

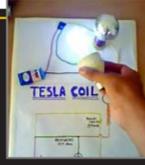


# THE TIMES OF INDIA

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TODAY'S EDITION

Have you heard about Tesla coil? Know more about this wonderful invention as a student explains its working principle  
**PAGE 2**



Learn how author Rick Riordan can inspire you in more than one ways with his works  
**PAGE 3**



Liverpool's 25-game unbeaten run comes to an end  
**PAGE 4**



STUDENT EDITION  
TUESDAY, NOVEMBER 9, 2021



Former external affairs minister Sushma Swaraj awarded Padma Vibhushan



Former external affairs minister Sushma Swaraj was conferred with the Padma Vibhushan award posthumously on Monday. President Ram Nath Kovind presented the Padma Awards in the Rashtrapati Bhawan. Sushma Swaraj's daughter Bansuri Swaraj received the award on her behalf. Sushma Swaraj served as a minister in all the governments headed by Atal Bihari Vajpayee and held various portfolios. She was the external affairs minister in the previous BJP-led government and was the first woman CM of Delhi for a brief period

The Padma Awards are one of the highest civilian honours of India announced annually on the eve of Republic Day  
The Awards are given in three categories: Padma Vibhushan (for exceptional and distinguished service), Padma Bhushan (distinguished service of higher order) and Padma Shri (distinguished service)

CLICK HERE: PAGE 1 AND 2

## TOP 3 BUZZ OF THE DAY

### ENVIRONMENT

#### Climate clock reset shows the world is a year closer to 1.5 C warming

Global carbon dioxide emissions are expected to increase to almost 2019 levels this year, upending last year's unprecedented drop caused by Covid-19 lockdowns. This means that emissions are trending upwards again, when they should be in rapid decline if we are to meet the goal of limiting global warming to 1.5 C above pre-industrial levels. The Climate Clock created in 2015 shows how quickly we are approaching 1.5 C, the lower limit of the Paris Agreement global temperature goal and a consequential threshold for climate impacts.



The clock tracks global emissions and temperature data, and uses the most recent five-year emissions trend to estimate how much time is left until global warming reaches the 1.5 C threshold. The new estimate of 2021 emissions removes almost a year from the countdown, which means that we are now only a little more than 10 years from 1.5 C

### HONOUR

#### Sangya Malla named 2021 UN Woman Police Officer of the Year

Nepalese peacekeeper serving in the Democratic Republic of the Congo (DRC) was named the recipient of the 2021 UN Woman Police Officer of the Year. Superintendent Sangya Malla with the UN mission in the country, MONUSCO, is chief of its Police Health and Environment Unit, based in the capital, Kinshasa.

Malla, a medical professional by training, helped establish the unit, which is responsible for implementing policies and procedures concerning the health and well-being of personnel as well as UN Police environmental initiatives.

Her contributions have been especially important during the ongoing Covid-19 pandemic, past Ebola outbreaks, and natural and humanitarian crises such as the volcanic eruption in the city of Goma last May

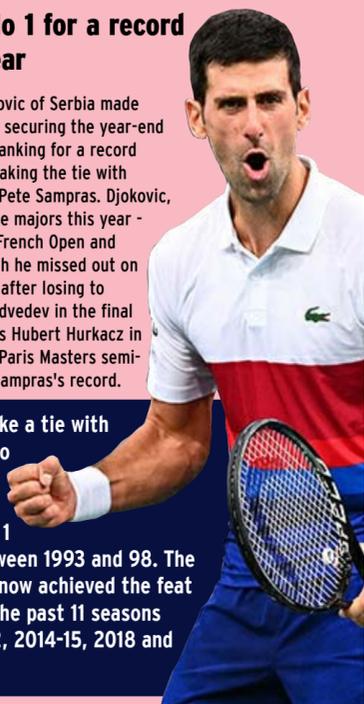


### SPORTS

#### Novak is No 1 for a record seventh year

Novak Djokovic of Serbia made history by securing the year-end No 1 ATP ranking for a record seventh time, breaking the tie with American legend Pete Sampras. Djokovic, who has won three majors this year - Australian Open, French Open and Wimbledon, though he missed out on the US Open title after losing to Russian Daniil Medvedev in the final defeating Poland's Hubert Hurkacz in Saturday's Rolex Paris Masters semi-finals to eclipse Sampras's record.

