

AROUND-

CURRENT AFFAIRS MAGAZINE



MARCH 2017 ₹ 50

GST

Lok Sabha passes GST Bills after marathon debate

Maternity Benefit (Amendment) Bill, 2016

The Surrogacy (Regulation) Bill

FOR THE MOST SOUGHT AFTER 2017 PRELIMS MOCK TEST

log on to: www.selflearn.co

PREFACE

Dear Reader,

It brings us immense joy and happiness to bring out the second edition of Selflearn's Monthly Current affairs magazine 'Around U'. Over the years, current affairs has become the most important topic for Civil Services Examination. Yet several aspirants faces difficulty in picking out the news items of relevance and analysing it in an examination perspective. 'Around U' is a humble attempt by us to help UPSC aspirants in their current affairs preparation.

The answer as to why a new magazine when there are innumerable CS magazines available in the market is to be explained. We have took three factors into account while preparing daily current affairs and monthly magazine. Firstly, the news has been simplified for better understanding and quick revision. Secondly, one of the most appreciated factor about our approach towards current affairs is offering the aspirants a perspective about how a news item might figure in the examination. The sections "Prelims Perspective" and "Mains perspective" serves this purpose. Finally, relating it to the UPSC syllabus helps an aspirant in understanding the relevance of the news. This magazine and daily current affairs should not be seen as a substitute for newspapers, but as a supplementary source to newspapers. It is ultimately you who should be making use of what is happening Around U.

Wishing you all the best.

Team Selflearn

Table of Contents

GS 1 History Culture Social issues and Geography 1

Ochre Coloured Pottery (OCP) Culture	1
Kurukh language - Oraon tribes	1
Ancient herbal ink Mahi	3
Nowruz	3
NIO finds a new canyon system close to Kovvada coast - Canyons	3

GS 2 Indian Polity and International Relations 5

Tejaswini: Socio-Economic Empowerment of Adolescent Girls and Young Women Project. ...	5
Arsenic Contamination	5
India first in bribery rate, Bribery rate Transparency International	6
The Surrogacy (Regulation) Bill, 2016	7
Common Service Centres (CSCs)	8
Electoral bonds	9
Maternity Benefits (Amendment) Bill, 2016	9
The Enemy Property (Amendment and Validation) Bill, 2016	10
The Inter-State River Water Disputes (Amendment) Bill, 2017	12
15 Indian Institutes of Information Technology (IIITs) declared as Institutes of National Importance	13
National Health Policy, 2017	14
HIV patients unhappy with Bill	16
‘The Right of Children to Free and Compulsory Education Act, 2009’	18
Corporate funding norms for political parties eased	19
‘Rashtriya Vayoshri Yojana’	19
Aadhaar mandatory for several services	20
The Lokpal and Lokayuktas Act 2013	21

Kerala Achieves single digit IMR	22
Shahpur Kandi Dam	22
Women Transforming India	23
Footwear Design and Development Institute (FDDI) Bill, 2017	23
Admiralty Bill,2016	23
IISc among world's best 10 varsities	23
Top seven IITs to get Rs. 100 cr. each	23
Committee to study University sports	24
MoPNG e Seva	24
GS 2 International Relations 25	
Indus Waters Treaty	25
South Asian Association for Regional Cooperation (SAARC)	26
Customs Convention on International Transport of Goods - TIR Carnets (TIR Convention) .	27
Compassion International to shut down India operations	28
U.N. scientific panel - Commission on Legal Continental Shelf (CLCS) United Nations Convention on the Law of the Sea (UNCLOS)	28
New Delhi, Kabul talks soon to boost trade	29
American Hindu Coalition	30
Trade Facilitation in Services (TFS) Agreement	30
Double Tax avoidance agreement	32
India and Belgium sign Protocol amending the India-Belgium Double Taxation Avoidance Agreement and Protocol	34
Indo-U.S. civil nuclear pact	34
G4 nations - UN reforms	35
J-20 stealth fighters	36
Shanti Prayas III	36
World Happiness Report	36

GS 3 Indian Economy 37

GDP growth forecast	37
East Coast Economic Corridor	38
GST levy may go up to 40%, 4-slab structure to remain	39
U.S. nixed India's plea on reforms in medicine - Access to medicines	42
Contentions between Indian and U.S.A over Intellectual property rights	42
National Investment and Infrastructure Fund	43
Foreign Investment Promotion Board (FIPB)	45
Centre to Launch Pilot Project on Ornamental Fisheries	46
GI tag, Mattu Gulla	47
Micro finance institutions , Small Finance Bank	48
Computing ability of people	50
Trade Infrastructure for Export Scheme (TIES)	50
Draft code on Social Security and Welfare	52
Payments bank	52
Foreign Direct investment norm to Multi brand retail	54
Human development index	54
The Insolvency and Bankruptcy Code, 2016	55
Integrated Cold Chain Projects	56
UDAN (Ude Desh ka Aam Naagrik).	57
IDS-II - Pradhan Mantri Garib Kalyan Yojana (PMGKY)	58
Central Board of Direct Taxes (CBDT) signs ten (10) more Advance Pricing Agreements (APAs) pertaining to various sectors	59

