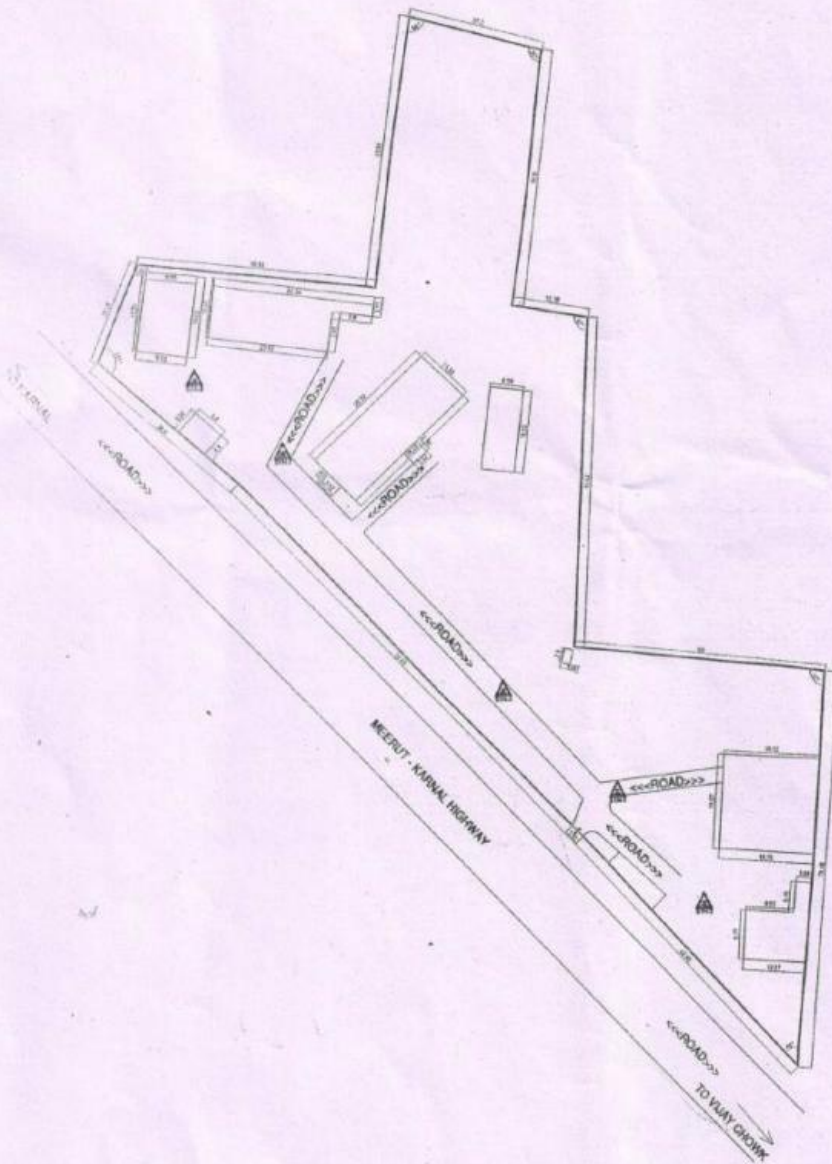
Project: Topographical Survey Plan of Academic Premises

Client: F.K. (P.G.) College, Shimla.

SURVEYOR: SINGHAL ASSOCIATES  
 SHAMLI  
 MCB-81983767030

Drawn By: GAURAV TOUCH	Checked: S.P. SINGHAL	Date: 05/22/18	Scale: 1:25
Drawn By: S.P. SINGHAL	Checked: S.P. SINGHAL	Date: 05/22/18	Scale: 1:25





North:



**NOTES**

1. ALL DIMENSIONS AND LEVELS ARE IN METERS. UNLESS OTHERWISE MENTIONED.
2. NORTH SHOWN ON THE DRAWING IS MAGNETIC NORTH.

**LEGEND:**

Sl. No.	Description	Symbol
01	SITE BOUNDRY	—
02	GATE	—
03	TBM	⊕
04	STATION	⊙
05	BUILDING	—

**AREA STATEMENT:-  
TOTAL AREA**

TOTAL AREA IN SQ METER = 9921.9376 SQMT.  
 TOTAL AREA IN SQ YARDS = 11666.5363 SQ YARDS.  
 TOTAL AREA IN ACRE = 2.451 ACRE.

SLNo.	Date	Description of revision	Prints Issued
	20.10.2017		

Project: Topographical Survey Sheet of Hostel Building

Client: F.K. (PG) College Shaml.

