



NEW HORIZON PUBLIC SCHOOL

Nature Science Internship Program

October 28th 2017

OUR TEAM

ADITYA
JAGGAT
JAISURYA
JOSHUA
PRISHA
SHAKTI
SHREYA
SOHAN
TEJASVI





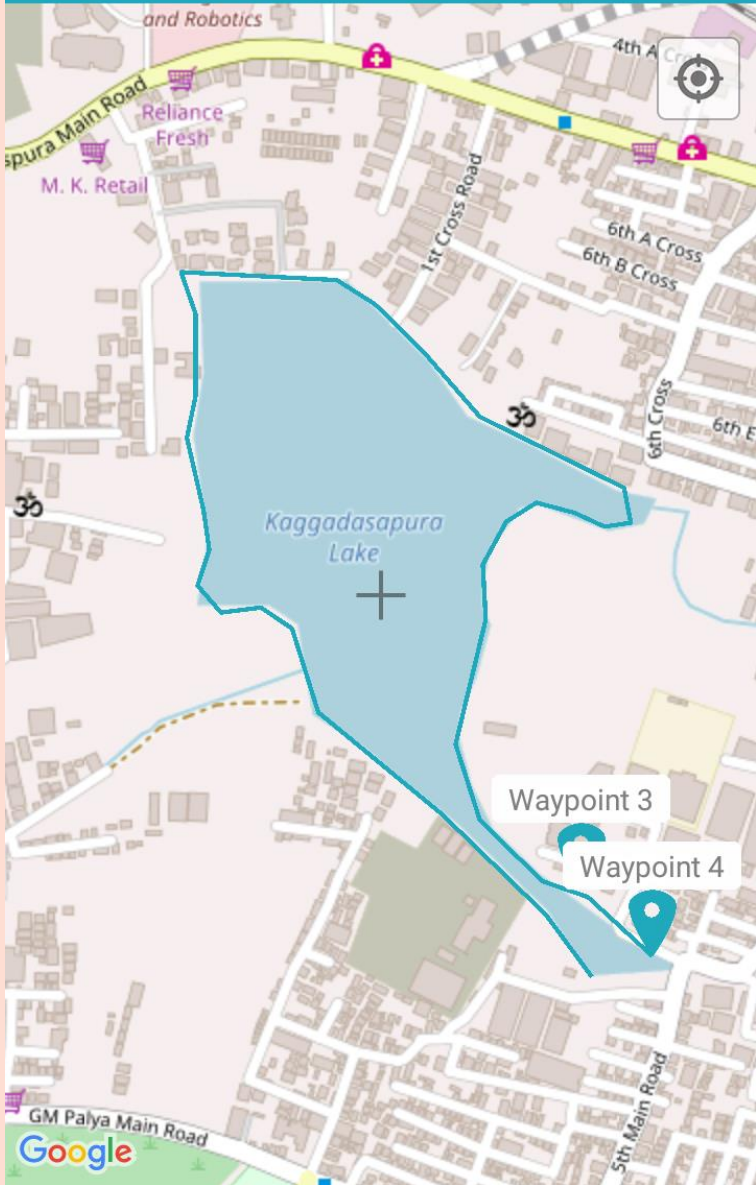
STUDY AREA

1. KAGGADASPURA LAKE

2. UTTKARSH PARK NEAR

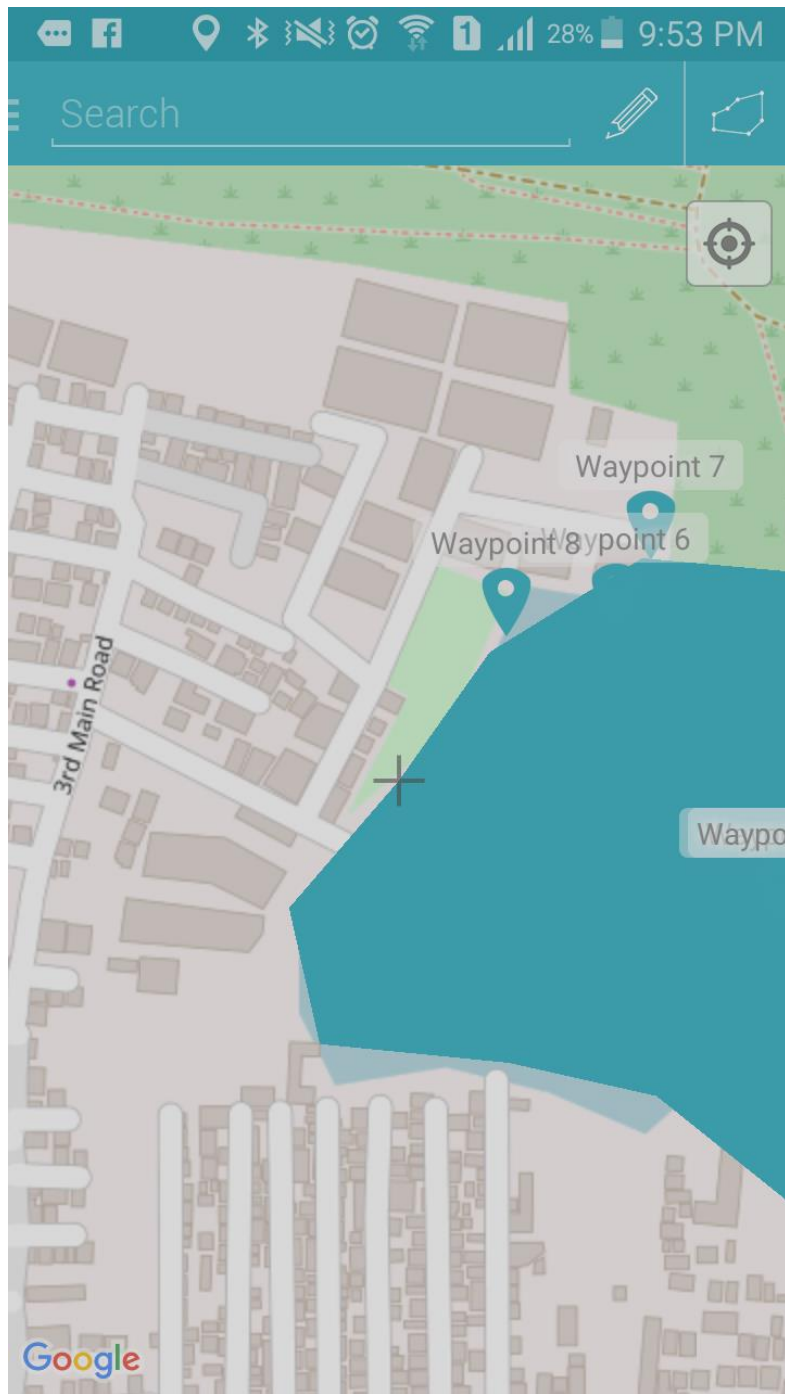
VIBUTHINAGAR/ L.B SHASTRI NAGAR LAKE






KAGGADASPURA LAKE

AREA-32 ACRES




UTTKARSH PARK

A screenshot of a mobile application interface. At the top, there is a teal header bar. Below it is a navigation bar with four icons: a green