



All the best for your exam!

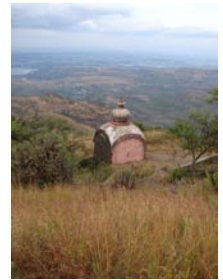


Today's attraction: Sinhagadh Fort, Pune-Heritage Walk

You must be looking forward to an opportunity to explore Pune! So here's a little to get you geared up for the experiences awaiting you! As you travel to Sinhagadh fort, you will have some glimpses of Pune.

Indian roads are crowded with pedestrians of all ages, vehicles, vendors, and occasionally even dogs or cows. Elephants are not a usual sight here! Pune was once a quiet city, a city of bicyclists, ideal for retired pensioners. Today the motorbikes with their speed and roar, dominate the roads. Notice how two-wheelers zig-zig through the gaps in the maze of traffic, while the drivers of the city's public transport buses skillfully negotiate even the narrowest of lanes. You may be tempted to ride in the three-wheeler 'Auto Rickshaw'! If you pass any statues, ask your guides for the name and legacy. They may know!

We are sure you will notice this and much more! And these places might remind you of something back home. We would love to hear from you of what you enjoyed on the excursion, and of things that reminded you of something from your town or country. Do 'write to us' students, and we'll try to share it with everyone in the next issue of Vigyan Beats. Leaders can mail us at vigyan.beats@gmail.com.



Today @ IJSO

Theory exam - Scientific activity - Village haat (market) - Dinner with leaders

Scientific activity venue: Shiv Chhatrapati Sports Complex

- Participation in scientific activity is voluntary. You can take home what you make.
- In the evening, you will meet your team leaders at hotel VITS.
- Village haat @ Hotel VITS. Exhibition of pottery, body art, sale of artefacts; music and dance. Shop using Indian currency.
- Wearing identity card is **COMPULSORY** for dinner at the Village Haat (VITS)



Sinhagadh trip / Pune-Heritage walk - Village haat (market) - Dinner with students - IB meeting

- Drive to foothills of a Sahyadri mountain, drive up in jeeps to the 400 year old Sinhagadh fortress and return to hotel Marriott for lunch in Meeting Room, 1 floor.
- Join students for Village haat and Dinner @ Hotel VITS.
- Exhibition of pottery, body art, sale of artefacts, music and dance. Shop using Indian currency.
- Wearing identity card is **COMPULSORY** for dinner at the Village Haat (VITS)
- Breakfast on 8th December at Sabha.



Ganga water is considered to be both pure and purifying. But over the years, this holiest of rivers has borne the load of pilgrims, and has been used for disposal of dead bodies, sewage and industrial wastes. The river is home to dwindling numbers of marsh crocodiles, gangetic dolphins and the critically endangered Gharial (crocodilian family).

The Gangetic plains boast of almost 12 species of fresh water turtles, many of which are vulnerable, threatened or endangered, despite high regard for these in Hindu mythology. The kachua (turtle) wildlife sanctuary was established in Varanasi district to conserve these turtles, the natural scavengers that help clean up the Ganga.

Winters in the open grassy plains of this region are typically mild, dry, foggy and short, while summers may be long and hot, and the monsoons bring plenty of rain. One of the most fertile lands in the country, the flat and mostly treeless Gangetic plains support one of the most populous areas on Earth. The main crops grown here are rice and wheat, apart from maize, sugarcane and cotton. Together with the Indus plains, called the Indo-gangetic plains, the region contributes to nearly 13% of India's total area, and produces close to half the country's total food grains that feeds about 40% of its population!



The region is best known for its fine silk saris and brocades with gold and silver thread work. Other local specialities include hand-knotted Mirzapur carpets, rugs, brass and copper ware, wooden and clay toys, and musical instruments. The Jantar Mantar observatory, presumed to have been set up in 1737 AD, has a sundial which allows for measurements to be monitored and recorded.



Write to us

FINDING THE CONNECTION: There are ten wires that run underground across a river. Thus on each of the banks, there are ten ends of the wires. Unfortunately, given an end of a wire on this bank, one doesn't know which end on the other bank it corresponds to. Suppose that you an ohmmeter and a bunch of wires. (You can then, for example, connect two ends on side A of the river, and go to the side B and measure the resistance between every pair of ends to figure out which pair on side B corresponds to the pair that is connected on side A). What is the minimum number of crossings you need to make in order to figure out the matching ends of all the ten wires?

Image source: Saravask, Linuxerist, Rursus, Chris, Manducus, orvalrochefort, Prasad Madho, Ashish Bhatnagar, Dainis Matisons, Patrick87, Siddharthkapil, Valadrem from commons.wikimedia.org., Vikrant Ghanekar, Anil Sankhwar and Praveen Pathak. Special thanks to Tejaswi N. for today's 'write to us' puzzle.

Editorial team

Chitra Natarajan, Geetanjali Date, Manoj Nair, Adithi Muralidhar,
Rafikh Shaikh, Shraddha Ghumre.

Snapshots



discussion session before the experimental examination



just get up and dance



the rook & the bishop



potato, potahto



off to GMRT



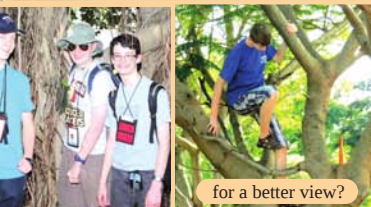
mixed signal



catch it or drop it...



@ GMRT



for a better view?



the ninjas



the astronomical ferris wheel

Happy Birthday
Makorokoto

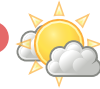


Daniel Pascoe
(Zimbabwe)

Today's weather

Sunrise: 06.54AM

Sunset: 05.58PM



Max Temp: 29° C

Min Temp: 13° C

Sky condition would be clear

Source: www.imdpune.gov.in

GRAFFITI SPECIAL



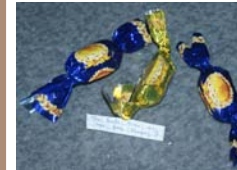
A KEEN EYE
So do you pay
attention to details?

"A child gives birth to a mother"

Who is the author of this phrase?

If you have been a keen observer, you might already know where to "look" for the answer. This is an individual exercise, so no team efforts on this one! Drop your answers in the box at the Help Desk. Correct answers will be eligible for a lucky draw!

Keep watching this space for more such activities. Keep your eyes and ears open, observe, talk and share. You may end up winning cool prizes!



Yesterday morning the Vigyan Beats Team (like many others) woke up to a "sweet" surprise! Special thanks to Team Hungary!



Sketch by our in-house artist Manoj Nair

Student Speak (on yesterday's Think Think question)

Wind, temperature, sub-tropical high air pressure are factors that influence formation of sand dunes.
-Lin Po-Han and Chiu Yu-Pin of Chinese Taipei

Zoom In

Gangetic Plains and the oldest "living" city of India: Varanasi



The Ganges river originates in the Himalayas, and flows an astounding 2525 km south-west into the Bay of Bengal.

In the city of Varanasi, the Ganga, as it is called, turns northward for a small stretch. The crescent shaped city that has grown around this arc of Ganga's flow is one of the oldest continuously inhabited cities in the world. Often referred to as the spiritual capital of India, Varanasi has a rich natural heritage.

It is a Hindu pilgrimage place, and is also historically linked to Islam and Buddhism.