SURVEYOR  
**SINGHAL ASSOCIATES  
 SHAML.**  
 MOB: +919637673630

Drawn By: GAURAV TOMER	Surveyor: GAURAV	Scale: HFB
Checked: S.P. SINGHAL		
Drawing No. SB/2017/A/JULY-01	Sl. No. 1 OF 1	Rev. No. 00

R/XII-1

**R K (PG) College, SHAMLI**

*Total Built up Area*

S.No.	Name of Building	Area in Sq. Metre
1	Library old Building	182.152
2	Library attach Room	49.549
3	Library Extension Building	299.460
4	Chemistry Deptt. Gr.Floor	705.375
5	Chemistry Deptt. Ist Floor	605.620
6	Physics Deptt.	499.320
7	Physics Deptt. Ist Floor	172.800
8	Stat +Lect. Room	405.385
9	Ag. Building	785.890
10	Ag. Building Ist Floor	540.750
11	Gymnasium	241.617
12	Gymnasium Ist Floor Agro.	241.617
13	Room No. 7 & 8	406.043
14	Gas Plant Store	43.360
15	Tube well+ Generator	21.535
16	Generator Ag.Block	9.535
17	W. Hostel Gr. Floor	344.190
18	W. Hostel Ist Floor	344.190
19	Principal office By MLA	57.285
20	Old Campus Office	251.440
21	Botany New By MP	353.000
22	Guest House	151.800
23	New Lab. Chemistry	308.070
24	New Lab. Chem. Ist Floor	308.070
25	R.No. 9 & 10	210.090
26	Computer Room	183.120
27	Staff Quarter 1&2	350.200
28	Servant Quarter	106.400
29	Dairy Shed	255.950
30	Ag. Tool Shed	160.380
31	B.Com. Lect. Illrd Floor	91.966
32	In front of Room No. 9	17.875
33	Office New campus	322.710
	Total	9026.959

PRINCIPAL  
R.K.College, Shamli

7/12/16

## FINDINGS

R.K. (PG) College, which was established in the year 1958 , has an eco-friendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Plantation of various type of trees like- fruit trees, ornamental flowering and foliage trees that generate a better and sustainable campus environment. These trees are very important for our Agriculture Students also.

### **Trees Diversity of R.K. (PG) College, Shamli**

R.K. (PG) College, is located at Shamli district of U.P. It encompasses an area of about 64.80 Bigha. The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these trees species are planted in different periods of time through various plantation programmes organized by the authority and have become an integral part of the college. The tree of the college have increased the quality of life, not only the college fraternity but also the people around the college in terms of contributing to our environment by providing oxygen, improving air quality, climate conservation of water and supporting wild life. Many spices of birds are dependent on these trees mainly for food and shelter. In our college some trees are very important for medicinal uses. The college have found to be bringing down noise and cut down dust and storms. Thus, the college has been playing a significant role in maintaining the environment of the entire campus and its surrounding areas. Our trees enhance the beauty and utility. The list of various type of trees species with their total number's are listed below:-

**Table: list of tree species of R.K. (PG.) College, Shamli**

S.No.	Common Name	Botanical Name	Family	Total No.
1.	Mango	Mangifera indica	Anacardiaceae	38
2.	Jack Fruit	Arocarpus heterophyllus	Moraceae	01
3	Jamun	Syzygium cuminni	Myrtaceae	17
4.	Mulbery	Morus alba	Moraceae	02
5.	Ber	Zigiphus mauritiana	Rhamnaceae	01
6.	Aonvala	Phyllanthus emblica	Euphorbiacea	07
7.	Kadam	Anthocephalus cadmba		04
8.	Ashok Pendula	Polyalthia longifolia Var- Pendula,	Annonaceae	11
9.	Ashok	Polyalthia longifolia		02
10.	Chinesa Palm			04
11.	Bottle Brush	Callistimon lanceolatus	Myrtaceae	05
12.	Semal	Bombax Ceiba		08
13.	Sheesham	Dalbergia sissoo	Fabaceae	37
14.	Barhal	Artocurpus lakoocha	Mroaceae	01
15.	Peepal	Ficus religiosa	Moraceae	07
16	Alestonia	Alestonia Scholaris	Apcynaceae	05
17.	Bael	Aegle mormelos	Rutaceae	12
18.	Harsingar (Parjat)	Nyctanthus arbortristris		03
19.	Kachnar	Bauhinia purpuria		02
20.	Fish Tail Palm	Areca urens	Areceaceae	01
21.	Bottle Palm	Hyophorbe lagenicaulis	Areceaceae	03