Djokovic broke a tie with Sampras, who completed six straight year-end No 1 finishes between 1993 and 98. The Serbian has now achieved the feat in seven of the past 11 seasons (also 2011-12, 2014-15, 2018 and 2020)



## CBSE issues guidelines for classes X & XII offline Term 1 exams

The Central Board of Secondary Education (CBSE) has issued detailed guidelines to conduct offline Term 1 examinations for classes X and XII

Examinations for class XII will commence on November 16 whereas those for class X begins on November 17. Physical offline examinations will be conducted for 19 subjects in class XII and 9 subjects for students in class X



### THE GUIDELINES

The circular from CBSE said that the Board will supply customised OMR (optical mark reader) answer sheets to examination centres having details of the students permitted to take those exams  
The CBSE has finalised its all new OMR sheets for its Term-1 exams, which will consist of multiple choice questions. A total of 36 lakh class X and XII students will be appearing for

The exams will commence at 11:30am instead of the usual 10:30am, given the winter schedule, and will be held for 90 minutes with an additional time of a half hour

the exams this year  
Each paper in the Term 1 exams will have a maximum of 60 questions with 90 minutes duration. Students have

to mark their answers on the OMR sheets only with pens  
Schools may download the OMR sheet in advance as per the schedule given in the guidelines, said the letter  
Schools are requested that based on the information provided by the CBSE, practice sessions may be organised for the students, it added  
Prior to the practice sessions, teachers must also acquaint themselves well with the OMR

## Longest lunar eclipse of this century will take place on November 19

Astronomers and amateur sky-watchers will get to see the longest lunar eclipse of this century this month. On November 19 (Kartik Purnima), the Earth will pass between the sun and the Moon, creating a shadow on the Moon's surface. The near-total lunar eclipse will peak just after 1:30pm IST, when the Earth will hide 97 per cent of the full moon from the sun's rays, said NASA. During this spectacular celestial event, the moon will acquire a reddish hue. It will be visible in some parts of India.



NASA said the lunar eclipse will last 3 hours, 28 minutes, and 23 seconds, which would be longer than any other eclipse in 100 years between 2001 and 2100  
The Earth will witness a total of 228 lunar eclipses in the 21st century. Mostly, there will be two lunar eclipses in a month, but there can also be three eclipses, it added

Normally, the Moon's face is illuminated by sunlight reflecting off its surface. But during a lunar eclipse, the Moon, sun, and the Earth align in a straight line. The Earth blocks the sunlight from reaching the moon and thus, the lunar object appears eaten from Earth

## Five years after note ban, cash in use now at record 14.5% of GDP

The ratio of currency in circulation as a proportion of GDP touched a new high of 14.5% for fiscal 2020-21. The surge came as the pandemic increased the demand for cash and shrunk the GDP. At the same time, the surge in every form of digital payments continues on the fifth anniversary of demonetisation - whether it is Unified Payments Interface (UPI), credit and debit cards or FASTag - demonstrating that the shift to digital as well as cash intensity are not mutually exclusive. The post-pandemic increase in currency in circulation has been a global phenomenon, described as a 'dash to cash' under extreme uncertainty. This has been experienced by the US, Spain, Italy, Germany, France, Brazil, Russia and Turkey. Meanwhile, digital payments are nearly three times what they were in FY18. The Reserve Bank of India's digital payments index, which has 2018 as the base year at 100, has risen to 270. This index also captures the spread of digital, taking into account growth in the payments infrastructure.

Of the four key objectives of demonetisation, India appears to have done well on three. There has been a rise in digital transactions. Besides this, there has also been a drop in fake currencies. Counterfeit notes detected continued to fall from 310,000 in FY19 to 290,000 in FY20 and 200,000 in FY21. There are also indications that the economy is getting more formalised

## Ducati unveils its 'most advanced' E-SCOOTER



Italian motorcycle brand Ducati has unveiled its most advanced electric scooter yet, the Ducati Pro-III e-scooter at \$924. The vehicle is switched on using innovative NFC technology, the contactless connection method...

