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Category:Â POLITY

1. Telecom regulator backs Net neutrality

In news:

- The Telecom Regulatory Authority of India (TRAI) came out in strong support of Net neutrality in a series of recommendations following a long process of consultations.
- The content mentioned includes all content, applications, services and any other data, including its end-point information, that can be accessed or transmitted over the Internet.
- TRAI warned against any "discriminatory treatment†including blocking, degrading, slowing down or granting preferential speeds to any content.
- The service providers should be restricted from entering into any arrangement, agreement or contract, by whatever name called, with any person, natural or legal, that has the effect of discriminatory treatment based on content, sender or receiver, protocols or user equipment.
- In February 2016, TRAI had barred telecom providers from charging differential rates for data services in its Prohibition of Discriminatory Tariffs for Data Services Regulations, 2016, effectively blocking such attempts by Facebook and Airtel.
- Facebook had earlier rolled out its Free Basics service in partnership with Reliance Communications as a â
 €œdifferential service†and lobbied hard for it on social media which put it at loggerheads with the telecom
 regulator.
- TRAI has recommended a multi-stakeholder body which would be responsible for developing technical standards for monitoring and enforcement of the principles.
- To monitor violations, TRAI has recommended the establishment of a collaborative mechanism in the form of a multistakeholder body which would be responsible for developing technical standards for monitoring and enforcement of

the principles.

Category:Â SOCIAL ISSUES

1. Ivanka exhorts women entrepreneurs to focus on education, technology

- Adviser to the U.S. President Ivanka Trump underscored the importance of education and technology for women entrepreneurs to make a mark in their chosen field.
- Participating in a panel discussion on †Be the Change: Women's Entrepreneurial Leadership' after the inauguration of the Global Entrepreneurship Summit-2017 here on Tuesday, Ms. Ivanka said technology was disrupting every sphere of life.
- It was important to train women in digital literacy, computer science and give them access to skill training.
- Citing the U.S. scenario, she said women comprised only 47% of the workforce, but only 21% of them were in the IT field.
- The U.S. President pumped in funds to bring focus on skill training for women and give opportunity to every American woman to participate in the economy and re-enter the workforce and become well-versed with the digital technology, she said.
- All the panellists were unanimous in that the entrepreneurs, significant number of them being women, were revolutionising economies, more so in the U.S. and India.
- Appreciating the diverse representation among the entrepreneurs at the GES-2017 with more than 50 per cent being women, Ms. Ivanka said networking and mentorship was more valuable to entrepreneurs.
- Each entrepreneur should make it a goal to at least help one more woman in their communities become an entrepreneur. Closing the gender entrepreneurship gap world-wide could raise global GDP by two per cent, she said
- Defence Minister Nirmala Sitaraman elaborating the priority being given to encourage start-ups and women entrepreneurs said that push should also come from women themselves.
- Women's skills were under-estimated by women themselves. Environment in the country today was conducive to promote women entrepreneurship through access to funding, mentoring and skill training.
- Nirmala said start-up concept was gaining momentum as it was not possible for government to generate as many jobs as people wanted. Thus focus was to provide skill sets to people and encourage spirit of entrepreneurship.
- Nirmala said that they had learnt from the experiences of countries and left it to entrepreneurs themselves to come up with solutions rather than imposing from the top.
- An important decision would be to provide level playing field to start-ups with women entrepreneurs. A meeting
 would be convened with industry leaders and Chambers of Commerce on December 4 to give an opportunity to startups in the defence sector.
- The Defence Minister said as directed by the Prime Minister, efforts were on to encourage women at every district across the country to establish start-ups. Start- ups should not be confined to metros alone, she said.
- Women who set up small and micro enterprises would be helped to explore global markets for their products with the help of a UN organisation , she disclosed.

