



THE TIMES OF INDIA

www.toistudent.com

TODAY'S EDITION

► Find out the relationship between demand and supply, and how it plays an important role in our economy
PAGE 2



► The benefits of a regular yoga routine are wide-ranging. Figure out how to unwind
PAGE 3



► Women's world number one Ashleigh Barty prevails over Jil to win Cincinnati Open
PAGE 4



STUDENT EDITION

TUESDAY, AUGUST 24, 2021



It's the fourth-largest organisation of its kind in the world

CLUE 1: More people use its services in a year than the world's total population.

CLUE 2: It has more employees than the combined population of Greenland and Iceland.

CLUE 3: As India's largest land-owner, it owns more land than Goa's geographical area.

Answer: INDIAN RAILWAYS (IR). According to the minister of state for railways Raosaheb Danve, the IR suffered a loss of ₹36,000 crore due to the ongoing Covid-19 pandemic. IR, which carries upwards of 8 billion people annually, operates the fourth-largest railway network in the world with more than 1.2 million employees, and owns close to 5 lakh hectares of land – 22% more than Goa's geographical area



► The collapse of the Thwaites Glacier would cause an increase of global sea level of between one and two metres, with the potential for more than twice that from the entire West Antarctic Ice Sheet

WORLD ATHLETICS U-20 SHAILI WINS SILVER IN LONG JUMP

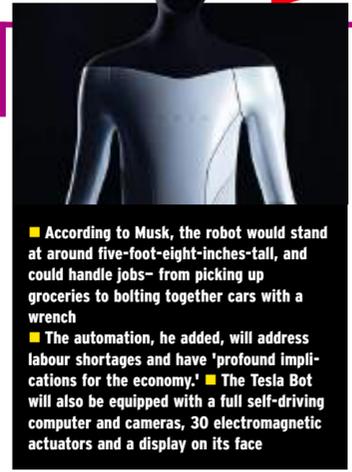


Shaili Singh bagged a silver medal with a superb leap of 6.59 metres, missing the gold medal agonisingly by a mere one centimetre in the women's long jump, as India ended its campaign in World Athletics U-20 Championships in Nairobi, Kenya, on Sunday, with two silver and one bronze medal. This is India's best-ever performance in the junior world championships.

Saili's silver is the third medal for India in the World Athletics U-20 Championships 2021, adding to the silver won by Amit Khatri in the men's 10,000 metres race walk and the bronze by the 4x400 mixed relay team

MUSK'S NEW GOAL: A HUMANOID ROBOT IN 2022

Tesla has announced that it is likely to launch a humanoid robot next year, designed to handle dangerous, repetitive, or boring work that people would rather not do. Interestingly, if the creepy, featureless android sets off your robophobia, fear not – the 125-lb machine is designed such that humans can overpower it, if need be. "We think we'll have a prototype sometime next year that looks like this," Tesla CEO Elon Musk said at AI Day event, after he ceded the stage to a human dressed like a robot...



■ According to Musk, the robot would stand at around five-foot-eight-inches-tall, and could handle jobs– from picking up groceries to bolting together cars with a wrench
■ The automation, he added, will address labour shortages and have 'profound implications for the economy.'
■ The Tesla Bot will also be equipped with a full self-driving computer and cameras, 30 electromagnetic actuators and a display on its face

Climate change and internal heat of Earth responsible for melting of Doomsday Glacier

A new study has revealed that Antarctica's 'Doomsday Glacier' is not only losing ice rapidly from climate change, but it's getting a double whammy from the heat of the Earth itself. According to scientists, the Thwaites Glacier, also called the 'Doomsday Glacier' due to its impact on sea level rise, is being hit with heat from the Earth's crust, as it is only 10 to 15 miles deep below West Antarctica, compared to around 25 miles in East Antarctica. This results in a 'geothermal heat flow of up to 150 milliwatts per square metre,' they add...

Source: Daily Mail



■ According to the BBC, the Thwaites glacier contributes roughly four per cent to the annual sea-level rise and is now believed to be losing 80 billion tons of ice per year
■ Since 1980, it has lost at least 600 billion tons of ice, according to a 2017 analysis done by the New York Times, using data from NASA JPL
■ Some of the accelerated sea ice loss can be attributed to hidden rivers under the glacier, according to Live Science, but most of it is related to climate change and rising temperatures

► The Thwaites glacier is slightly smaller than the total size of the UK, approximately the same size as the state of Washington, and is located in the Amundsen Sea
► It is up to 4,000 metres thick and is considered a key in making projections of global sea level rise

Taliban inherit untapped \$1 trillion trove of minerals



The Taliban now hold the keys to an untouched trillion-dollar trove of minerals, including some that could power the world's transition to renewable energies, but Afghanistan has long struggled to tap its vast deposits. The Taliban are already in a financial bind since they returned to power 20 years after their ouster, as major aid donors halted their support for Afghanistan.