GS 3 Environment and Ecology 60

Namami Ganga Programme National Green Tribunal	60
Olive Ridleys turtle	60

Centre dithers on Western Ghats issue	61
Mission Kakatiya	62
Kolleru Lake	63
Ropar wetland, Asian waterbird census , Wetlands International	64
Coral bleaching again, Great Barrier Reef	65
Pristine air-quality monitoring station at Palampur	66
Ganga, Yamuna termed ‘living persons’	67
The Animal Welfare Board of India	67
Heat waves	68
Bharat Stage emission standards	70
International Renewable Energy Agency (IRENA)	71
The International Energy Agency	72
“OPERATION THUNDERBIRD” and “OPERATION SAVE KURMA”	73
Law to regulate use of air conditioners	73
2 more tiger reserves soon in Uttarakhand	73
Synchronous elephant count by four States in May	73
GS 3 Science and Technology 74	
Indian Ballistic Missile Defence Programme	74
Swati weapon locating radar	75
Bt cotton varieties	76
Chandrayaan-1	77
Europa Clipper mission	78
Hyperloop	78
Tuberculosis	79
TB vaccine trial on adults begins in June	80
Biodiesel	80

Methicillin-resistant Staphylococcus aureus (MRSA)	81
CRISPR gene editing	82
GRAPES-3 experiment	83
India-based Neutrino Observatory (INO)	84
Traditional Knowledge Database Library (TKDL)	85
Dhruv's	86
Bitcoin	87
High Nitrogen Steel	88
Fovea - Sweet spot in eye helps humans read	88
Lopinavir syrup	88
International Smart Grid Action Network (ISGAN)	89
About Smart India Hackathon 2017	89
Brown dwarf planet SDSS J0104+1535	89
World's oldest algae fossil	89
GS 3 Internal Security 89	
NATGRID - National Intelligence Grid	89
Bilateral exercises	90

GS 1 HISTORY CULTURE SOCIAL ISSUES AND GEOGRAPHY

Ochre Coloured Pottery (OCP) Culture

Six copper axes and some pieces of pottery discovered in Sakatpur of Saharanpur district in Uttar Pradesh could point to a separate culture that straddled the Ganga and Yamuna, coinciding with the Indus Valley Civilisation, say archaeologists.

Mains : GS 1 Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

About the discovery

- Copper axes and pieces of pottery were discovered from UP which could point to a separate culture coinciding with the Indus valley civilization.
- The Archaeological Survey of India is excavating the site at Rampur Maniharan, hoping to discover more artefacts.
- When the Indus Valley civilisation flourished in what is today Punjab, Haryana and parts of Pakistan, a parallel culture is thought to have co-existed in the fertile plains between the Ganga and the Yamuna in western Uttar Pradesh.
- The discoveries may be related to the Ochre Coloured Pottery (OCP) culture in the doab (plains) of the two rivers in the late Harappan period, around 2000 BC.

Ochre Coloured Pottery (OCP) culture

- OCP marked the last stage of the North Indian Copper Age.
- The people who used ochre pottery and their culture are specific to the doab region.
- The first remnants of OCP culture were found in Hastinapur, in Meerut district, in 1951 and later in Atranjikhhera in Etah district.
- Scholars differ in their interpretation of the nature of OCP culture. Those like V.N. Misra see it as “only a final and impoverished stage of the late-Harappan,” while others view it as completely unrelated to Harappa.

Exam Perspective

Indian culture is an important topic for civil service preliminary as well as mains examination. You can visit our IAS preparation page to know about the subject how to master it and to see the previous year questions asked from the topic.

[Indian Culture for Prelims Preparation](#)

[Indian Culture for Mains Preparation](#)

Sources: The Hindu

Kurukh language - Oraon tribes

Kurukh, an endangered tribal language of the Dravidian family, is set to get a new lease of life in West Bengal. It is spoken by the Oraon tribal community. The West Bengal government is taking steps for the recognition of the Kurukh language of the Oraon community who live in Dooars [in north Bengal].