22.	Silver Oak	<i>Grevillea robusta</i>	Proteaceae	07
23.	Ficus Bengamin	<i>Ficus benjamina</i>	Moraceae	10
24.	Arjun	<i>Terminalia arjuna</i>	Combretaceae	07
25.	Mohuva	<i>Madhuka longifolia</i>	Sapotaceae	03
26.	Temple Tree	<i>Plumeria alba</i>	Apocynaceae	02
27.	Tun	<i>Toona ciliata</i>	Meliaceae	07
28.	Siris	<i>Albizia lebeck</i>	Leguminaceae	10
29.	Neem	<i>Azadirachta indica</i>	Meliaceae	18
30.	Mavlshri	<i>Mimusops elengi</i>	Sapotaceae	02
31.	Kanak Champa	<i>Pterospermum accrifolium</i>		04
32.	Amaltas	<i>Cassia fistula</i>	Leguminaceae	18
33.	Sagwan	<i>Teetona grandis</i>	Lamiaceae	08
34.	Rubber Plant	<i>Ficus elastica</i>	Moraceae	01
35.	Sekta Ashok	<i>Saraca indica</i>	Fabaceae	02
36.	Kagzi Niboo	<i>Citrus aurentifolia</i>	Rutaceae	03
37.	Ingadulsis	<i>Pithecolobium dulee</i>	Leguminaceae	02
38.	Guava	<i>Psidium guajava</i>	Myrtaceae	03
39.	Bargad	<i>Ficus bengalensis</i>	Moraceae	02
40.	Agust	<i>Sisbania grandiflora</i>	Leguminaceae	02
41.	Gold Neem	<i>Delonix regia</i>	Fabaceae	01
42.	Akash Neem	<i>Millingtonia hortensis</i>	Bignonia ceae	13
43.	Clerodendron	<i>Clerodendron splendens</i>	Verbinaceae	02
44.	Bongain Vilea	<i>Bougainvillea spp.</i>	Nyctaginaceae	05
45.	Gandhraj	<i>Gardenia florida</i>	Rubiaceae	02
46.	Kamini	<i>Murraya exotica</i>	Rutaceae	01

47.	Nerium	Nerium indicum	Apocynaceae	10
48.	Hibiscus	Hibiscus rosa sinensis	Malvaceae	15
49.	Rat ki Rani	Cestrum nocturnum	Solanaceae	03
50.	Pride of India	Lagerstroemia flobreginae	Lythraceae	03
51.	Sanwani	Lagerstroemia spp.	Lytharaceae	15
52.	Tecoma	Tecoma stans	Bignoniaceae	06
53.	Chandnee	Tabernaemontana montanacoronaria	Apocynaceae	05
54.	Cassia Biflora	Cassia grandis	Leguminosae	06
	<b>Total</b>			<b>360</b>

CERTIFICATE OF GREEN AUDIT

This is to certified that the list of tree species shows in table for green audit at R K (PG) College, Shamli campus are found accordingly. I would like to thanks college authority for significant role in maintaining the good environmental condition within the college campus and outside the surrounding area.

1  
24/08/2020  
जिला उद्यान अधिकारी  
शामली











## Faunal Diversity in R.K. (PG.) College, Campus

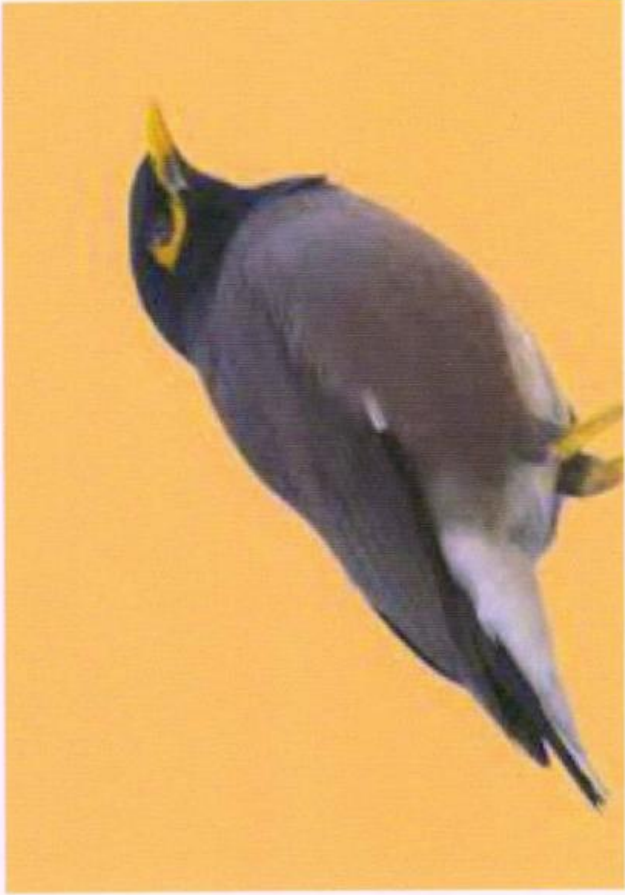
R.K. (PG.) College is located in Shamli distt. of U.P. The highest temperature is recorded 35<sup>0</sup>C – 40<sup>0</sup>C just prior to the onset of monsoon (around May-June) Summer rain is normal, and is principally caused from late June to August by the moisture- laden south – west monsoon. The climate condition of R.K. (PG.) college is very suitable for a wide variedly of flora and fauna to support its rich biodiversity. The faunal diversity of R.K. (PG.) College has been studied and documented as below:

Table Common and scientific names of Birds and Animals.