location pin, a green square with a white location pin, a blue 'X', and a blue arrow. The main content area has a light gray background. It displays the following information:

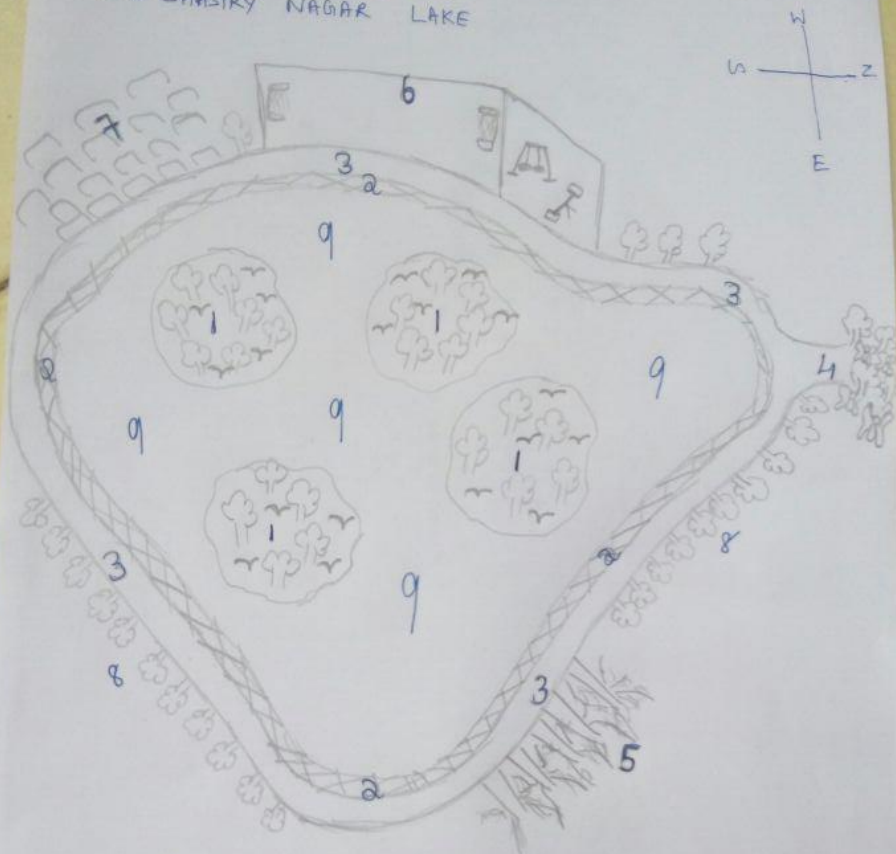
	Latitude	<input type="text" value="12.9678496"/>
	Longitude	<input type="text" value="77.67654441"/>

Pictures





CRUDE STUDY MAP OF
L.B. SHASTRY NAGAR LAKE



1 = Islands with large variety of birds

2 = Fenced gate

3 = PATHWAY TO WALK

4 = ENTRY TO BUTTERFLY PARK

5 = EUCALYPTUS GROVE

6 = PARK TO PLAY (UTKARSH PARK)