Mains : GS 3 Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

Kurukh language

- Kurukh, an endangered tribal language of the Dravidian family, is set to get a new lease of life in West Bengal. It is spoken by the Oraon tribal community.
- Jharkhand has recognised Kurukh as a language, and students can write their school final examination in its script.
- The script is called Tolong Siki.
- It resembles that of any Dravidian language.
- According to the 2001 census report (the latest official data on language-speakers), the language is spoken by about 17 lakh persons.
- Kurukh belongs to the Northern Dravidian group of the Dravidian family of languages.
- Kurukh is written in Devanagari, a script also used to write Sanskrit, Hindi, Marathi, Nepali and other Indo-Aryan languages.
- Narayan Oraon, a medical doctor, invented the Tolong Siki script specifically for Kurukh.
- The language is marked as being in a “vulnerable” state in UNESCO’s list of endangered languages.

Oraon tribes

- The Oraon tribes or Kurukh tribe also spelled Uraon, Oran, or Oram, are an Adivasi group inhabiting various states across central and eastern India, Myanmar, Bangladesh, and Bhutan
- Traditionally, Oraons depended on the forest and farms for their ritual and economic livelihood, but in recent times, a few of them have become mainly settled agriculturalists.

Prelims perspective Model questions

Which of the following tribal community speaks Kurukh language?

- a) Lepcha
- b) Oraon
- c) Tamang
- d) Bhutia

Sources: The Hindu Wikipedia Wikipedia

Ancient herbal ink Mahi

Researchers are working on to create the lost technique of manuscript writing using the ancient herbal ink Mahi. A cocktail of fruit pulp and barks such as haritaki, amla, bibhitakhi or bhomora, mango, jamun -- often infused with the blood of eels or catfish -- Mahi was extracted using cow urine. Rust from iron tools or nails were also added for an intense black hue. Traditionally, Mahi was used in early and medieval Assam for writing on Sancipat (folios made of bark of the sancu tree) manuscripts. Mahi's endurance is proven by the stability of Sancipat manuscripts. The endurance of Mahi is attributed to antifungal activity of the Ink.

Nowruz

Nowruz, also spelled as Navroz, is the Iranian New Year celebrated by ethnic Iranian people. In India, the Parsi community, who follow Zoroastrianism, celebrated Navroz with on March 21. Nowruz was Inscribed in 2009 on the Representative List of the Intangible Cultural Heritage of Humanity as a cultural tradition observed by numerous peoples, by UNESCO. Nowruz is the day of the vernal equinox, and marks the beginning of spring in the Northern Hemisphere. It usually occurs on 21 March.

NIO finds a new canyon system close to Kovvada coast - Canyons

CSIR-National Institute of Oceanography (NIO) scientists have found three new canyons in Bay of Bengal near Kovvada coast in Andhra Pradesh

Mains : GS 1 Salient features of world's physical geography.

Canyons

- Canyon systems are generally formed by flow of river water into the sea and they could be as old as the river system, which is close to 23 million years.
- A canyon gorge is a deep cleft between escarpments or cliffs resulting from the erosive activity of a river over geologic timescales.

About the discovery

- Earlier an American geologist Prof LaFond has discovered a canyon system off the Visakhapatnam coast in 1963.
- The new canyon system is very huge and probably formed by the river Kandivalasa.
- The depth of the canyon varies from about 90 metres from the starting point to about 2,500 metres (more than Grand canyon) at the deepest point, and it extends to about 50 to 70 km deep into the sea and the width varies from 50 metres to two km.
- Prof LaFond had predicted the existence of the presently discovered canyons.

Prelims perspective Model questions

Which of the following system is the result of erosive activity of river?

1. Gorges
2. Canyons
3. Flood plains

Select the correct answer using the code given below:

- a) All the above
- b) None of the above
- c) 1 and 2 only
- d) 2 and 3 only

Sources: The Hindu Wikipedia Social media campaign #WeAreEqual

Leading up to International Women's Day on March 8, 2017, the Ministry of Women and Child Development has initiated a social media campaign - #WeAreEqual - targeted at raising awareness about gender discrimination. The campaign will culminate into the celebration of International Women's Day marked by the prestigious Nari Shakti Award ceremony, in which the Hon'ble President will honour individuals and institutions for their exemplary contribution to women's empowerment.

GS 2 INDIAN POLITY AND INTERNATIONAL RELATIONS

Tejaswini: Socio-Economic Empowerment of Adolescent Girls and Young Women Project.

A Financing Agreement for IDA credit of US\$ 63 million (equivalent) for the “Tejaswini” Socio-Economic Empowerment of Adolescent Girls and Young Women Project” was signed here with the World Bank on 23rd February, 2017.

Mains : GS 2 Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes;

Tejaswini Project

The project seeks to empower the adolescent girls with basic life skills and thereafter provide further opportunities to acquire market driven skill training or completion of secondary education, depending on the inclination of the beneficiary. The project will be delivered in 17 Districts of Jharkhand.

The project has three main components

- Expanding social, educational and economic opportunities
- Intensive service delivery
- State capacity-building and implementation support.