S.No.	Common Name	Scientific Name
1	Little owl	Athene brama
2	House Crow	Corvas splendens
3	Common Myna	Acridotheres tritstis
4	Parrot	Prittacula enpatria
5	House sparrow	Passer domesticus
6	Snake	Naja naja
7	Butter fly	Danaus genutia
8	Common woodshrike	Tepnrodornis pondicerianus
9	Skylark	Aluda gulgula
10	Red vented bulbul	Pycnonotus cafer
11	Oleander Moth	Syntomedida epilais
12	Pigeon	Colunba livia
13	Squirrel	Funambulus palmarum
14	Monkey	Macaca munita
15	Shrinking Bird	



PARROT



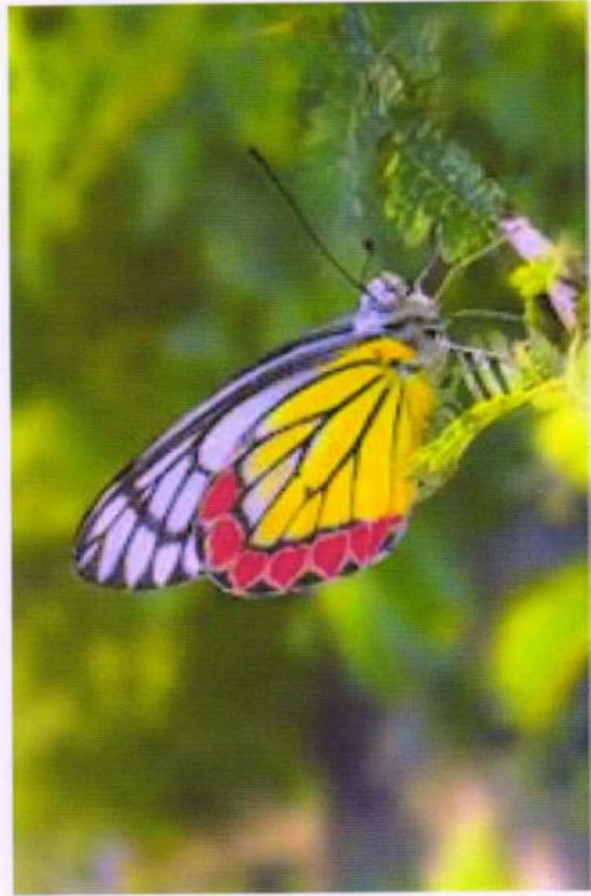
MYNA



PIGEON



OWL



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BUTTER FLY



SPARROW



SHRINKING BIRD

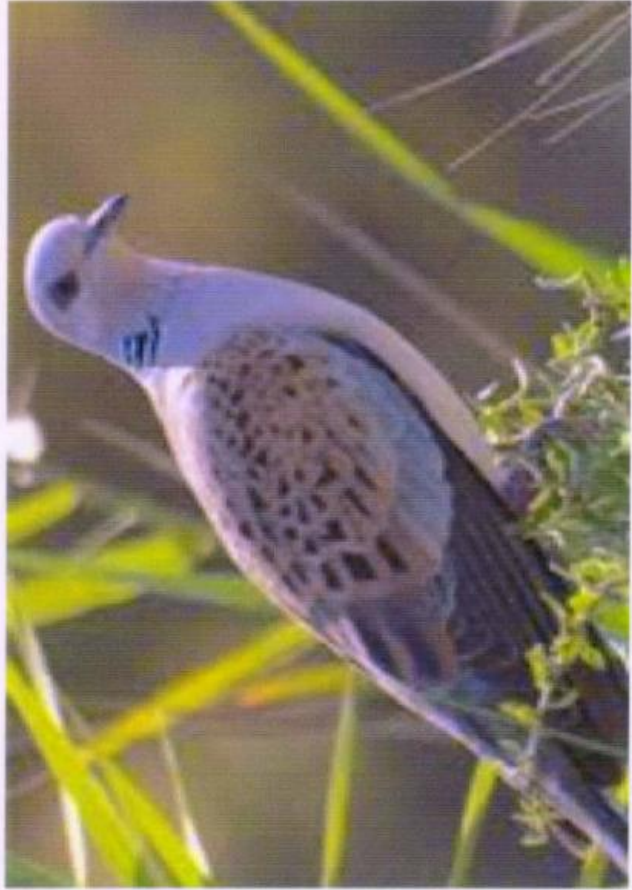




MONKEY



CROW



PENDUK



SQUAIRREL



**Skylark**



**Red Vented Bulbul**



**Gleaner Moth**



**Common Wood Shrike**

### Land use Data of R. K. (PG.) College, Shamli

Categories of land use	Area (m <sup>2</sup> )
Plantation Area	35231.986 sq.m.
Built -up Area	9026.959 sq.m.
Total Area	44258.945 sq. m.

### Land Use (Built Up) Analysis.

The built up area 9026.959 sq.m. consists of the following regions as stated below for land consumption in built-up area of R. K. (PG.) College, Shamli.