Category:Â INTERNATIONAL RELATIONS

1. Chabahar port ready, next stage for India

- Iranian President Hassan Rouhani will inaugurate the first phase of the Chabahar port development project on Sunday, with senior Afghan and
- Iranian media quoted President Rouhani as saying that the port "will enhance trade in the regionâ€, with a final aim to connect not just to Afghanistan via rail but also to the 7,200-km International North-South Transport Corridor to Russia.
- Iran's parliament, or Majlis , recently ratified the trilateral trade agreement signed by Prime Minister Narenda Modi, President Rouhani and Afghanistan President Ashraf Ghani in May 2016.
- The inauguration of the port will effectively pave the way for India to carry forward the next phase of construction and development of two berths for its use, particularly for trade with Afghanistan.
- Next, the government, which has committed \$500 million to the port project, will develop a free-trade area around the port, and finally will complete the loop with a \$1.6-billion railway line to Zahedan.
- India has already completed the Zaranj-Delaram highway in Afghanistan, which would facilitate the trade to Kabul and eventually beyond to Central Asia. Mr. Gadkari said the first part of India's construction would be finished in 2018.
- At present, India is using the port's existing commercial route to transport more than 1.1 million tonnes of wheat to Afghanistan, of which the first consignment of 15,000 tonnes from the Kandla port came to Zaranj, via Chabahar.

2. <u>India supports creation of a Palestinian state: PM</u>

- In a statement on the International Day of Solidarity with the Palestinian people, Prime Minister Narendra Modi presented his government's position and said that India will continue to support nation building activities by the Palestinians, and urged for the creation of a Palestinian state that will co-exist â€~peacefully' with Israel.
- The special day marks Resolution 181 of the United Nations which called for creation of independent Israeli and Palestinian states and was adopted on this day in 1947.
- The two-state solution of the Israeli-Palestinian dispute is based on this resolution.
- The day is being marked in the backdrop of the ongoing diplomacy to bring the two sides to the negotiation table. â €œIndia hopes for early resumption of dialogue between the Palestinian and the Israeli sides to move towards finding a comprehensive negotiated resolution,†Mr. Modi said.
- The statement was sent to the United Nations a few days ago through the Permanent Mission of India at the UN.
- Modi's statement adds India's support to the global push for a negotiated settlement of the longstanding demand for a Palestinian state next to Israel.
- The statement is the first occasion that the Prime Minister has spoken about the need for a viable Palestinian state since his visit to Israel last July.
- However, the India-Israel Joint Statement issued during his visit this year did not mention the need to create a

Palestinian state but had mentioned the need for â€~mutual recognition' and â€~security arrangements' as the basis for a peaceful solution to the issue.

- Prime Minister Benjamin Netanyahu is likely to visit India in January reciprocating Mr. Modi's visit.
- The Prime Minister also expressed India's long-term commitment to the Palestinian people and said, "India is an active development partner of Palestine, engaged in extending technical and financial assistance to improve the lives of the Palestinian people. We will continue to support the development and nation-building efforts of Palestine.â
- Several events and seminars are expected to be held in India to mark the day of solidarity with the Palestinians.

3. India, Russia update pact on security

- India and Russia have concluded a comprehensive agreement on security and reviewed the implementation of the Agreement on Information Security signed in October 2016 during the just-concluded visit of Home Minister Rajnath
- Singh, who paid a three-day visit to Russia, met his counterpart, Nikolai Patrushev, and signed deals on disaster management and narcotics smuggling.