- The resources include bauxite, copper, iron ore, lithium and rare earths, according to a January report by the US Geological Survey (USGS)
- Copper, which is needed to make power cables, became a hot commodity this year as prices soared to more than \$10,000 per ton
- Lithium is a crucial element to make electric car batteries, solar panels and wind farms
- World demand for lithium is expected to grow by over 40 times by 2040, according to the International Energy Agency
- Afghanistan is also home to rare earths that are used in the clean energy sector: Neodymium, praseodymium and dysprosium.
- The country's untapped mineral riches have been estimated at \$1 trillion by the USGS, though Afghan officials have put it three times as high

RBI may soon want you to memorise your 16-digit card number

Card holders, both debit and credit, making payments online from January 2022 may have to enter their 16-digit card numbers every time they make a payment online. This is if the Reserve Bank of India has its way on ensuring data security, according to sources...

1 The new norms would make it mandatory for the customers to enter all their card details – name, 16-digit card number and expiry date, and CVV – every time they make an online payment. Right now, you only need to authenticate transactions through your CVV (card verification value) and OTP (one-time password (OTP))

2 The new Payment Aggregator/Payment Gateways (PA/PG) rules, according to reports, would mandate every online merchant processing transaction to only have access to a 'tokenised' key linked with the consumer's card instead of the entire card file

3 The RBI is reportedly against acceding to a demand by payment gateways for exemptions. The new rules would prohibit the usage of this data even by authorised operators for auto check-outs



Officials say the new rules are framed keeping security of the customers as paramount. The current system, they say, is seamless, but is prone to breaches, as customer card details are being stored in the servers of merchants not directly under the supervisory purview of RBI

IN OTHER NEWS

Covid-19 third wave peak likely in October: NIDM report

The National Institute of Disaster Management (NIDM) under the ministry of home affairs has warned of a third COVID-19 wave peak in October in its recent report to the Prime Minister's Office. The NIDM's report quoted the Reuters' opinion survey of 40 experts that forecasted that the third wave of the Covid-19 pandemic is likely to hit India between July 15 and October 13, 2021. Emphasising the effect of the potential Covid third wave on children, the report said, the Indian Academy of Paediatrics found that there is no biological evidence that the current and the new Delta Plus variant will affect children more than adults.



UAE will accept Indian passport holders with 14-day rider



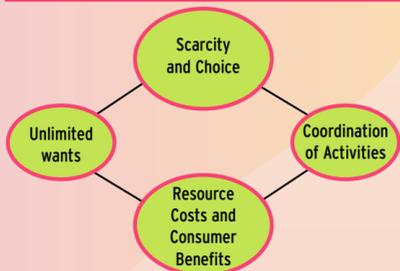
Indian passport holders, who have not been to the country in the last 14 days, can get tourist visas to the UAE, according to a media report on Sunday. The facility has been extended to Nepal, Nigeria, Pakistan, Sri Lanka and Uganda, other than India, the Gulf News reported. Presently, only UAE citizens and transit passengers are allowed to fly to the UAE, due to the coronavirus outbreak.

Understanding The Concept Of DEMAND & SUPPLY

Humans are the part and parcel of society. Economics is a social science concerned with the production, distribution, and consumption of goods and services. It is the study of how human beings act on rational behaviour in seeking utility or maximum benefit. Human beings' wants are unlimited. If one's want or desire is satisfied, another want and desire spur. Man's wants are unlimited. The resources are not enough to meet his desires. As more and more desires are to be satisfied, scarcity of available resources starts.

To match these criteria of wants and resources, economists coined the meaning of economics. The word 'Eco' means home, and 'Nomos' means accounts. Adam Smith is considered as the father of modern economics.

ECONOMICS IS THE STUDY OF...