Administrative blocks Gymnasium, Library, Physics Department, Botany Department, Agriculture Block, Chemistry Department, Lecture rooms, Science Lecture rooms, Agriculture block, Dairy cattle shade, Work shop, Girls Hostels and Playground.

### Weather Data of R. K. (PG.) College, Shamli

The Climate of R. K. (PG.) College, Shamli is warm and temperate. The climate condition bear a strong resemblance with the other cities in the Northern part of India. The summers are prevalent during the month's of April to the September August till mid September being the hottest months. The winter is prevalent from the month of November till the month of March. The summers are usually very hot and the winter are very cold. The geographical Co- ordinate of R. K. (PG.) College, are very cold. The geographical co-ordinate of R. K. (PG.) College are ... $29.45^{\circ}$  N, .... $77.32$ ....  $^{\circ}$ E . The city has an average altitude of ... $833$ ... feet or  $254$ .... Meters from the average sea level. The land of shamli are best suitable for Mango, guava, Jamun and citrus fruits cultivation. The land is more viable for sugar cane and wheat cultivation. The variation in temperatures throughout the year is  $20.3^{\circ}$ C

### Weather Data Month wise of R. K. (PG.) College

Temp. / Month	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temp. (°C)	13.4	16.3	20.2	26.3	32.3	34.6	30.2	28.5	28	24.8	18.2	14.6
Min. Temp (°C)	6.6	8.5	12.5	18	21.2	24.6	25.2	25.6	24.5	16.2	10.2	7.9
Max. Temp (°C)	20.2	2.6	27	32.7	40.5	41.2	35.1	34.5	34.2	32.6	28	22.6
r												
Rain Fall (mm)	32	24	24	5	10	32	25.2	160	138	32	4	10

### Air Quality in R. K. (PG.) College, Shamli :

The ambient air quality data for R. K. (PG.) College for the last one year shows that there are very less polluted particles in ambient air, AQI for SO<sub>2</sub> & NO<sub>x</sub> parameters are within the range of Indian living standards, there are number of factors responsible for the cleanliness, calmness and the serenity in this area. In this are more trees have been planted as compared to other cities. A very beautiful greenery and variety of trees is situated in the campus. Due to the movement of heavy vehicular traffic on Shamli Karnal road the air quality of R. K. (PG.) College in between moderate to rich quality state.



# Newcon Consultants & Laboratories

An ISO 9001 : 2015, ISO 14001 : 2015, OHSAS 18001 : 2007 Certified Laboratory  
NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accredited Laboratory,



Website : [www.newconlab.in](http://www.newconlab.in)

## TEST CERTIFICATE

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Page 1 Of 1

TEST REPORT NO : NCL/RKP/5941/024/25/09-2020

DATE OF REPORT : 29-09-2020

Name And Address Of Customer

R.K.PG COLLEGE  
KARNAL ROAD , SHAMLI,UTTAR PRADESH, INDIA

#### SAMPLING DETAIL

Analysis Start Date	25/09/2020	Analysis End Date	29/09/2020
Date Of Sampling	24/09/2020	Sampling Done By	NCL
Time Of Sampling	10:50	24/09/2020 To	18:50 24/09/2020
Sampling Location	NEAR MAIN GATE		
Sampling Protocol	IS:5182(PART-5) AS PER CPCB GUIDELINES		
Sample Flow Rate For SPM(Average)	1.12 mtr <sup>3</sup> /min	Sampling Machine Placed At Height (From Ground)	1.6 mtr
Sample Flow Rate For Gas	1.0 LPM	Sample Duration	8.0 Hrs
Equipments Used	RDS APM-460,411 (S.No.55-DTH-1997 & 588-DTI-1997), .		

#### PHYSICAL OBSERVATIONS

Ambient Temperature	28°C	Wind Direction	West To East
Weather Condition	Cloudy		

#### TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Specification/ Limit (As Per CPCB)
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS:5182 Part 23	78	For 24 Hrs=100
2	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS:5182 (Part 2)	17	For 24 hrs= 80
3	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS:5182 (Part 10)	0.25	For 08 Hrs= 02 For 01 Hrs=04
4	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS:5182 (Part 6)	24	For 24 hrs=80

\*\*\*\* End Of Report\*\*\*\*

FOR NEWCON CONSULTANTS & LABORATORIES

**INTEKHAB KHAN**  
M.Sc. (Environmental Science)

CHECKED BY



PREPARED BY



AUTHORIZED SIGNATURE

NOTE: That the Test Report is prepared only for the Tested parameters only. Endorsement of the same is neither intended nor signed. TO ANY disputes subject to GHAZIABAD JURISDICTION. 3. The Report shall not be reproduced except in full without the permission of MANAGING PARTNER. 4. Our liability is limited to invoiced value only.

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E-mail : [info@newconlab.in](mailto:info@newconlab.in), [newconlab@gmail.com](mailto:newconlab@gmail.com), [accounts@newconlab.in](mailto:accounts@newconlab.in)

## Air Quality Determination

Satisfactory air quality index on September 2020.