Category: Â EDUCATION

1. Rethink school education

- In Uncertain Glory â€" India and its ContradictionsÂ, Jean Dreze and Amartya Sen begin their chapter on education with a quote from Rabindranath Tagore: "The imposing tower of misery which today rests on the heart of India has its sole foundation in the absence of education.†This is as true today as it was nearly 90 years back.
- While India highlights its ever-improving literacy levels, educationally it is a terrible under-performer, too embarrassed to participate in the OECD's Programme for International Student Assessment tests covering reading and computational skills for 15-year-olds.
- Successive studies have repeatedly established that a majority of those in each class in India have educational attainments much lower than the one they are in.
- Data from the Ministry of Human Resource Development show that only half of all students who enter primary school make it to the upper primary level and less than half that â€" around 25 million â€" get into the 9-12 class cycle.
- We have around a million primary schools and only half that number at the upper primary level. The number of secondary schools is less than 150,000 for a country of 1.3 billion, and even this comes down to just 100,000 at the higher secondary level.
- While there are around five million primary school teachers, at the secondary level the number is just 1.5 million. India has persisted with a schooling system that has long failed its young.
- The inexorable shift to private school education along with the Right to Education Act represents a failure of the public-school system. It is government schools that should be the drivers of change by becoming the first, not the last, choice of parents to send their children to.
- For that to happen, our public-school system must be swiftly and radically revamped, while our teacher training institutions, of which the District Institutes of Education and Training constitute an important part, speedily re-jigged to turn out world-class teachers, of the kind that will encourage children to stay on in, not drop out of, school.
- It is time that India began viewing school education as a critical strategic investment and gave it the status of a vital infrastructure project. As all in-country efforts have failed, we should go in for a radical overhaul of our educational infrastructure with the help of countries that have an amazing record in providing quality school education â€" Finland, for instance. We can surely afford to pay for that.
- If only India had begun revamping school education at the start of economic liberalisation, it would by now have had the world's largest pool of well-educated and highly trained workers.
- Fortunately, India continues to have the largest number of young people anywhere. By ensuring they get a worldclass education over the next few decades, India will be well on its way towards becoming a developed nation sooner than expected.

Category:Â ECONOMY

1. Invest in India, PM tells entrepreneurs

- Prime Minister Narendra Modi said his government understands that an environment of transparent policies and a rule of law providing a level playing field are necessary for entrepreneurship to flourish.
- Inaugurating the Global Entrepreneurship Summit (GES) here said this calling upon entrepreneurs from across the globe to "come make in India, invest in India, for India and for the world.â€
- The three-day GES, co-hosted by the US and Indian governments is the first in the annual series to be travelling to
- South Asia, has †Women First, Prosperity for All' as the theme. More than 50% delegates are women. "In Indian mythology, women is an incarnation of Shakti, the goddess of power. We believe women empowerment is vital to our development,†Mr.Modi said, adding Indian women continue to lead in different walks of life.
- The government, under its Mudra scheme of providing easy finance of up to Rs. 1 million to entrepreneurs, has sanctioned over 90 million loans worth Rs. .4.28 trillion since 2015. More than 70 million of the loans have been sanctioned to women entrepreneurs.
- The Prime Minister also highlighted how the government was focused on reducing the regulatory burden and providing support to start-ups. "Our 1,200 redundant laws have been scrapped. 87% rules for foreign direct investment have been eased in 21 sectors, and several government procedures have been taken online. The process is vet not completeâ€.
- Listing various other programmes of his government, he said "we are working on development of a national gas grid. A comprehensive national energy policy is also in the pipeline,â€he added.

2. No compromise on India's interests at WTO: Prabhu

• At next month's meeting of the World Trade Organisation's (WTO) highest decision-making body, India will not compromise on its interests including ensuring food security as well as protecting its resource-poor and lowincome farmers and fisher-folk, according to Commerce Minister Suresh Prabhu.