7 = SLUM AREA

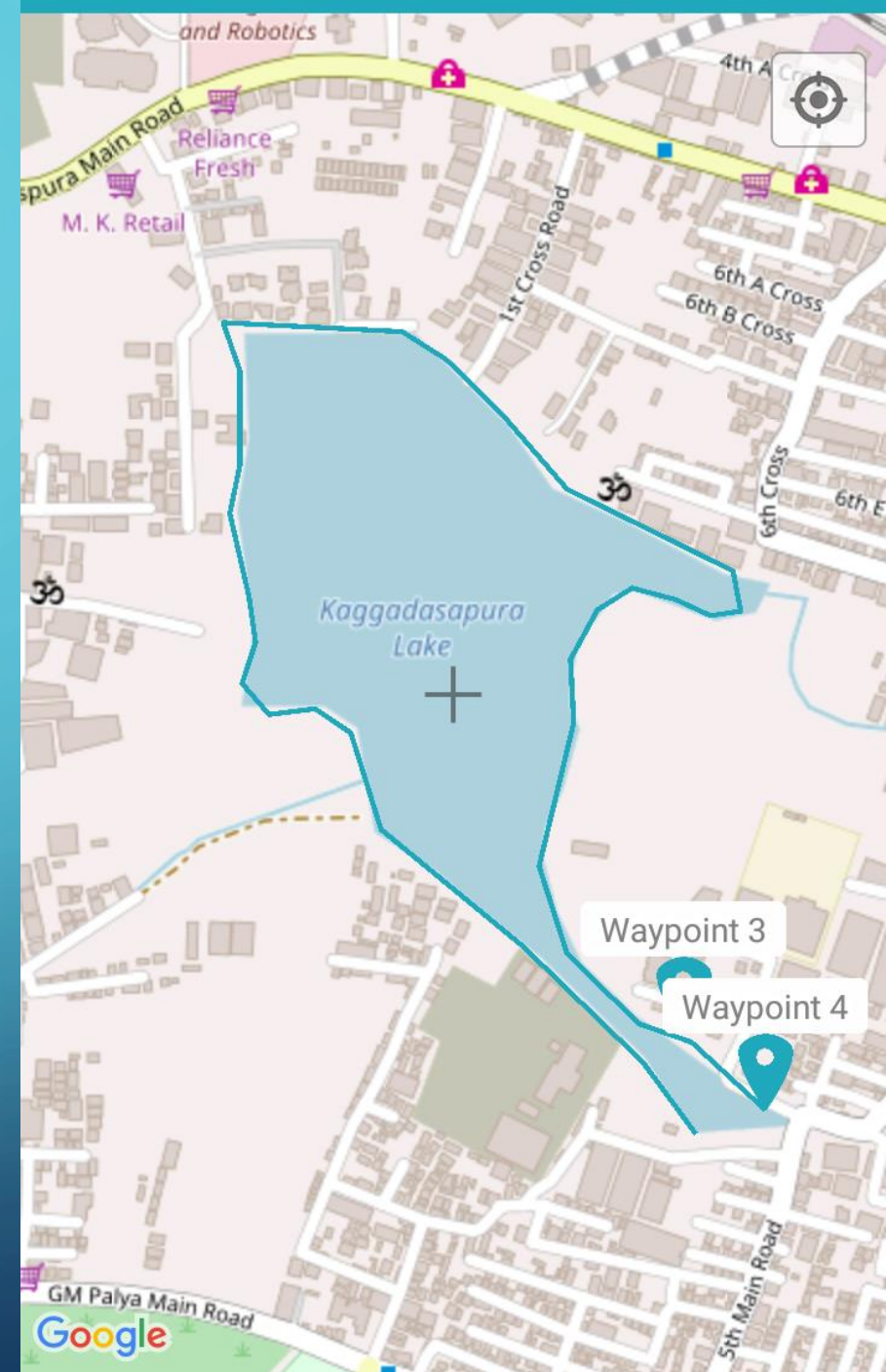
8 = MIXED VAREITY OF TREES

9 = WATER

HAND DRAWN MAP

WATER ANALYSIS

WATER FROM KAGGADASPURA
LAKE



WATER ANALYSIS :DISSOLVED OXYGEN

DATE OF TEST-AUGUST 26

INLET WATER:

- Amount of dissolved Oxygen : 4.0652 mg/ml
- Inference : heavily polluted
- pH- 7
- Temperature-24 ° C

OUTLET WATER:

- Amount of dissolved Oxygen : 5.3 mg/ml
- Inference : moderately polluted
- pH- 7
- Temperature-22 ° C

Water in the inlets is heavily polluted as sewage is pumped

In but in the outlets the water is being cleaned.



ON GOING CLEANING OF LAKE



MICRO-ORGANISMS IN THE WATER





SAVE THE LAKE.....NHPS AND KAGGADASPURA LAKE



SOIL ANALYSIS



UTKARSH PARK SOIL

LAT - 12.96824821

LONG - 77.67724648

The painful week on the greens as he continued to miss short putts and missed the cut at the Northern Trust, the opening Cup Playoffs event on the tour.

Lahiri, who has been having lot of problems on the green in Europe, added a four-over 74 to his round 73 and crashed out of the tournament.

Lahiri totaled nine-over 149 as he fell at two-over on the 36th hole. Lahiri missed a dozen putts inside 12 feet and a large number of them were eight feet and some three-footers.

After missing the cut, Lahiri reeled in the second Play-offs event at the Northern Trust, Technologies and he will get a good result to stay on the tour and the Tour Champions for which only the Top 10 qualify.

While Dustin Johnson (65) and Rickie Fowler (68-66), Jordan Spieth (65) and Jhonattan Vegas (65) and Jhonattan Vegas are in a four-way share of the lead at six-under.

Johnson made a couple of birdies and Fowler caught up with him from nine itself.

Kuchar looked like he might miss the cut until his caddie encouraged him to try to get back to even par.

Kuchar ran off four straight birdies and kept right on rolling, ending his round of 64 with eight birdies on the last 10 holes. Kuchar and two-time Masters champion Bubba Watson (69) are one shot out of the lead.

Watson is at No. 113 in the FedEx Cup, and only the top 100 advance to the next round.

JORDAN SPIETH RIDES HOT PUTTER

Jordan Spieth caught fire on the greens as he seized a share of the half-way lead at the Northern Trust, the first tournament in the US PGA Tour's FedEx Cup playoffs.

Spieth's seven birdies in a row from the 10th to the 14th — six in all on the 14th — a five-under par 65 that put him in a six-under total of 134.