Parameter	Result Range
NO <sub>2</sub>	24 ug/m <sup>3</sup> , AQI 26 very good
SO <sub>2</sub>	17 ug/m <sup>3</sup>
O <sub>3</sub>	31.49 ug/m <sup>2</sup> , AQI 31 good
PM 2.5	28.14 ug/m <sup>2</sup> , AQI 28 good
PM 10	78 ug/m <sup>3</sup> , AQI 79 satisfactory
CO	0.25 mg/m <sup>3</sup>
Humidity	56.0%
Barometric pressure	1014 millibar or hpa
Wind Speed	10-15 m/s
Wind Direction	28.0012 degrees west to east
Ambient Temperature	28 <sup>0</sup> C
Weather Condition	Cloudy

## WATER ANALYSIS REPORT OF R. K. (PG.) COLLEGE

Water quality testing is important because it identifies contaminants and prevents water borne diseases. Drinking or using contaminated water can cause severe illness or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and viruses. The parameters for water quality are determined by the intended use. Water quality tend to be focused on water that is treated for human consumption, or in the environment. Our college provide cool and clean water to the students by big water purifying machine. (Auro)

Drinking water Indicators :

The following is a list of indicators of ten measured by situational category-

Alkalinity

Colaur of Water

Odour

Taste

PH value

Total hardness

Total dissolved Solids (TDS)



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NABL ISO/IEC 17025 : 2017 (Testing, Cert. No. TC-5526) Accredited Laboratory.



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## TEST CERTIFICATE

### WATER SAMPLE ANALYSIS REPORT

(ESSENTIAL TEST AS PER IS:10500)

Page 1 Of 1

TEST REPORT NO : NCL/RKP/5941/023/25/09-2020

DATE OF REPORT : 29-09-2020

Name And Address Of Customer

R.K.PG COLLEGE

KARNAL ROAD , SHAMLI, UTTAR PRADESH, INDIA

#### SAMPLING DETAILS

Analysis Start Date	25/09/2020	Analysis End Date	29/09/2020
Date of Sampling	24/09/2020	Sampling ID No.	023/25/09/20
Time of Sampling	12:40		
Sampling Done By	CUSTOMER		
Sampling Description	DRINKING WATER		
Sampling Location	WATER COOLER		
Sampling Protocol	IS:3025(Part-I)	Sampling Quantity	Two Lt
Packing Condition	Sealed	Packed In	PVC BOTTLE

#### TEST RESULT

S.No.	Parameter	Unit	Protocol	Result	Drinking Water Standards / Limit (IS :10500)	
					Desirable Limit	Permissible Limit
1	Colour	HZN	APHA-2120 (C)	<5.0	5 max	15 max
2	Odour	--	IS:3025 (P-5)	Agreeable	Agreeable	Agreeable
3	Taste	--	IS:3025 (P-8)	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	APHA-2130 (B)	<1.0	1 max.	5 max
5	pH	--	APHA-4500 (H+B)	7.15	6.5-8.5	No Relaxation
6	Total Hardness	mg/L	APHA-2340 (C)	72	200 max	600 max.
7	Iron (Fe)	mg/L	APHA-3111 (B)	0.12	1.0 max.	No Relaxation
8	Chloride (Cl)	mg/L	APHA-4500 (B)	43	250 max	1000 max
9	Residual free Chlorine	mg/L	APHA-4500 (B)	<0.2	0.2 min.	1
10	Sulphates (SO4)	mg/L	APHA-4500 (C)	32.5	200 max	400 max
11	Total Alkalinity	mg/L	APHA-2320 (B)	81.5	200 max	600 max
12	Fluoride (F)	mg/L	APHA-4500(F)	0.10	1.0 max.	1.5 max.
13	Total dissolved Solids (TDS)	mg/L	APHA-2540 (C)	246	500 max	2000 max
14	Total Coliform	MPN/100ml	IS:1622-1981	Not Detected	Not Detectable	Not Detectable
15	E.coli	/100 mL	IS:1622-1981	Not Detected	Not Detectable	Not Detectable