- Prabhu also said India â€" at the December 10-13 (WTO's) Ministerial Conference in Buenos Aires, Argentina â€" will hold firm on its position against the inclusion of new issues such as â€~e-commerce' and â€~investment facilitation' into the ongoing round of multilateral trade negotiations, without first resolving the outstanding ones including food security.
- Besides, he said India will make sure that the †development agenda†(to improve the developing countries†trading prospects) of the talks, which began in Doha in 2001, is not subverted.
- India will stand firm on all the issues that it has raised so far, and will not make any compromise or dilute its stand. We will not directly or indirectly reduce our ability to push our own agenda forward.
- Also, the Doha Development Agenda (DDA) is not dead. The DDA is as important as it was before and it will be taken
 forward.
- Prabhu said the highest priority for India was to ensure that a â€~permanent solution' on the issue of public stockholding for food security purposes is a part of the Buenos Aires meeting outcomes.
- Prabhu's predecessor Nirmala Sitharaman had said, "without a permanent solution, public stockholding programmes in India and other developing countries will be hampered by the present ceiling on domestic support which is pegged at 10% of the value of production, and is wrongly considered as trade-distorting subsidy to farmers under existing WTO rules.
- "The existence of such a subsidy element is determined by comparing present day administered prices with fixed reference prices of the 1986-88 period which is unrealistic. Developing countries are finding themselves hamstrung by the existing rules in running their food stockholding and domestic food aid programmes.â€
- Currently, an interim mechanism called the †Peace Clause†is available for developing nations including India, according to which they cannot be challenged at the WTO Dispute Settlement Mechanism (DSM) even if they breach the cap of the product-specific domestic support (10% of the value of production).
- However, Mr. Prabhu said India "will insist on a permanent solution that is much better than the Peace Clause.â€
- He also said meaningful reforms in agriculture can happen only when the disproportionately large subsidies of the developed countries are reduced.
- On talks to eliminate †harmful†fisheries subsidies, the minister said †coIndia will protect its small and subsistence fisherfolk, and we want sustainable fishing. We want subsidies for small fisherfolk to continue.â€
- In addition, at the WTO talks, India will also "very aggressively†push its proposal for Trade Facilitation in Services (which, among other things, aims to ease norms on the movement of skilled workers and professionals across borders for short-term work.
- Criticising attempts by certain countries to undermine the WTO's DSM by blocking the appointment of new judges, the minister said, "the DSM is an important pillar on which the entire multilateral trading system stands.
- We will not allow it to be be weakened. Efforts must be taken to quickly fill in the vacancies as, without judges, the DSM will not be able to function.

3. India must integrate with global value chain: ADB

- The manufacturing sector's share in India's GDP has remained stagnant despite the government's efforts to increase it, according to Asian Development Bank Country Head Kenichi Yokoyama, who added that India must do more to integrate with the global value chain in which it currently only plays a small part.
- Yokoyama also highlighted problems with the inequality between Indian states, the inadequate investment in the infrastructure sector and the poor planning behind urban development.
- "The share of manufacturing in India's GDP has been stagnant despite the government's efforts in this direction,†said Mr. Yokoyama. "The heart of the global value chain resides in southeast Asia at the moment, and India plays only a small part in that.
- We are working with the government to increase this. And, despite increasing per capita GDP growth, the challenge still remains of bridging the wide gap between the Indian states,†he added.
- "We expect GDP growth this year to be 7%,†Sabyasachi Mitra, Deputy Country Director, ADB, said. "Next year, we expect it to increase to 7.4%. There is an upturn in the global economy, trade is picking up, and the capital expenditure has been front-loaded.â€
- Even lead indicators such as the index of industrial production, sale of commercial vehicles and indirect tax collections all point to higher GDP growth looking ahead, said Abhijit Sen Gupta, Economist at ADB.

4. India seeing increasing formalisation: Jaitley

- The country is witnessing a new chapter in history being written where every day is seeing a new initiative that further expands the formalisation of the economy, Finance Minister Arun Jaitley said on Tuesday.
- "It is a great tribute to entrepreneurship in India that in five years a payment gateway started its operations, grew so rapidly, and expanded its activities to include online banking,†Mr Jaitley said while inaugurating Paytm's payments bank.
- "This is a new chapter in history being written that almost every day some such initiative is taking place that is increasing the formalisation of the economy,†he added.
- Paytm has 28 crore users, recorded 250 crore annual transactions from 50 lakh merchants, with transaction value of of Rs. 80,000 crore, said Vijay Shekhar Sharma, Paytm founder.

5. Sharma to head GST â€~profiteering' watchdog

- The government said that it had appointed B.N. Sharma as the first Chairman of the National Anti-profiteering Authority (NAA), which is tasked with ensuring the benefits of the Goods and Services Tax are passed on to consumers.
- The appointments help reassure "consumers of Government's commitment that GST would result in lower prices of goods and services,†a statements said.
- Once the Authority confirms there is justification to apply anti-profiteering measures, it has the authority to order the

business concerned to reduce prices or return undue benefit availed, with interest at the rate of 18% to consumers.