CLASS: X, CBSE

THE CONCEPT OF SUPPLY

It is the total amount of stock, the willingness, and ability of potential sellers to produce and sell it. Quantity supplied is the total amount of a good that sellers would choose to produce and sell under a given condition. There are various factors that determine supply like price of the good, prices of production (labour, capital), technology, productive capacity, and expectations of future prices.

THE LAW OF SUPPLY

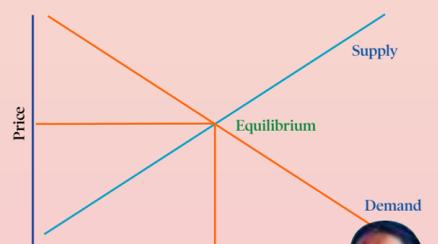
The law of supply states that when the price of goods rises and everything else remains the same, the quantity of the goods supplied will also rise.

A supply curve is a graphical representation of the relationship between price and quantity supplied of the good.

When the price of a product changes, it will result in a movement along with a demand or a supply curve. When a non-price determinant of demand or supply changes (assuming the price is constant), it will cause a shift in the position of the demand or supply curve.

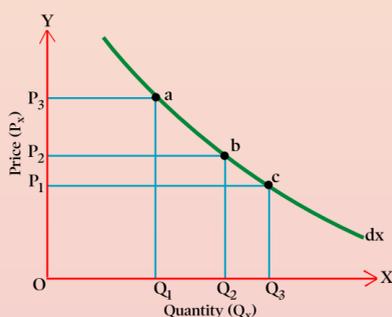
ECONOMIC EQUILIBRIUM

Economic equilibrium is the point at which the supply and demand of a single product are identical. The equilibrium price, therefore, exists where the hypothetical demand and supply curves meet.



Rafiza Khatoon, Teacher
Social department, Chitturi High School, Vijayawada

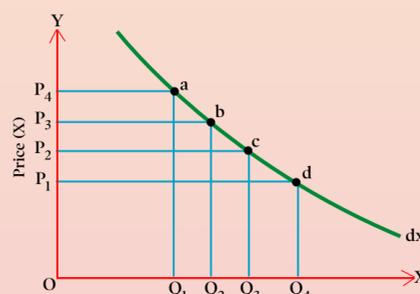
MOVEMENTS ALONG THE DEMAND CURVE EXPLAIN THE LAW OF DEMAND



It is understood that moving along the demand curve (dx) we are moving from point b to a or from point b to c. Moving from b to a shows: Rise in Px from P2 to P3, and fall in Qx from Q2 to Q1.

Likewise, moving from point b to c shows: Fall in Px from P2 to P1 and a rise in Qx from Q2 to Q3. Thus, moving along the demand curve (upward or downward), we find an inverse relationship between Px and Qx. This is what the law of demand states.

SHIFTS IN DEMAND CURVE



In the picture, we can clearly see that moving from point a to b to c to d, are the movements along the demand curve. Moving from a to b, from b to c, from c to d shows:

- Higher purchase in response to lower price.
- Inverse relationship between price and purchase of a commodity.
- Downward slope of the demand curve.

Thus, movement along the demand curve may be defined as:

A situation of change in quantity (Qx) in response to changes in price (Px) of a commodity implies an inverse relationship between price and purchase or a downward sloping demand curve situation.

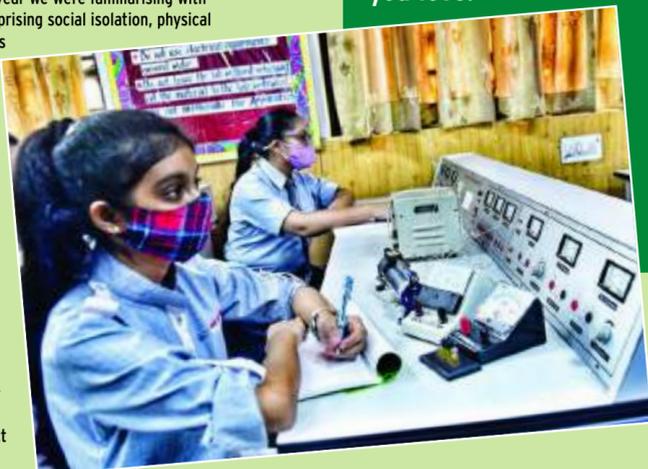
BRACE FOR 'NORMAL' LIFE

Human brain is highly adaptable and at the same time is a slave of habits. Last year we were familiarising with the "new normal" comprising social isolation, physical distance, altered daily routines in addition to fear and uncertainty in the environment. Living and surviving as a community is a basic human nature therefore unforeseen community isolation created anxiety within us. We accommodated with this process of survival however that had hit us mentally and physically. Acclimatising was challenging and when we finally achieved it, suddenly an invisible pressure to return back started.