\*\*\*\* End Of Report\*\*\*\*

FOR NEWCON CONSULTANTS & LABORATORIES

**INTEKHAB KHAN**  
M.Sc. (Analytical Science)

CHECKED BY

PREPARED BY

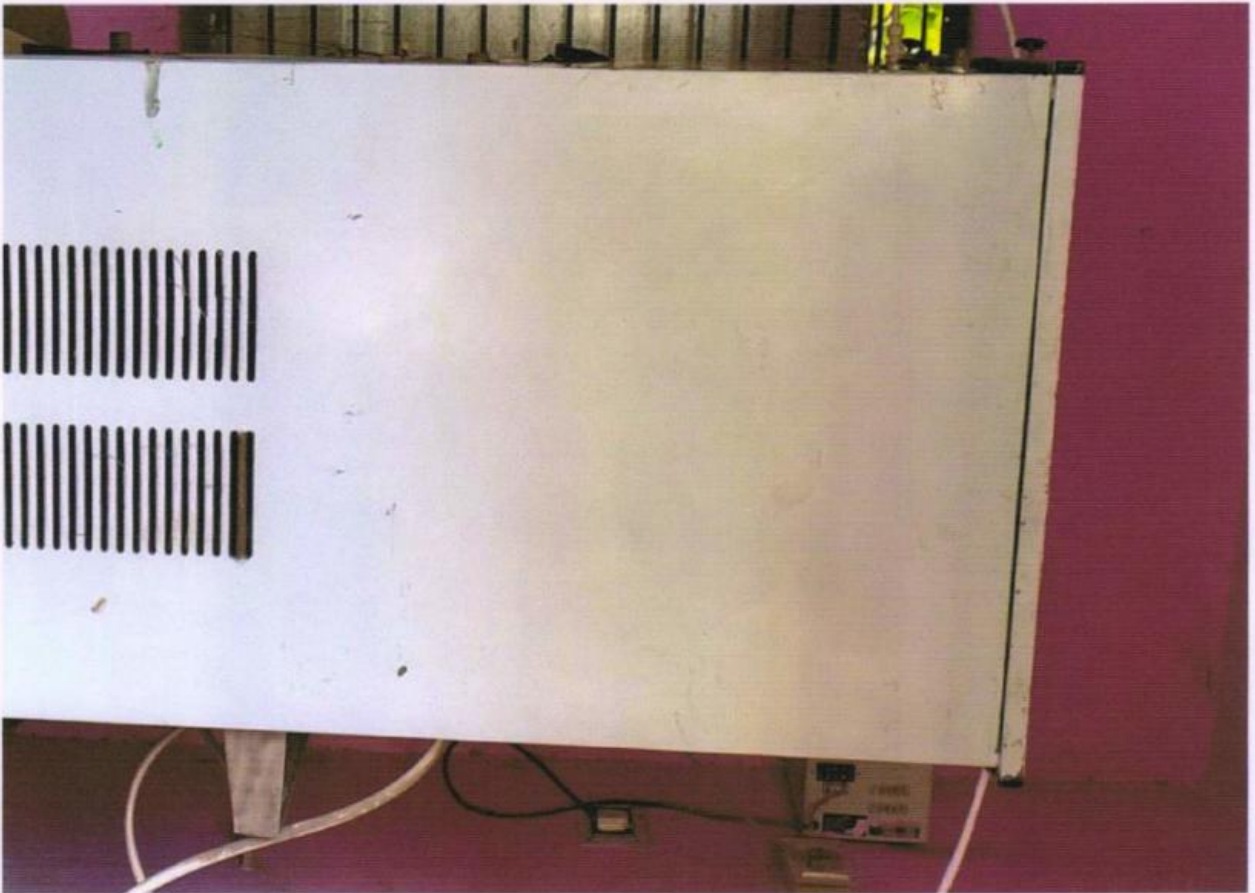
AUTHORIZED SIGNATORY

NOTE : 1. The Results reported above pertains to the tested parameters only. Endorsement of the same is neither inferred nor implied. 2. All disputes subject to GHAZIABAD JURISDICTION. 3. The Report shall not be reproduced except in full without the permission of MANAGING PARTNER. 4. Our liability is limited to invoiced value only.

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Mobile : 9810430345, 8744051920 | Website : [www.newconlab.in](http://www.newconlab.in)

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Dissolved metals and salts (Sodium, Chloride, potassium, calcium, manganese)

Micro organisms such as feed coliform bacteria and viruses.

Dissolved metals and metalloids (Lead, Mercury, arsenic ect)

Dissolved organic - dissolved organic matter (CDOM),

- Dissolved organic carbon (DOC)

Heavy Metals.

Noise Level in the Surrounding of R.K. (PG.) College Shamli.

There are two basic properties of sound- Loudness and frequency. Loudness is the strength of sensation of sound perceived by the individual. It is measured in terms of Decibels. Normal conversation about 35-60 db heavy traffic 60 dB, Boiler factoris 120 db, Jet planes during take off is about 150 db, rocket engine about 180 dB The loudest sount a person can stand without much safely regarded as pollutant as it harms hearing system. The WHO has fixed 45 dB as the safe noise level up to 65 db is considered tolerate. Loudness is also expressed in Sones. One some equals the loudness of 40 dB sound pressure at 1000 HZ. Frequency is defined as number of vibration per second. It is denoted as Hertz (HZ).

Materials, Study Area and Method.

Noise level mete or noise measuring app, noise test pro was used to measure the noise level. Noise test pro deteet of any noise or sound in your surroundings. It will tell you maximum, minimum and average decibels.