He led a group of four shared the lead that also included world number one Dustin Johnson, Venezuela's Jhonattan Vegas and Rickie Fowler.

Vegas also posted a 65, nabbing five birdies without a bogey. Fowler carded a 66 and Johnson posted a one-under 69 on the Glen Oaks Club.



Photo: AFP

Johnson, whose opening round 65 put him one off the overnight lead, was three-under through 12 holes and eight-under for the tournament before errant tee shots led to back-to-back late bogeys.

After this week's advance to the Dell Technologies Championship next week, Jon Rahm (69) was two shots behind along with Justin Rose (68) and Russell Henley (72).

Seventy players made the cut at two-over par. Among those missing the cut was Hideki Matsuyama, the No. 1 seed going into the FedEx Cup Playoffs, who three-putted the last hole and missed by one.

FIFA U-17 WC host city logo launched

The host city logo of Guwahati for the up-coming FIFA U-17 World Cup was launched on Monday.

The logo, which is a blend of the region and complements the current FIFA U-17 World Cup India 2017 Official Emblem.



Photo: AFP

Joshna wins her 15th Natl crown

Joshna Chinappa cruised to her 15th women's singles title while Saurav Ghosal won his 11th men's title.

Chinappa's main rival and longtime teammate, Palika, had pulled out of the tournament at last minute due to an ankle strain.

Later in the day, Ghosal got the better of Mungsook in a closely-contested final with the final scoreline reading 11-6, 11-13, 11-9, 11-6 in favour of the Kolkata man.

It was the second year in a row that squash nationals offered equal prize money with eventual winners receiving ₹ 1.5 lakh each.



Photo: AFP

Tournament was a little over ₹ 11 lakh

Chinappa and Ghosal, the flagbearers of Indian squash for the past decade, were stretched in the finals by Lakshya Ravendran and Mahesh Mangonkar respectively before getting home in four games.

Top seed Chinappa, who had lost to Dipika Pallikal in the final last year, regained the trophy with a 11-6, 11-13, 11-9, 11-6 victory over Ravendran. The World No 14 is now one shy of equalling Bhuvneshwari Kumar's record

NATIONAL SQUASH CHAMPIONSHIP



Photo: AFP

Day for India at World Boxing Championships

India were off to a restart at the 19th World Boxing Championships with contrasting ambury.

Welterweight Anshu Kumar (49kg) and middleweight Anshu Khatri (56kg), both debutants at the mega event, were the only Indians in the late evening session.

Khatri had the continuity moving into the earlier session.

Silver medalist Amit Kumar took the ring and slow start to edge out Jericho Serra in a split verdict.



Photo: AFP

The 21-year-old from Haryana, competing in the biggest tournament of his career, was rather sluggish in the opening round, allowing his rival easy shots.

However, he showed a slumber in the second round with some hooks and straight punches.

In fact, Amit made pace by rival quite in closing three minutes, perhaps tilted the scales in his favour.

"This is my first senior tournament. I turned out to be happy with the performance," Amit, whose biggest achievement so far has been a bronze medal he won earlier this year, said after his fight.

2018 WC workers



The 2018 World Cup workers are seen at a construction site in the East. When the battle finally ended, the wrecked city of Stalingrad held a football match, marking the first hopes of a return to normal life.

The effects of the war can still be seen in the East. When the battle finally ended, the wrecked city of Stalingrad held a football match, marking the first hopes of a return to normal life.

RENAULT COMEBACK: RENAULT HAVE ALL ANSWERS

Renault have answered questions about Robert Kubica's Formula One comeback and may give their weather van in their car before next



Photo: AFP

DETAILS

- Sample taken - 8th Sept Friday 6:03 pm
- Sample tested - 9th Sept Saturday 9:10 am
- Colour - Mild Brown
- Texture – Coarse ; Medium
- Particle size – 0.475 mm to 2 mm
- Weight – 75 g
- pH - 7

FIELD DENSITY

- Volume of sample - $\pi r^2 h = 257.27 \text{ cm}^3$
- Field Density = Mass of Sample \div Volume
 $= 75 \div 257.27 = 0.2915 \text{ g/cc}$

...s. It's about
of fair.

SIMPLY SPORTS

n leads in Canada, seeking nd run of near-misses



In ge of South Korea
ed her second consec-
four under 6ft to move
in the weakened after
the Canadian Pacific
open in Ottawa.
one shot off the lead
son.
"It
sday's opening round.
rries against one bo-
me to eight under 134
ngins.
but lead over a trio of perfom-
s - Mo Martin, Brit-
seven C
come and first round
to win.

**ITF fines Hong
Kong for refusing
to play in Pakistan**

The International Tennis Federation (ITF) has fined Hong Kong \$150,000 for refusing to play in Pakistan. The federation has also fined the Hong Kong Tennis Association \$100,000 for refusing to play in Pakistan. The federation has also fined the Hong Kong Tennis Association \$100,000 for refusing to play in Pakistan. The federation has also fined the Hong Kong Tennis Association \$100,000 for refusing to play in Pakistan.



U-17 WC host ogo launched

city bag of Guwahati for the up-
FIFA Under-17 World Cup was on
y launched by Assam Chief Min-
anda Sonowal in Guwahati.



excasion even more special was
the start of the Trophy Es-
tari and Sonowal also un-
World Cup Winner's Tro-
vision, Sonowal said.

Jo...s her 15th Natl crown

Jo...s her 15th women's sin-
gles title while Suroor
Ghosh secured his 12 men's
singles crown at the ICL Na-
tional Squash Championship
that concluded in Greater
Noida on Saturday.