Prelims perspective Model questions

‘Tejaswini’, an initiative of the Government of India, aims at:

- (a) promoting the Self Help Groups in rural areas
- (b) providing financial and technical assistance to young start-up entrepreneurs
- (c) promoting the education and economic opportunities of adolescent girls
- (d) providing affordable and quality education to the citizens for free

Sources: pib

Arsenic Contamination

The drinking water sources in Tiwaritola a the backward region of eastern Uttar Pradesh are heavily contaminated with arsenic.

Mains : GS 2 Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Highlights

- Nearly every person you in the village suffers from melanosis (skin lesions or white marks that on their chest, abdomen or thighs). Others suffer from more serious ailments.
- While the World Health Organisation (WHO) has set the permissible limit for arsenic in drinking water at 5 ppm, in Ballia, over 300 villages have arsenic above that limit, with one third having concentration levels above 100 ppm.

Arsenic Contamination

- Arsenic is naturally present in the groundwater of a number of countries and it is highly toxic in its inorganic form. Arsenic contaminated water used for drinking, food preparation, and irrigation of food crops poses greatest threat to public health
- The effect of Arsenic in the body starts showing after 2-5 years of consuming the contaminated water. The skin develops spots, then hard nodules, leading to gangrene and cancer.
- Arsenic contamination has been reported from West Bengal and Bihar. It was also found that the the whole of Bangladesh is affected by the problem.

Prelims perspective

The reasons for arsenic poisoning, the places affected by arsenic poisoning etc could be asked in the examination.

Sources: The Hindu Environmental Studies R. Rajagopalan

India first in bribery rate, Bribery rate Transparency International

India had the highest bribery rate among the 16 Asia-Pacific countries surveyed by Transparency International between July 2015 and January 2017,

Mains : GS 2 Important aspects of governance, transparency and accountability, GS 4 Public/Civil service values and Ethics in Public administration

Highlights of the survey

- It says 7 out of 10 people who accessed public services had to pay bribe.
- Indian had to pay bribe in public schools, police stations, for getting voter card and even for availing court services.
- Vietnam, Thailand and Pakistan follows India.
- Japan had the lowest incidence of bribery at 0.2 per cent.
- The police is the most corrupt institution across the whole region surveyed.

The annual index of Transparency International issued for 2016 earlier placed India with Brazil and China in the 40th position.

Transparency International

- Transparency International (TI) is an international non-governmental organization which is based in Berlin, Germany, and was founded in 1993.
- Its nonprofit purpose is to take action to combat corruption and prevent criminal activities arising from corruption.
- It publishes for example the Global Corruption Barometer and the Corruption Perceptions Index.

Prelims Perspective Model Questions

'Transparency International', often in the news, is

- (A) a division of Amnesty international

- (B) a non-governmental international organization
- (C) an inter-governmental agency sponsored by European Union
- (D) a specialized agency of the United Nations

Mains Perspective Model questions

In the integrity Index of Transparency International, India stands very low. Discuss briefly the legal, political, social and cultural factors that have caused the decline of public morality in India. [UPSC Mains 2016]

Sources: The Hindu Wikipedia

The Surrogacy (Regulation) Bill, 2016

A Supreme Court Bench allowed a representation to be made before the parliamentary committee to consider including a “specific provision” in the Bill so as to facilitate single persons to become parent through surrogacy.

Mains : GS 2 Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

Present provision

Provision is at present available only to infertile, legally-wedded Indian couples The Supreme Court is hearing a bunch of petitions on banning commercial surrogacy and the treatment of babies as a commodity.

The Surrogacy (Regulation) Bill, 2016

- The Bill prohibits commercial surrogacy, but allows altruistic surrogacy. Altruistic surrogacy involves no monetary compensation to the surrogate mother other than the medical expenses.
- It expressly allows only infertile and legally-wedded Indian couples to have children through surrogacy.
- The draft Bill does not cover categories other than married Indian couples, like single women or men, gay or lesbian couples, etc. The window for “altruistic surrogacy” is only open for childless Indian married couple. The Bill also does not allow married couple, who have children, adopted or surrogate or biological, to have children via surrogacy.
- The stated objective of the new Bill is to constitute a National Surrogacy Board, State Surrogacy Board and appointment of authorities for regulation of practice and process of surrogacy. In short, the law is meant to end commercial surrogacy or, as the Supreme Court had once in 2009, termed “fertility tourism” in the country.
- The surrogate mother should be a close relative of intending parents.
- The Bill specifies a range of offences and penalties for other contraventions of the provisions of the Bill and initiating commercial surrogacy

Prelims perspective Model questions

Features of the draft bill could be asked in the examination.

Mains Perspective Model questions

While the introduction of draft Surrogacy (Regulation) Bill, 2016, is a welcome step towards plugging the existing regulatory vacuum in the commissioning of surrogacy in India, the provisions spelt out under the draft bill reek of regulatory overreach and a flawed mechanism.