Noise Test

The highest dB - 60 dB

The Average dB - 52 dB

The Lowest dB - 26 dB

Measurement Procedure

The Noise was recorded at the different important location of R.K. (PG.) College Shamli. At each spot, the measurement were taken for 60 seconds during day time and noted down the measurement. Screen shots of the measurements of noise were taken immediately on the app at the time of 60<sup>th</sup> second of each measurement.

#### Results

Table 1- Measurement of Noise in and around R.K. (PG.) College Shamli.

Place	Measurement (Duration in Sec.)	Minimum (dBA)	Maximum (dBA)	Average (dBA)
Principal Office	60	35	75	65
College Front Gate	60	60	78	71
Library		50	82	62
Gymnasium	60	65	85	76
Lecture Theator Science	60	59	77	65
Lecture Theator Agriculture	60	53	75	71
Auditorium	60	53	72	68
Botany Department	60	52	75	67
Physics Department	60	64	78	65
Staff Quarter	60	50	71	65

#### WASTE DISPOSAL OF R.K. (PG.) College Shamli.

Waste disposal are the activities and action required to manage waste. It includes the collection, transport, treatment and disposal of waste.

The waste from all around the college is daily early in the morning disposed by two sweepers. Organic waste such as dry leaves, grasses etc are utilized be quality organic manure that can be used as soil amendment and source of plant nutrients.



Waste management is helping to achieve 'Green and clean Campus' a higher level of environment. By reusing or recycling we are contributing to the conservation of natural resources, saving energy, helping to protect the environment R.K. (PG.) College adopts environment friendly practices and takes necessary actions such as – energy conservation, waste recycling and production waster are **proceed** as organic manure for the plants available in college campus.

#### ELECTURICAL POWER CONSUMPTION AT R.K. (PG.) COLLEGE SHAMLI:

R.K. (PG.) College consumes on an average 583 kw-hr (units) of electricity which turn out to be 60998 kw-hr per year only to maintain its volumetric activities. Throughout the year. The authority keeps on replacing the old filament bulbs, CFL bulbs and tube lights by low energy consuming Led bulbs and LED tubes and bulky high power consuming fans by energy efficient fans in order to keep the electricity consumption of the college as low as possible. The college has installed solar panels on the roof of Commerce and Zoology deptt. The energy from this solar installation is helping offset the college's day time peak electricity demand from the grid. College with the installation of 40 KW solar rooftop plant in collaboration with M/s Amperellus PVt. Ltd. Delhi was able to offset 54% of its energy usage from the state grid thus moving towards a made reliable and greener option and reducing its carbon footprint.

Percentage of annual power requirement of the college met by the renewable energy sources

Response -54 %

Annual Power requirement met by the renewable energy sources (in KWH)

Response - 60998 Units

Total annual power requirement (in KWH)

Response - Average 583 units



Power requirements met by renewable energy source	Total Power requirement	Renewable energy sources	Renewable energy generated and used	Energy supplied to the grid
60998 from Grid	60998 Units	Solar 40 KW	100%	NIL
KWH/ year	KWH/ Year	Solar		

Percentage of annual power requirements met through LED bulbs

Response - 50 %

Annual lighting power requirement met through LED bulbs (inKWH)

Response -

Annual lighting power requirement (excluding LED) in KWH

Response -

Total annual Lighting power requirement


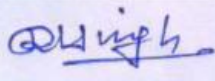
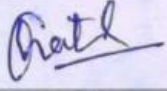
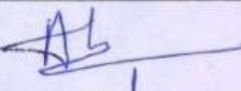
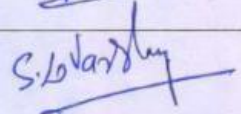
KWH

Total Requirements	Lighting	Percentage through LED Bulbs	Lighting	Percentage lighting through other sources
		50%		50%

#### Expenditure on Green Initiatives during the last five years:

Financial year	Tree Plantation (Amounts Rs.)	Gardening & Beautification (Amount in Rs.)	Purchase of LED's (Amount in Rs.)	Total Amount (in Rs.)
2016-17	6165	47812	4083	58060
2017-18	28024	60069	782	88875
2018-19	32936	23495	4775	61206
2019-20	12810	47370	5264	65444
2020-21	4200	11200	880	16280

### Internal Green Audit Committee :-

S.N.	Name	Department	Signature
1	Dr. Arvind Kumar	Principal R.K. (P.G.) College, Shamli	
2	Prof. R.P. Singh	HOD Horticulture Deptt.	
3	Dr. C.B. Patel	HOD Botany Deptt.	
4	Dr. Ajay Kumar	HOD Ag. Engineering Deptt.	
5	Prof. Shrikant Varshney	HOD Zoology Deptt.	

### External Green Audit Committee :-

S.N.	Name	Department	Signature
1	Dr. Harit Kumar	DHO Shamli	
2	Sh. S.K. Sirohi	Incharge, Govt. Fruit Preservation Centre, Shamli	
3	Dr. Rakesh Sejwal	Department of Botany V.S. Pathik Govt. (P.G.) College, Kairana	