■ The total prize
money of the
tournament was a
little over ₹ 11 lakh

Chinnappa and Ghosh, the
flagbearers of Indian squash
for the past decade, were
stretched in the finals by Lak-
shya Ravindran and Mahesh
Mangrulkar respectively be-
fore getting home in four
games.

Top seed Chinnappa, who
had lost to Dipika Pallikal in
the final last year, regained
the trophy with a 11-6-11-11-
3-11-4 victory over Ravin-
dra.



NATIONAL SQUASH CHAMPIONSHIP



of 16 national titles.
Chinnappa's men's rival
and longtime teammate Pal-
likal had pulled out of the
tournament at last minute
due to an ankle strain.
Later in the day, Ghosh
got the better of Mangrulkar
in a closely-contested final
with the final scoreline re-
ading 11-6, 11-8, 11-6, 11-4 in
favour of the Indian man.
It was the second year in
a row that the national
champion...

BULK DENSITY

- Mass of Dried Soil – 50 g
- Bulk Density – Mass of Dried Soil ÷ Volume
$$= 50 \div 257.27 = 0.1943 \text{ g/cc}$$
- Water content : $75 - 50 = 25 \text{ g}$
- Water content % : $25 \div 75 \times 100 = 33.33\%$

BUTTERFLY AREA SOIL

LAT – 12.96824821

LONG – 77.67724648



There are two concentric circular tracks of radii 100 metres and 102 metres respectively. A runner runs on the inner track and goes around the track in 1 minute and 30 seconds; while B runs on the outer track in 1 minute 32 seconds. Who runs faster?

A. A runs faster
B. B runs faster
C. Both run at equal speed
D. None of these

The representation of a statistical data by a symbol is known as

A. Pictograph
B. Pictograph
C. Piechart
D. Bargraph

The smallest number by which 72 must be multiplied to obtain

A. 2
B. 3
C. 5
D. 7

Q.4) If the radius of a circle is 7cm and its total surface area is 154 cm². The height of the cylinder is

A. 22cm
B. 11cm
C. 14cm
D. 10cm

Q.5) The interest on a sum of money is Rs. 1000 annually. To the nearest rupee, the interest will be earned in 1 year if the rate of interest is 10%.

A. 10000
B. 1000
C. 100
D. 10

A) A runs faster (2) B) Pictograph (3)

EDGE

Q.5) Name the inventor of the modern day bicycle.

A. Penny-farthing
B. Horse cart
C. Dandy horse
D. Tricycle

Q.6) The 10th World Hindi Conference was held in ...

A. Maharashtra
B. Madhya Pradesh
C. Gujarat
D. Haryana

Q.7) Name the ingeniously made surface-to-air missile system that was developed by the Indian agency, DRDO.

A. Akash
B. Agni
C. Prithvi
D. Samudra

ANSWERS

Q.1) B) Alfred Nobel
Q.2) A) Indonesia
Q.3) A) Prakash

KNOWLEDGE BANK

Queen Alexandra's Birdwing butterfly is the largest butterfly in the world with a wingspan of 20 cm.

COMMON GRAMMATICAL MISTAKES

1. ACTIVE/ACTIVITY

THE RULES:

- "Active" expresses an action or state of being.
- "Activity" expresses a specific use, action, etc.

HOW NOT TO DO IT:

- The school conducted many active for its students.

HOW TO DO IT PROPERLY:

- The school conducted many activities for its students.
- He was an active young man.
- You can participate in any activity.

2. FUSE/FUSION

THE RULES:

- "Fuse" is a verb, which means, to combine or blend by melting together; melt.
- "Fusion" is a noun, which means, the act or process of fusing; the state of being fused.

HOW NOT TO DO IT:

- The two parts were fusion together.
- The play was a fuse of different genres.

LAUGH OUT LOUD

■ Father: What did you do today to help your mother?
Son: I washed the dishes.
Father: How did you wash them?
Son: I helped pick up the pieces.
Father: How did you help pick up the pieces?
Son: I stood on my head the blood.
Father: How did you stand on your head?
Son: I didn't wash to my feet. Why is this?
Father: It's because your feet aren't empty.

■ Q: Why did the man throw a bucket of water out of the window? A: He wanted to see the waterfall.
■ Q: Why did the man throw the butter out of the window? A: He wanted to see the butterfly.
■ Q: What do maps and fish have in common? A: Scales.



ANSWERS TO SUDDOKU

1	2	3	4	5	6	7	8	9
2	3	4	5	6	7	8	9	1
3	4	5	6	7	8	9	1	2
4	5	6	7	8	9	1	2	3
5	6	7	8	9	1	2	3	4
6	7	8	9	1	2	3	4	5
7	8	9	1	2	3	4	5	6
8	9	1	2	3	4	5	6	7
9	1	2	3	4	5	6	7	8

JUMBLED WOP JS

1) coencom
A: ecnomic
B: cperce
C: cobic
D: commere

INDIA SHINING

Chaitya
A chaitya is a Buddhist shrine or prayer hall with a stupa at one end. Chaityas were probably constructed to hold large numbers of devotees and to provide shelter for them. Early chaityas, such as the Bijak ki Pahadi of Viratnagar adjoining it, the more spectacular and more numerous chaityas, however, were cut into living rock as caves.