Critically evaluate

Sources: The Hindu PRS

Common Service Centres (CSCs)

The Centre has initiated talks with FMCG companies to sell their products online in rural areas through common service centres (CSCs) as it looks to increase the business for such centres.

Mains : GS 3 e-governance- applications, models, successes, limitations, and potential;

Common Service Centres

- The CSCs are Information and Communication Technology (ICT) enabled kiosks with broadband connectivity to provide various Governments, private and social services at the doorstep of the citizen.
- The Government of India is implementing CSCs scheme to develop and provide support to the use of information technology in rural areas of the country.
- The CSC is a strategic cornerstone of the National e-Governance Plan (NeGP), approved by the Government in May 2006, as part of its commitment in the National Common Minimum Programme to introduce e-governance on a massive scale.
- The CSCs would provide high quality and cost-effective video, voice and data content and services, in the areas of e-governance, education, health, telemedicine, entertainment as well as other private services.

Prelims perspective Model questions

Which of the following statements regarding Common service centres are correct?

1. It provides only government services
2. It will provide services in the areas of e-governance, education, health, telemedicine and entertainment

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Mains Perspective Model questions

Common service centre can be a game changer initiative in furthering the vision of Digital India.

Comment

Sources: The Hindu MeitY

Electoral bonds

The Finance Minister said that the electoral bonds will be made available ahead of the elections and would remain valid for a few days.

Mains : GS 2 Important aspects of governance, transparency and accountability,

What is it Electoral bonds? How it works?

- Electoral bonds will be issued by a notified bank for specified denominations.
- These bonds can be purchased by anyone and can be given to a registered political party without disclosing the identity of the donor.
- The party can convert these bonds back into money via their bank accounts.
- These bonds are thus like bearer cheques.

Significance

- Today, most political parties use the lax regime on donations to accept cash donations from anonymous sources.

The loopholes

- While the identity of the donor is captured, it is not revealed to the party or public. So transparency is not enhanced for the voter.

Latest development

- The Finance minister announced that the bond will be open for a limited period of time during the elections, or maybe a little before the elections.

Mains Perspective Model questions

Transparency and anonymity don't go together. If the purpose of electoral bonds is to ensure anonymity of the donor then through these bonds another unknown source of political funding has been created. Comment

Sources: The Hindu The Hindu Businessline

Maternity Benefits (Amendment) Bill, 2016

Lok Sabha passed the Maternity Benefit (Amendment) Bill, 2016 which inter-alia includes increasing maternity benefit to woman covered under the Maternity Benefit Act, 1961 from 12 weeks to 26 weeks .

Mains : GS 1 Role of women and women's organization.

Highlights of the bill

- Increase paid leave for expectant mothers from 12 weeks to 26 weeks.

- Women adopting a newborn and those having babies through surrogacy will also be entitled for maternity leave for three months.
- These amendments are applicable to factories with at least 10 workers, will help around 18 lakh women workers in the organised sector.
- Women with two or more children will continue to get only 12 weeks maternity leave
- Commissioning mothers will also be entitled to maternity benefits.

Commissioning mothers :

Biological mother who uses her egg to create an embryo implanted in another women.

- Establishments will have to provide creche facilities within a certain distance and women will be allowed four visits to the creche in a day.
- If the nature of the work permits women may also be allowed to work from home after the period of maternity leave

Prelims Perspective

A question can be expected from any of the following areas Provisions of the maternity bill

Mains Perspective Model questions

Laws regulating workplaces will help only organised sector workforce. With the majority of employers employed in informal sector of the economy, explain how India is going to provide social security for its informal sector workers

Sources: The Hindu The Hindu PRS pib

The Enemy Property (Amendment and Validation) Bill, 2016

The Rajya Sabha passed the The Enemy Property (Amendment and Validation) Bill, 2016. The amendments are aimed at plugging the loopholes in the Act to ensure that the enemy properties that have been vested in the Custodian remain so and do not revert to the enemy subject or firm.

Mains : GS 2 Governance, Constitution, Polity, Social Justice and International relations.

Background

- After the wars against China in 1962 and Pakistan in 1965 and 1971, property belonging to the nationals of these two countries was taken over by the Union government under the Defence of India Acts.
- Later, the Enemy Property Act, 1968 was passed to vest all such immovable and movable property in a 'Custodian'.
- The Supreme Court ruled in 2005 that legal heirs of the enemy could inherit the property if they were Indian citizens.
- The Centre promulgated The Enemy Property (Amendment and Validation) ordinance, 2016 several times until the bill was passed to overcome Supreme Court order

The Enemy Property (Amendment and Validation) Bill, 2016

Retrospective application:

The Ordinance amends several provisions of the 1968 Act retrospectively.