Category: A ENVIRONMENT AND ECOLOGY

1. India loses billions to air pollution: UN

- India had the highest share of welfare costs (or a loss of income from labour), of about \$220 billion (about Rs. 1.4 trillion), in South and South-East Asia â€" of a combined total of \$380 billion from mortality due to air pollution, according to a report by the United Nations Environment Programme (UNEP).
- The global mortality costs from outdoor air pollution are projected to rise to about \$25 trillion by 2060 in the absence of more stringent measures. At regional and national scale, China's welfare costs from mortality were the highest at nearly \$1 trillion followed by the Organisation for Economic Corporation and Development (OECD) countries with a combined total of \$730 billion, the report added quoting a 2016 projection by the OECD.
- Although certain forms of pollution have been reduced as "technologies and management strategies have advanced,†approximately 19 million premature deaths are estimated to occur annually as a result of the way societies use natural resources and impact the environment to support production and consumption, it notes.
- "If consumption and production patterns continue as they are, the linear economic model of â€~take-make-dispose' will seriously burden an already-polluted planet, affecting current and future generations,†the reportâ €™s foreword concludes.
- To curb pollution in various forms, the UNEP called for strong high-level political commitment and engagement of the local government, civil society and other stakeholders.
- "Pollution is a universal challenge [but] the good news is that we already know what we need to do to prevent and reduce it,†UNEP Executive Director Erik Solheim said in a statement, stressing that "now the responsibility is on governments, businesses, cities and local authorities, civil society and individuals around the world to commit to act to beat pollution in all its forms.â€
- To achieve high level political commitment in key economic sectors, there is a need to go beyond the environmental ministries and include other relevant ministries such as finance, agriculture, industry, urban, transport, energy and health.
- There is also a need to engage the local government, civil society organisations, business leaders, industries, trade unions and citizens at large. Reporting on the progress that comes from acting on pollution â€" whether through voluntary measures or formal laws â€" is a crucial step in this transition.
- The report, â€~Towards a pollution-free planet', was launched during the first Conference of Parties for the
 Minamata Convention, which addresses mercury issues, and ahead of the annual U.N. Environment Assembly, to
 be held in early December.

The Minamata Convention, which addresses mercury issues.

Category: A SCIENCE AND TECHNOLOGY

1. Earthworms may grow in Martian soil, says study

- Scientists show that worms crucial to healthy crops can reproduce in Martian soil
- Scientists have successfully grown earthworms in a Mars soil simulant, an advance that points to the possibility of life and future human colonies on the red planet.
- The two young worms are the first offspring in a Mars soil experiment at Wageningen University & Research Centre in The Netherlands.
- The experiments are crucial in the study that aims to determine whether people can keep themselves alive on the red planet by growing their own crops on Mars soils.
- "To feed future humans on Mars, a sustainable closed agricultural ecosystem is a necessity. Worms will play a crucial role in this system as they break down and recycle dead organic matter,†researchers said.
- Researchers observed the growth of rucola plants in Mars soil simulant provided by NASA, and added worms and pig slurry.
- "Clearly the manure stimulated growth, especially in the Mars soil simulant, and we saw that the worms were active,†said Wieger Wamelink of Wageningen University & Research. "However, the best surprise came at the end of the experiment when we found two young worms in the Mars soil simulant,†said Wamelink.
- Worms are very important for a healthy soil, not only on Earth but also in future indoor gardens on Mars or the Moon.
- They thrive on dead organic matter such as old plant remains, which they eat, chew and mix with soil. By digging burrows, the worms also aerate and improve the structure of the soil, making watering the plants more effective.
- The latter proved to be very important in earlier experiments where water would not easily penetrate the soil. The application of worms will solve this problem, Wamelink said.
- However, further research would be required to understand the growth of such life forms in low gravity conditions.