LITTLE-KNOWN LEGACIES THAT HAVE WITHSTOOD THE RAVAGES OF TIME

built as standing structures with the stupa being surrounded by a colonnaded processional path enclosed by an outer wall with a congregation hall



THEY SAID IT MISCELLANEOUS



Perfection is not attainable, but if we chase perfection we can catch excellence.
- Vince Lombardi



Put your heart, mind, and soul into even your smallest acts. This is the secret of success.
- Swami Sivananda



The roots of education are bitter, but the fruit is sweet.
- Aristotle



Word Watch

Examples:

- India is trying to maintain good relations with its neighbouring countries.
- The new partners of the



Vocabulary Builder

- heavy balles
- 4) Pejorative
- pedantic
- accurate assessment

DETAILS

- Sample taken - 8th Sept Friday 6:10 pm
- Sample tested - 9th Sept Saturday 9:22 am
- Colour – Dark Brown
- Texture – Fine ; Clay
- Particle size – <0.002mm
- Weight – 760 g
- pH - 7

FIELD DENSITY

- Volume of sample = 257.27 cm^3
- Field Density = Mass of Sample \div Volume
 $= 760 \div 257.27 = 2.95 \text{ g/cc}$



BULK DENSITY

- Weight of Dried Soil – 50 g
- Bulk Density = Mass of Dried Soil ÷ Volume
$$= 50 \div 257.27 = 0.1943 \text{ g/cc}$$
- Water content : $760 - 50 = 710 \text{ g}$
- Water content % : $710 \div 760 \times 100 = 93.42\%$



BIODIVERSITY



Purple heron
Ardea purpurea poliocephalus
Swampy marshy area
Sitting
Single
Slender bird with dark plumage, yellow orangish red long legs
Lines on the side of face and neck



Purple swamp hen
Porphyrio porphyrio
Among weeds in damp areas
Sitting
Single
purplish hem like bird with
beak



Black drongo

Dicrurus macrocercus

In the midst of tall trees

Sitting

Glossy black plumage, forked tail, slightly
in the region below

Puffed up to protect from the cold and drizzle.



red vented bulbul

Pycnonotus cafer

Open forest area

Sitting

slight red mark

the tail.



White throated kingfisher
Halcyon smyrnensis
Near marshy wet areas on trees
trees
Sitting
Single
White throat brown body and blue wings
wings



Black kite
Milvus migrans
soar high in the sky or perch on tall
trees
Sitting
Single
short sharp beak and claws, narrow
wings



Spotted dove

Spilopelia chinensis

Scarce vegetation like short grass and trees

Sitting

Pair

grey coloured bird with spots all over its body

below its eyes

White cheeked barbet

psilopogon virdis

on top of tall trees

Sitting

single

green bird with a white stripe

BUTTERFLIES



Common name : Blue
pansy

Scientific name :