As a result of being in isolation for more than a year, even a thought or the prospect of returning back to normal social life may be daunting to many individuals. The impact is so that even those who considered themselves as completely "social" are struggling and having anxious feelings for transitioning back. For those who were already not very fond of social interactions are finding it even harder as pandemic gave them the opportunity to stay in their cocoon and function from there.

Many of those who are even partially back to social life are facing sensory overload. It's happening since now abruptly again there is too much gen available to process through our senses. In social interactions within physical environment, we can see, hear or feel more information than in

Take your own time to come out of 'lockdown cocoon.' If you feel overwhelmed, take a sensory break, drink water, take a quick walk outside or call someone you love.



video calls. It is leading to feel like getting stuck and not being able to process what is going around you.

To deal with this, start slowly and expect to have some uneasiness at initiation. This is normal, valid and temporary. Almost everyone is going through these feelings in varying degrees. Take your own time into transition and honour your own limits and boundaries. If you feel overwhelmed, take a sensory break, drink water, take a quick walk outside or call someone you love. If it is difficult to handle it on your own, seek professional for you or your loved ones.

Kirtika Pandey, Sport Psychologist, Lucknow

GEARING UP FOR 2 BOARD EXAMS

CLASS X LESSONS ARE ON IN FULL SWING AND SO FAR I AM HAPPY WITH MY REGULAR STUDIES. THIS YEAR, WE HAVE TO PREPARE FOR TWO BOARD EXAMS. THIS IS HOW I PLAN TO GO ABOUT IT...

- A timetable for all subjects. I plan to spend extra time on tough portions.
- A flow chart for easy learning.
- A separate book to write down the main points, one word questions from the chapters as it will help in MCQs.
- Revise the portions that we have covered so far.
- Set a test for myself at regular intervals and see where I stand.
- Read the textbooks thoroughly and note down the dates and events.
- At the end of the week, assess how much we have studied.
- After studying, try to recollect the key points.
- Do as many revisions and as many question papers as possible.



Minnu Mohind George, class X, Carmel School, Peyad, Thiruvananthapuram

QUICK REVISION

The Rise of Nationalism In Europe

CLASS: X SUBJECT: History, Lesson 1

- Who was proclaimed German Emperor in a ceremony held at Versailles in January 1871?
- Who was proclaimed the King of United Italy in 1861?
- Who headed Sardinia-Piedmont?
- What was the result of the Act of Union 1707 between England and Scotland?
- What is an Allegory?
- Who were Slavs?
- What the crown of oak leaves symbolise?
 - Peace
 - Heroism
 - Courage
 - Tolerance
- Italian Princely house ruled which of the following states before the Unification of Italy.
 - Sardinia-piedmont
 - Lomabardy
 - Venetia
 - Kingdom of two Sicilies
- Name the Treaty of 1832 that recognised Greece as an independent nation.
- Choose the correct nationality of the artist Frederic Sorrieu who visualised in his painting a society made up of Democratic and Social Republic.
 - German
 - Swiss
 - French
 - American

ANSWERS

- Kaiser William I of Prussia.
- Victor Emmanuel-II
- VICTOR EMMANUEL II of Prussia.
- The Acts of Union, passed by the English and Scottish Parliaments in 1707, led to the creation of the United Kingdom of Great Britain on 1 May of that year.
- An allegory is a term for a figure of speech. It is a story or picture with a hidden meaning. The characters in allegories are symbols which represent particular ideas. The story has a figurative meaning, not just a literal one. ... A fable or parable is a short allegory with one basic idea (a moral).
- In religion, the Slavs traditionally divided into two main groups: those associated with the Eastern Orthodox Church (Russians, most Ukrainians, most Belarusians, most Bulgarians, Serbs, and Macedonians) and those associated with the Roman Catholic Church (Poles, Czechs, Slovaks, Croats, Slovenes, some Ukrainians)
- b) Heroism
- a) Sardinia-piedmont.
- The Treaty of Constantinople (1832) recognised Greece as an independent nation.
- (c) French

S Radhika, Teacher, DDMS AMS P Obul Reddy Public School, Hyderabad