- PRO-III is equipped with a token to start the scooter simply by bringing it close to the display, allowing the use of the vehicle only to the owner in possession of the chip
- The riding experience is made even safer by the 10-inch wheels with anti-puncture tubeless tyres, the braking system consisting of double front and rear disc brakes and the powerful LED lights that allow to see even in low light conditions and at night
- The frame is made up of magnesium alloy, and the vehicle weighs a maximum of 100kg
- The scooter's display is equipped with a USB port that allows you to recharge the smartphone or other devices while in use
- The Pro-III has a 350W motor that can provide a top speed of 15.5 mph, which is far below the 150 mph top speeds Ducati claims it can achieve in its motorcycles. The Pro-III has a 468 Wh battery pack with a range of 31 miles
- The integrated app, available on both Android and iOS, allows the owner to constantly monitor the performance of the vehicle and its location

GAUGE YOUR STRENGTH  
IN POLITICAL SCIENCE

## PRACTICE PAPER SET BY SHIPRA, UDGAM SCHOOL FOR CHILDREN, AHMEDABAD

## GENERAL INSTRUCTIONS

There are 40 questions and all are compulsory.

## SECTION-A

Q1. Which of the following statements does not reflect the objectives of NAM?  
a) To enable newly decolonized countries to pursue independent policies. [1]  
b) Not to join any military alliances  
c) To follow a policy of neutrality on global issues.  
d) To focus on elimination of global economic inequalities.

Q2. The high point of the Cold War was [1]  
a) Cuban Missile Crisis  
b) Atomic bomb attack on Hiroshima and Nagasaki  
c) Establishment of SEATO and CEN-TO  
d) Establishment of NATO

Q3. Which set of the countries belonged to the NATO Group? [1]  
a) Poland, Britain, Romania  
b) USA, Czech Republic, France  
c) Britain, France, West Germany  
d) Spain, France, East Germany

Q4. Which of the following statements about the NIEO is false? [1]  
a) Obtain access to Western markets  
b) Reduce the cost of technology from the Western countries  
c) Give the LDCs control over their natural resources  
d) Provide the developed countries with a greater role in international economic institutions.

Q5. Addressing the 18th NAM summit, India strongly criticized the [1]  
a) Cooperation  
b) Globalization  
c) Unity  
d) Terrorism

Q6. Which of them is not a founder leader of the NAM? [1]  
a) Gamal Abdel Nasser  
b) Josip Broz Tito  
c) Jawaharlal Nehru  
d) Kranjic Nkrumah

Q7. The first Gulf War was known as [1]  
a) Operation Infinite Reach  
b) Operation Enduring Freedom  
c) Operation Desert Storm  
d) Operation Iraqi Freedom

Q8. Commonwealth of Independent States was established in [1]  
a) 1991  
b) 1992  
c) 1990  
d) 1919

Q9. \_\_\_\_\_ was a series of anti-government protests and uprising that took place in the Middle East and North Africa beginning in 2010 and 2011. [1]  
a) Arab Spring  
b) Tunisian Revolution  
c) Taliban Insurgencies  
d) Operation Enduring Freedom

Q10. Study the passage given below carefully and answer the questions (10-12) that follow. [1]  
The Collapse of communism was followed in most of these countries by a painful process of transition from an authoritarian socialist system to a democratic capitalist system. Privatization of state assets and corporate ownership patterns were to be immediately brought in.

Why has the process of transition been described painful?  
a) The transition has been described as painful because it underlined the collapse of communism which was followed by a shift from an authoritarian socialist system to a democratic system.  
b) The transition has been described as painful because it underlined the upliftment of communism which was followed by a shift from a democratic system to an authoritarian system  
c) The transition has been described as painful because it underlined the collapse of democracy.  
d) The transition has been described as painful because it underlined the upliftment of authoritarian system

Q11. Which political system existed before the transition? [1]  
a) Communist political system  
b) An authoritarian political system  
c) Democratic political system  
d) Socialist-Intellectual system

Q12. What does privatization imply? [1]  
a) A reduction in state planning and it encourages private ownership of property and means of production.  
b) An increase in state planning and it encourages public ownership of property and means of production.  
c) Privatization means absolute control of private property.  
d) No change in state planning and keeping strategies as they are.

Q13. In which year did Gorbachev turn out to be General Secretary of the Communist Party of USSR? [1]  
a) 1985  
b) 1990  
c) 1987  
d) 1989

Q14. USA launched 'Operation Enduring Freedom' and attacked Al-Qaeda in [1]  
a) Afghanistan  
b) Pakistan  
c) Iraq  
d) Russia

Q15. The questions (15-20) consist of an assertion and a reason. Use the following key to choose the appropriate answer. [1]  
a) Both A and R are true, and R is the correct explanation of A.  
b) Both A and R are true, but R is not the correct explanation of A.  
c) A is true but R is false.  
d) A is false but R is true.