Junonia orithya

Order : Lepidoptera

Class : Insecta



**Common name : pale grass
blue**

**Scientific name: Zizina
labradus**

Order : Lepidoptera



**Common name : Angled
castor**

**Scientific name : Ariadne
ariadne**

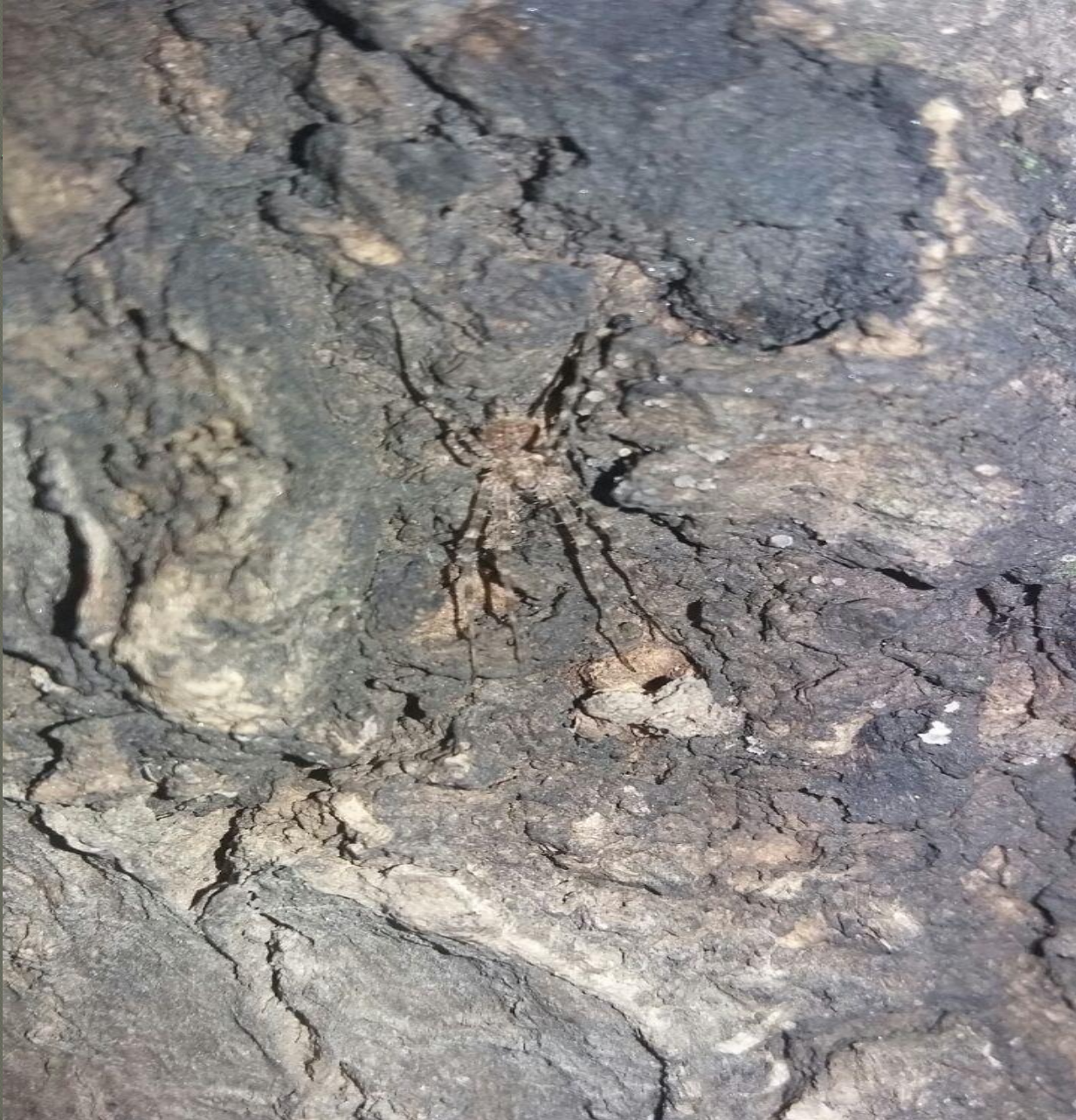


Common name : Common
indian crow

Scientific name : Euploea
core

Order : Lepidoptera





Common name :
Mostly – Grass spider
Scientific name –
family : Agelenidae
Order : Araneae
Class : Arachnida



Common name : Lappet moth
caterpillar





SOCIAL SPIDER

TREE STUDY



Honge Tree



Indian Fig Tree







Malabar Nut



Hibiscus syrcius



Wild Water Lemon



Euphoria



Touch Me Not



Crown Flower

CARBON FOOTPRINT

**ENERGY
CONSUMPTION
&
PAPER
CONSUMPTION**

ENERGY CONSUMPTION

ENERGY CONSUMPTION FOR THE MONTH OF JULY

- ◉ *Total amount paid:*
-Rs.112867
- ◉ *Per unit rate:*
-Rs.5.98
- ◉ *Total units consumed:*
 $112867 / 5.98 = 18874.08027 \text{ kWh}$
- ◉ *Carbon dioxide emission factor*
 $18874.08027 * 1.56 = 29443.56522 \text{ Kg}$
 $= 29.44356522 \text{ ton}$

ENERGY CONSUMPTION FOR THE MONTH OF AUGUST

- ◉ *Total amount paid:*
-Rs.104892
- ◉ *Per unit rate:*
-Rs.5.98
- ◉ *Total units consumed:*
 $104892 / 5.98 = 17540.4682 \text{ kWh}$
- ◉ *Carbon dioxide emission factor:*
 $17540.4682 * 1.56 = 27363.1304 \text{ Kg}$
 $= 27.3631304 \text{ Ton}$

ENERGY CONSUMPTION FOR THE MONTH OF SEPTEMBER

◉ *Total amount paid:*

-Rs.100035

◉ *Per unit rate:*

-Rs.5.98

◉ *Total units consumed:*

$$10035 / 5.98 = 16728.26087 \text{ kWh}$$

◉ *Carbon dioxide emission factor*

$$16728.26087 * 1.56 = 26096.08696 \text{ Kg}$$
$$= 26.09608696 \text{ ton}$$

PAPER CONSUMPTION

PAPER CONSUMPTION (5th– 8th)

- ◉ *Weight Of 1 Paper:*
 - 31.65 gm.
- ◉ *Total No. Of Classes:*
 - 20 (5th – 8th)

$$31.65 * 35 = 1107.75 \text{ (Avg. of student)}$$

$$1107.75 * 5 = 5538.75 \text{ (No. of section)}$$

$$5538.75 * 4 = 22155 \text{ (No. of standards)}$$

$$22155 \text{ gm.} = 2.2155 \text{ kg.}$$

PAPER CONSUMPTION (9th– 10th)

- Weight Of 1 Paper:

 - 31.65 gm.

- Total No. Of Classes:

 - 8 (5th – 8th)

$31.65 * 35 = 1107.75$ (Avg. of student)

$1107.75 * 4 = 4431$ (No. of section)

$4431 * 2 = 8862$ (No. of standards)

$8862 \text{ gm.} = 8.862 \text{ kg.}$

PAPER CONSUMPTION (TOTAL)

◉ *Total (Adding 5th - 8th & 9th - 10th)*

$$2.2155 + 8.862 = 31.017$$

◉ *CO₂ Emission*

$$31.017 * 2.9 = 89.9493 \text{ kg}$$
$$= 0.0899493 \text{ ton}$$

FUTURE PLAN

- TO DOCUMENT THE GARBAGE DUMP POINTS IN OUR STUDY AREA.
- TO FIND OUT THE ENVIRONMENTAL LITERACY RATE IN OUR NEIGHBOURHOOD.
- TO DOCUMENT THE TYPES OF TEXTILES ,THEIR USAGE, THE KNOWLEGDE OF CLOTH FIBRE LIFE CYCLE AMONG PEOPLE.
- TO VISIT A LOOM.
- TO CONSOLIDATE CARBON FOOTPRINT AND FOOD MILE DATA.
- TO CONTINUE WITH SOIL AND WATER SAMPLING AND BIODIVERSITY STUDIES.