Definition of enemy:

The ordinance expanded the definition of enemy to include legal heirs of enemies (even they are Indian citizens) and nationals of an enemy country who subsequently changed their nationality to that of another country, etc.

Vesting of enemy property:

The Ordinance amends the Act to clarify that even in the following cases these properties will continue to vest with the Custodian: (i) the enemy's death, (ii) if the legal heir is an Indian or citizen of a country that is not an enemy, (iii) enemy changes his nationality to that of another country, etc.

No laws and customs governing succession will be applicable to these properties.

Power of sale:

The Ordinance allows the Custodian to sell or dispose of enemy property.

Transfers by enemies:

The Ordinance prohibits all transfers of enemy property by enemies.

Bar of jurisdiction:

The Ordinance bars civil courts and other authorities from entertaining cases against enemy properties,

Powers of the Custodian:

The 1968 Act authorised the Custodian to take measures to preserve enemy property, and maintain the enemy and his family if they are in India, from the income derived from the property.

The Public Premises Act, 1971 regulates removal of unauthorised occupants and construction from public premises. The Ordinance amends this Act to include enemy properties within the definition of public premise.

Ordinance

- As per article 123 of the Indian constitution the president can promulgate ordinances when the parliament is not in session
- Ordinances are temporary laws that are promulgated by the President of India on the recommendation of the Union Cabinet.
- They can only be issued when Parliament is not in session.
- Ordinances cease to operate either if Parliament does not approve of them within six weeks of reassembly, or if disapproving resolutions are passed by both Houses.

Prelims perspective Model questions

Who among the following has the power to promulgate ordinances?

- a) Parliament
- b) Speaker of Lok Sabha
- c) President
- d) None of these

Mains Perspective Model questions

Resorting to ordinances has always raised concern on violation of the spirit of separation of power doctrine. While noting the rationales justifying the power to promulgate, analyse whether the decision of the Supreme Court on the issue have further facilitated to resorting to this power.

Should the power to promulgate the ordinances be repealed? [UPSC Mains 2015]

Sources: The Hindu The Hindu Wikipedia pib PRS

The Inter-State River Water Disputes (Amendment) Bill, 2017

The Inter-State River Water Disputes (Amendment) Bill, 2017 was introduced in Lok Sabha. The Inter-State River Water Disputes (Amendment) Bill, 2017 proposes to streamline the adjudication of inter-state river water disputes and make the present legal and institutional architecture robust.

Mains : GS 2 Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

Highlights of the Bill

- The Bill proposes a Single Standing Tribunal (with multiple benches) instead of existing multiple tribunals
- The tribunal will consist of one Chairperson, one Vice-Chairperson and not more than six other Members.
- The term of office Chairperson is five year or till he attains the age of 70 years, whichever is earlier, the term of office of Vice Chairperson and other member of tribunal shall be co-terminus with the adjudication of the water dispute.
- The total time period for adjudication of dispute has been fixed at **maximum of four and half years.**
- The decision of the Tribunal shall be final and binding with no requirement of publication in the official Gazette. It provides for transparent data collection system at the national level for each river basin and
- for this purpose, an agency to maintain data-bank and information system shall be appointed or authorized by Central Government.

- **Dispute resolution committee** :Along with the tribunal, the amendment proposes to set up Dispute Resolution Committee (DRC). The DRC, comprising experts and policy-makers, is proposed to handle disputes prior to the tribunal.

Constitutional provisions dealing with Inter- state water disputes Interstate water disputes tribunal act – 1956

- Under Article 262 of the constitution Parliament has enacted the Interstate water disputes tribunal act
- The Act empowers central government to set up an adhoc tribunal for adjudication of a dispute between two or more states in relation to water of an interstate river or river valley
- The decision of the tribunal will be final and neither the Supreme court nor any other court will have jurisdiction of any dispute referred to the tribunal under this act

Article 262 of the constitution

1. Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter-State river or river valley.
2. Notwithstanding anything in this Constitution, Parliament may by law provide that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in clause (1).

Prelims perspective

A question can be expected from any of the following areas Inter-State Water Disputes tribunal Parliament’s or Supreme Court’s authority in dealing with interstate water disputes

Mains Perspective Model questions

Constitutional mechanisms to resolve the inter-state water disputes have failed to address and solve the problems. Is the failure due to structural or process inadequacy or both? Discuss [UPSC Mains 2013] The effective management of land and water resources will drastically reduce the human miseries. Explain. [UPSC Mains GS 1 2016]

Sources: pib The Hindu Constitution of India

15 Indian Institutes of Information Technology (IIITs) declared as Institutes of National Importance

Cabinet approves Indian Institutes of Information Technology (Public- Private Partnership) Bill, 2017

Mains : GS 2 Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Highlights of the bill

- It will grant statutory status to the fifteen Indian Institutes of Information Technology in Public Private Partnership and declare them as Institutions of National Importance;
- It will enable these institutions to grant degrees to their students in the academic courses

conducted by them.