Assertion (A): Left parties in India believed in the ideologies of Marxism, Socialism, Maoism, Egalitarian society, state ownership and pro-poor programs.  
Reason (R): In 1950, national planning committee of the Indian National Congress was set up with Jawaharlal Nehru as its chairman. [1]

Q16. Assertion (A): The first five-year plan, which commenced in 1940, was drafted by K.N Raj. [1]  
Reason (R): The objectives of planning are to make the economy self-reliant and plan strategies and to activate distributive justice among various sections.

Q17. Assertion (A): Since 1947, the government is paying more attention to economic development. [1]  
Reason (R): For this, many modifications and improvements are made in this process.

Q18. Assertion (A): Growing two crops on the same land increased crop production and its variety. [1]  
Reason (R): The introduction of high-yielding varieties of seeds and the increased use of chemical fertilizers and irrigation led to the increase in production.

Q19. Assertion (A): The States of Maharashtra and Gujarat were created in 1960. [1]  
Reason (R): Sardar Vallabhbhai Patel was the first Home Minister of India.

Q20. Assertion (A): The Peasantry in Telangana were the main victims of Nizam's oppressive rule; so, they were against his rule. [1]  
Reason (R): Nizam of Hyderabad 'Sardar Ali Khan' followed oppressive policies against the masses.

Q21. Match the following: [1]

A) Mapping of boundaries of religious grounds  
B) Mapping of boundaries on grounds of different language  
C) Demarcating within a country on administrative and political grounds  
D) Demarcating within a country on geographical zone

I) Pakistan and Bangladesh grounds  
II) India and Pakistan  
III) Jharkhand and Chhattisgarh  
IV) Himachal Pradesh and Uttarakhand

a) A-II, B-I, C-IV, D-III  
b) A-I, B-II, C-IV, D-III  
c) A-IV, B-II, C-III, D-IV  
d) A-I, B-IV, C-II, D-III

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a) A-II, B-III, C-IV, D-I  
b) A-IV, B-III, C-III, D-I  
c) A-I, B-II, C-III, D-IV



Q23. Select the correct option. When was the McMahon Line decided? [1]  
a) 1916  
b) 1961  
c) 1915  
d) 1914

Q24. The Shimla Agreement was signed between these two countries. [1]  
a) China & India  
b) Tibet & India  
c) Pakistan & India  
d) Bangladesh & India

Q25. Bangladesh emerged as an independent nation in: [1]  
a) January 1972  
b) December 1971  
c) March 1971  
d) November 1971

Q26. Expand NEFA [1]  
a) North-Eastern Frontline Agency  
b) North-Eastern Frontier Agency  
c) North-Eastern Frontline Agreement  
d) North-Eastern Frontier Alliance

Q27. Choose the correct option for the given statements: [1]  
A) Non-alignment allowed India to gain assistance both from U.S.A. and U.S.S.R.  
B) India's relationship with her neighbors has been strained from the beginning.  
C) The Cold War has affected the relationship between India and Pakistan.  
D) The treaty of Peace and Friendship in 1971 was the result of India's closeness to the U.S.A.

a) A- True, B- False, C- True, D- False  
b) A- True, B- True, C- True, D- False  
c) A- False, B- True, C- True, D- False  
d) A- True, B- True, C- False, D- False

Q28. Who accompanied the Tibetan spiritual leader Dalai Lama during the official Chinese visit to India in 1956? [1]  
a) Hua Guofeng  
b) Zhao Ziyang  
c) Zhou Enlai  
d) Li Peng

Q29. Indian foreign policy is affected by: [1]  
a) Cultural factors  
b) Domestic factors  
c) International factors  
d) Domestic and International factors

Q30. Which state was not created in 2000? [1]  
a) Jharkhand  
b) Chhattisgarh  
c) Uttaranchal  
d) Telangana

Q31. The Cities that were divided into 'communal zones' during the partition violence were [1]  
a) Lahore, Amritsar, and Calcutta.  
b) Kashmir, Lucknow, and Allahabad.  
c) Madras, Hyderabad and Mysore.  
d) Delhi, Mumbai, and Gwalior.