2. Indonesia: the world's volcanic hotspot

- The Southeast Asian archipelago is situated on the Pacific "Ring of Fireâ€, a vast zone of geological instability where the collision of tectonic plates causes frequent quakes and major volcanic activity.
- Indonesia, where more than 40,000 people have been evacuated over fears of an imminent volcanic eruption at Mount Agung on Bali, is the world's most volcanic area.
- The Southeast Asian archipelago of more than 17,000 islands and islets â€" and nearly 130 active volcanoes â€" is situated on the Pacific "Ring of Fireâ€, a vast zone of geological instability where the collision of tectonic plates causes frequent quakes and major volcanic activity.

3. Infusing technology into education

- With emerging technologies like Artificial Intelligence (AI), Internet of Things (IoT) and Big Data Analytics knocking at India's doors, the country needs to sow the learning seeds early â€" in the classroom â€" and China and Turkey can show the way, top global Intel executives have said.
- The world has realised what is coming its way in the next 10-20 years and has already begun modernising classrooms

at schools to prepare a technology-ready workforce.

- "The Chinese and Turkish authorities have given kids IoT-enabled devices in millions of schools. Every student has a device connected to an intelligent whiteboard at the front of the classroom. There are teacher-controlled devices too. The curriculum is designed for that kind of environment. This is the future of education,†Joe D. Jensen, Vice President, Internet of Things (IoT) Group, and General Manager, Retail Solutions Division at Intel, told IANS.
- "Intel has installed 400,000 IoT-enabled connected devices for schools in Turkey, a million-and-a half in Chinese schools and another million to go in China in the next two years,†Jensen informed.
- Technology can do wonders in providing a great educational experience and create a pool of talent for these disrupting technologies.
- "In China, the newest innovation is that there are eight video cameras and a series of microphones in a classroom at certain private schools and colleges. The videos of the classroom activities are recorded daily. Parents can later log on and see the student-teacher interaction,†Jensen told IANS.
- For Lisa Davis, Vice President and General Manager, IT Transformation for Enterprise and Government at Intel, while India is at the cusp of dramatic changes in delivering next-generation education, it is also set to learn new ways to infuse technology in many other sectors.
- "Not just education, we are looking at the financial services, transportation, retail and healthcare sectors too in India. The next big wave is coming in video surveillance and the security sector, and our teams are engaged with the stakeholders in the country,†Davis told.
- Intel has also pushed the envelope towards creating a modern workforce in India.
- In April this year, Intel made a commitment to democratise AI in the country by training 15,000 developers and engage with not just businesses but also the government and academia to enable the adoption of AI.
- Intel India has trained 9,500 developers, students and professors in the past six months.
- The chip giant has collaborated with 40 academic institutions that are using the technology for scientific research and 50 public and private organisations across e-commerce, healthcare, technology, defence, and banking and financial services.
- Intel India has also launched an initiative to strengthen the use of technology in the country's education ecosystem. It is collaborating with leading device manufacturers, education digital content publishers and education solution providers to build end-to-end solutions that promote the use of technology.
- The company will then help deploy management solutions for schools, classrooms, content and learning, and also manage student information systems.
- "India is at the cusp of a technology boom, but needs training and teaching right from the beginning to prepare a
 future digital workforce,†Davis stressed.

4. Auto fuel from CO2 emissions

- Researchers at Massachusetts Institute of Technology (MIT) have developed a new system that could potentially be used for converting power plant emissions of carbon dioxide (CO2) into useful fuel for cars, trucks and planes.
- The new method, described in a paper in the journal ChemSusChemÂ, is based on a membrane-based system. The membrane, made of a compound of lanthanum, calcium, and iron oxide, allows oxygen from a stream of carbon dioxide to migrate through to the other side, leaving carbon monoxide behind.
- Carbon monoxide produced during this process can be used as a fuel by itself or combined with hydrogen and/or
 water to make many other liquid hydrocarbon fuels as well as chemicals including methanol (used as an automotive
 fuel), the study said.

Nothing here for Today!!!

Nothing here for Today!!!

F. Practice Questions for UPSC Prelims Exam

G. UPSC Mains Practice Questions

GS Paper I

• Discuss the significance of India-Iran-Afghanistan Trilateral.

GS Paper III