- There is no financial implication with regard to the proposed IIIT PPP Bill, 2017
- The grant of a formal degree in Information Technology, Engineering or Ph.D will enhance the prospects of the graduating students in the job market and will also enable the Institutes to attract enough students required to develop a strong research base in the country in the field of information technology.

Why the Indian Institutes of Information Technology (Public- Private Partnership) Bill, 2017?

The Scheme of Setting up of 20 new IIITs in Public Private Partnership (IIIT PPP) didn't had a provision which empowered the Institutes to grant degrees to its students.

Mains Perspective Model questions

Should the premier institutes like IITs/IIMs be allowed to retain premier status, allowed more academic independence in designing courses and also decide mode/criteria of selection of students. Discuss in light of the growing challenges [UPSC Mains 2014]

Sources: The Hindu pib

National Health Policy, 2017

National Health Policy, 2017 approved by Cabinet Focus on Preventive and Promotive Health Care and Universal access to good quality health care services

Mains : GS 2 Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

National Health Policy, 2017 Objective:

It aims at achieving universal health coverage and delivering quality health care services to all at affordable cost.

- It promises to increase public health spending to 2.5% of GDP
- The policy aims to move away from 'sick care' to 'wellness,'
- It seeks to engage private sector as strategic partners.
- It seeks to promote quality of care, focus is on emerging diseases and investment in promotive and preventive healthcare.
- It addresses health security and make in India for drugs and devices.
- The policy proposes free drugs, free diagnostics and free emergency care services in all public hospitals.
- Prioritizes the role of the Government in shaping health systems
- It envisages providing larger package of assured comprehensive primary health care through the Health and Wellness Centers'.
- Allocating major proportion (up to two-thirds or more) of resources to primary care followed by secondary and tertiary care.

- It aspires to provide at the district level most of the secondary care which is currently provided at a medical college hospital.
- It assigns specific quantitative targets aimed at reduction of disease prevalence/incidence, for health status and programme impact, health system performance and system strengthening.
- It seeks to strengthen the health, surveillance system and establish registries for diseases of public health importance, by 2020.
- It seeks to align other policies for medical devices and equipment with public health goals.
- The policy affirms commitment to pre-emptive care (aimed at pre-empting the occurrence of diseases) to achieve optimum levels of child and adolescent health.
- The policy envisages school health programmes as a major focus area as also health and hygiene being made a part of the school curriculum.
- The policy recommends mainstreaming the different health systems.
- It envisages better access to AYUSH remedies through co-location in public facilities.
- The policy supports voluntary service in rural and under-served areas on pro-bono basis by recognized healthcare professionals under a 'giving back to society' initiative.
- It advocates extensive deployment of digital tools for improving the efficiency and outcome of the healthcare system
- It proposes establishment of National Digital Health Authority (NDHA) to regulate, develop and deploy digital health across the continuum of care.
- The broad principles of the policy is centered on Professionalism, Integrity and Ethics, Equity, Affordability, Universality, Patient Centered & Quality of Care, Accountability and pluralism.

Criticisms

- Health was not made a legal right. The GDP spent target for health of 2.5% would be met by 2025.
- The 12th plan document has set the same target for the plan that ends this month.
- Many of the disease-specific targets announced by the Policy were already mentioned in the budget Several initiatives in the policy were announced earlier.

Health - a state subject

- The policy is silent on whether Health should continue to be in the State List, or be brought, like Education, in the Concurrent List for better regulation.
- A national health authority cannot work effectively without Health being on the Concurrent List.
- Questions on Health in Parliament will continue to remain unanswered as "Health is a State Subject".

Exam perspective

Government schemes and policies are important for prelims as well as mains. Questions related to Government policies, their performance are important for all stages of the examination.

Sources: The Hindu The Indian Express pib

HIV patients unhappy with Bill

Obligation on State governments to provide treatment 'as far as possible' The HIV Bill, a crucial public health legislation guaranteeing equal rights to India's HIV community, was passed by the Rajya Sabha.

Mains : GS 2 Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

Objective of the bill

The Bill seeks to prevent and control the spread of HIV and AIDS and prohibit discrimination against persons with HIV and AIDS.