FOOD MILE & CARBON FOOTPRINT

VEGETARIAN FOOD

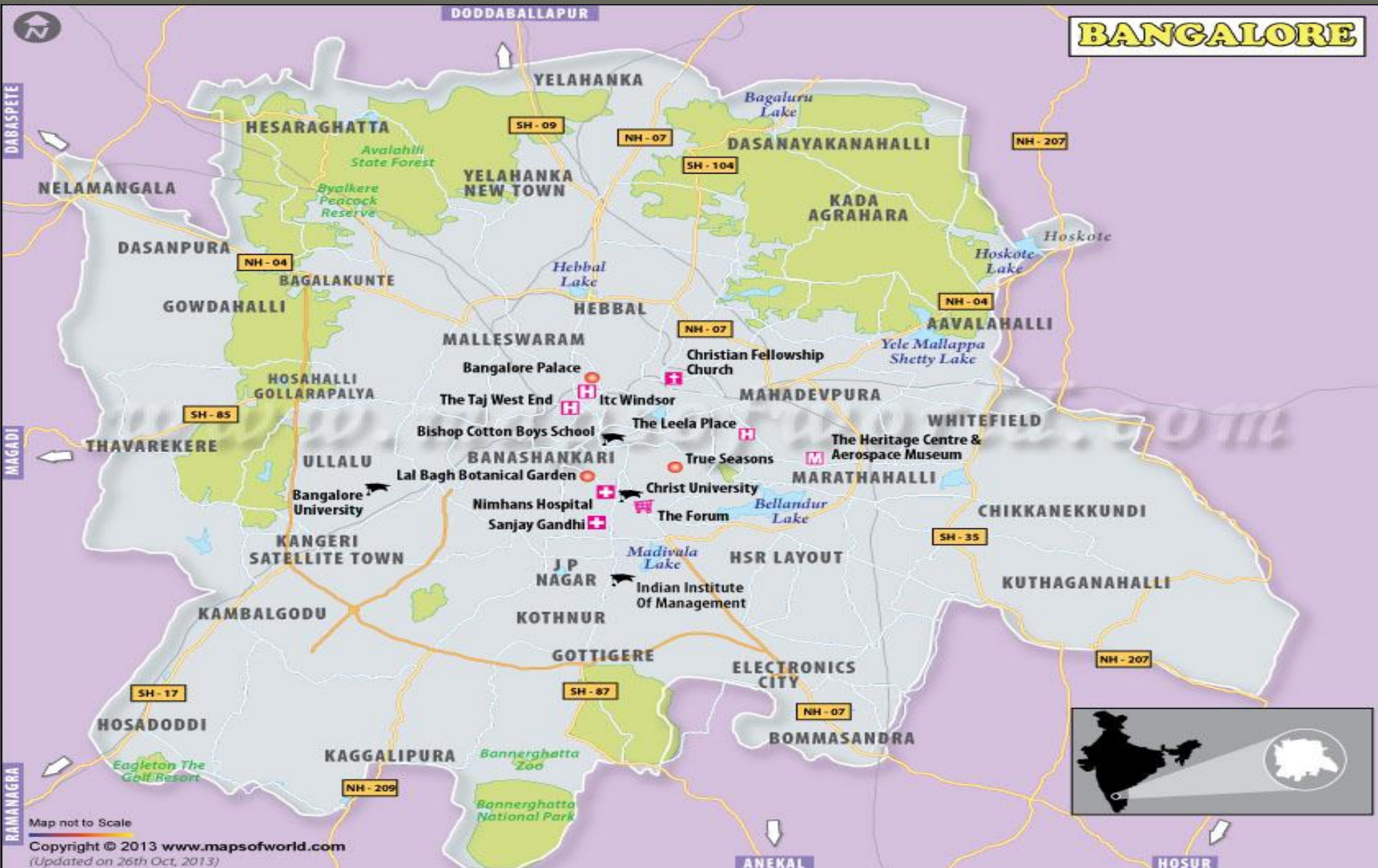
ITEM NAME	PLACE	DISTANCE	RATE IN RUPPEES	CO ₂ e
COCONUT	HOSUR	39.4 km	Rs. 25 – 35 / piece	0.01063
CHILLI	BELLARY	311.2 km	Rs. 100 – 110 / kg	0.0840
POMEGRANATE	BAGALKOT	530.3 km	Rs. 120 – 190 / kg	0.1431
TOMATO	MALAPPURAM	344.7 km	Rs. 20 – 35 / kg	0.0930
EGGPLANT	BASTAR	1124.2 km	Rs. 30 – 45 / kg	0.3035

CARROT	KODAIKANAL	465 km	Rs. 70 – 85 / kg	0.1255
CAULIFLOWER	HOSKOTE	27.3 km	Rs. 30 – 40 / piece	0.0073
LADY'S FINGER	RAJAHMUNDRY	799.5 km	Rs. 35 – 40 / kg	0.2158
POTATO	HOSKOTE	27.3 km	Rs. 30 – 35 / kg	0.0073

NON – VEGETARIAN FOOD

ITEM	PLACE	DISTANCE	RATE	CO ₂ e
FISH	KASIMEDU FISHING HARBOUR	353.6 km	Rs. 800 – 1000 / kg	0.0954
CHICKEN (BONE)	LOCAL POULTRY FARM IN MYSORE	150 km	Rs. 200 – 220 / kg	0.0405
CHICKEN (BONELESS)	LOCAL POULTRY FARM IN MYSORE	150 km	Rs. 240 – 300 / kg	0.0405
MUTTON	KAIWARA SHEEP FARM	75 km	Rs. 400 -450 / kg	0.02025
CRAB	KOLLAM	676 km	Rs. 800 – 1400 /kg	0.1825

BANGALORE



Map not to Scale
 Copyright © 2013 www.mapsofworld.com
 (Updated on 26th Oct, 2013)

National Highway	Major Road	Shopping Center	Hospital	Hotel	Tourist Place	Educational Inst.
Other Road	Railway	Church	Museum	Vegetation	Waterbody	



Thank
You!