Q32. Fill in the blanks with appropriate words: [1]  
Eventually, his voice was simply ignored and the \_\_\_\_\_ was made to merge with \_\_\_\_\_.  
a) NWFP, Pakistan  
b) East Bengal, Pakistan  
c) East Punjab, India  
d) East Punjab, Pakistan

Q33. On which date State Reorganization Act was put into practice? [1]  
a) November 1, 1956  
b) December 1, 1956  
c) November 15, 1954  
d) December 7, 1956

Q34. The United Nations agency concerned with the improvement of standards of education and strengthening international co-operation in this field is: [1]  
a) UNICEF  
b) UNESCO  
c) ILO  
d) UNEF

Q35. General Assembly of the United Nations meets in a regular session - [1]  
a) Once a year  
b) Twice a year  
c) Once in two years  
d) Occasionally

Q36. Who of the following was the U.N.O.'s first Secretary General from the African continent? [1]  
a) Kofi Anan  
b) Boutros Boutros- Ghali  
c) Javier Perez de Cuellar  
d) Ban ki-moon

Q37. Which of the following is the headquarters of IMF? [1]  
a) Geneva  
b) Paris  
c) Washington  
d) Hague

Q38. Which of the following is world's center for co-operation in the nuclear field? [1]  
a) IEAA  
b) CTBTO  
c) IAEA  
d) INEA

Q39. Where is the Headquarter of "UN-ESCO"? [1]  
a) Geneva  
b) Rome  
c) Washington  
d) Paris

Q40. Under whom recommendations the UN General Assembly suspends the UN membership? [1]  
a) International Court of Justice  
b) Security Council  
c) International Court of Justice and Security Council  
d) All the above

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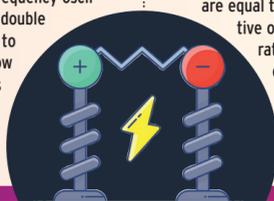
These questions are meant for practice purpose only. Students are advised to check format, syllabus and marks for Board test papers with their teachers. Questions have been given by teachers and NIE is not responsible for them.

## MY SCHOOL PROJECT TESLA COIL

## WIRELESS WONDER

## TECH ADVANCES

The world of wireless technology is here. Innumerable wireless applications like wireless powered lighting, wireless smart homes, wireless charges and so on have been developed with the advances made in wireless technology. One such great invention is a Tesla Coil. Invented about 100 years ago by Nikola Tesla, a Tesla coil is a radio frequency oscillator that drives the air core double tuned resonant transformers to produce high voltages with low currents. Nikola invented this Tesla coil with the intention of transmitting electricity through air.



## WORKING PRINCIPLE

The principle behind the working of this is the Faraday's Law of Magnetic Induction. This law states that "the induced electromotive forces in any closed circuit are equal to the negative of the time rate of change of magnetic flux enclosed by the circuit".

## COMPONENTS USED

## RESISTOR

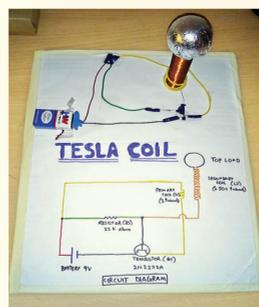
A resistor opposes a flowing current. Every conductor has certain resistance, if one applies a potential difference V at the terminals of a resistor, the current I passing through it is given by:  
 $I = V/R$  (Ohm's law)  
A 22k Ohm resistor is used in this project.

## TRANSISTOR

A transistor is a type of a semiconductor device that can be used to both conduct and insulate electric current or voltage. It basically acts as a switch and an amplifier. In simple words, we can say that a transistor is a miniature device that is used to control or regulate the flow of electronic signals. A 2N2222A transistor is used in this project.

## PRIMARY COIL

This is made up of copper wire with 250+ turns. This is the coil where the current due to varying magnetic field is induced.



## SECONDARY COIL

This is made up of insulated copper wire with 3 turns. This is the coil from which the varying magnetic field is produced.

## BATTERY

An electrical battery is a device consisting of one or more electrochemical cells that convert stored chemical energy into electrical energy. We used a 9v battery.

## CONNECTING WIRES

## HOW WE WENT ABOUT IT

This project was done in the times of COVID-19 pandemic, when we were restricted to limited resources. Keeping the idea of creating wealth out of waste, we used things we could find at home like an old light bulb, some used cardboard, unused copper wires and other materials to make our project. Due to the lockdown we couldn't meet each other to make this project, therefore Nishanth S (XII A) made the model and I, Ashrith Kumar (XII B) did the research, theory part and explanation. We presented our project to Baishali Garai, assistant professor at Dayananda Sagar University at the event Einstein's Backyard conducted by our school, Delhi Public School, Whitefield under the supervision of our Science HOD Sumana Sinha Das.

Ashrith Y Kumar, class XII-B & Nishanth Satish, class XII-A, DPS, Whitefield, Bengaluru