Highlights of the bill

- Prohibition of discrimination against HIV positive persons: The Bill lists the various grounds on which discrimination against HIV positive persons and those living with them is prohibited. These include the denial, termination, discontinuation or unfair treatment with regard to: (i) employment, (ii) educational establishments, (iii) health care services, (iv) residing or renting property, (v) standing for public or private office, and (vi) provision of insurance (unless based on actuarial studies).
- The requirement for HIV testing as a pre-requisite for obtaining employment or accessing health care or education is also prohibited.
- Every HIV infected or affected person below the age of 18 years has the right to reside in a shared household and enjoy the facilities of the household.
- **Informed consent and disclosure of HIV status:** No person shall be compelled to disclose his HIV status except with his informed consent, and if required by a court order.
- **Data Protection:** Establishments keeping records of information of HIV positive persons shall adopt data protection measures.
- **Ombudsman:** An ombudsman shall be appointed by each state government to inquire into complaints related to the violation of the Act. The ombudsman should submit report to state government every six months.
- **Guardianship:** A person between the age of 12 to 18 years who has sufficient maturity in understanding and managing the affairs of his HIV or AIDS affected family shall be competent to act as a guardian of another sibling below 18 years of age.

- **Court proceedings:** Cases relating to HIV positive persons shall be disposed of by the court on a priority basis.
- **Role of the central and state governments:** The central and state governments shall take measures to prevent the spread of HIV or AIDS, provide anti-retroviral therapy, facilitate access to welfare schemes, formulate HIV or AIDS education programmes, lay guidelines for the care and treatment.

HIV stats

- There are approximately 21 lakh persons estimated to be living with HIV in India and the percentage of patients receiving antiretroviral therapy (ART) treatment currently stands at a mere 25.82% as against the global percentage of 41%, according to the 2015 Global Burden of Diseases (GBD).

The Issues

- Amendments to the bill state that the government’s focus will be only on prevention, and not treatment

One card for everything?

Aadhaar is becoming mandatory for a slew of services

No. of cards issued: **108 crore**, according to Finance Minister Arun Jaitley

As many as 31 schemes have been identified by the Centre for mandatory use of Aadhaar. Carry your card if you want to:

- File income tax returns or apply for PAN
- Avail benefits under the Pradhan Mantri



Kaushal Vikas Yojana for skill development

- Get subsidised grain under the National Food Security Act
- Avail jobs under the MGNREGA
- Claim benefits under the Employees Pension Scheme



Aadhaar has biometric details, so its chances of misuse become minimal. When the country has so much technology, and when it is being put to use, why create such a hue and cry about it? ARUN JAITLEY, Union Finance Minister

Image · The Hindu

- Besides seeking to prevent stigma and discrimination against the HIV community, the Bill was intended to safeguard the rights of people living with HIV by guaranteeing access to treatment.
- The law is paying more attention to prevention measures alone. Even those prevention measures are not guaranteed as the clause says they’ll do as far as possible.

Prelims Perspective

A question can be expected from any of the following areas Major provisions of the bill can figure in the examination

Mains Perspective

The syllabus clearly mentions about ‘Welfare schemes for vulnerable sections of the population and laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections’ and the questions from this part of the syllabus were asked in the previous year examinations. To see how questions can be framed asked from this section visit our [IAS preparation page](#)

Sources: [The Hindu](#) [The Hindu](#) [PRS](#)

‘The Right of Children to Free and Compulsory Education Act, 2009’

The Union Cabinet approved the amendment to Right of Children to Free and Compulsory Education (RTE) Act, 2009.

Mains : GS 3 Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

What does the amendment do?

- This will ensure that all teachers, in position as on 31st March, 2015, acquire the minimum qualifications prescribed by the academic authority to extend the period for such training for four years up to 31st March, 2019.
- This will enable the in-service untrained elementary teachers to complete their training and ensure that all teachers at the elementary level in the country have a certain minimum standard of qualifications.
- **Significance :** This would ultimately result in improvement in overall quality of teachers, teaching processes and consequently learning outcomes of children.

The Right of Children to Free and Compulsory Education (RTE) Act, 2009,

- The 86th Constitution Amendment Act, 2002 requires the State to provide free and compulsory elementary education to all children. The Right of Children to Free and Compulsory Education Bill, 2008 seeks to give effect to this Amendment.
- All children between the ages of six and 14 years shall have the right to free and compulsory elementary education in a neighbourhood school.
- No child shall be held back, expelled, or required to pass a board examination until the completion of elementary education. Schools may not screen applicants during admission or charge capitation fees. A child who completes elementary education shall be awarded a certificate.
- Kendriya Vidyalayas, Navodaya Vidyalayas, Sainik Schools, and unaided schools shall admit at least 25% of students from disadvantaged and economically weaker groups.
- A person who wants to file a grievance claim shall submit a written complaint to the local authority. Appeals shall be decided by either the State Commission for Protection of Child Rights or the specified authority.

Mains Perspective Model questions

Acts, schemes and policies related to social sectors - Education and health- are important for examination. The number of questions vary but one can always expect 1-2 questions from this section. Visit our [IAS Preparation page](#) to see previous year questions.

Sources: pib [PRS](#)

Corporate funding norms for political parties eased

Corporate donations to political parties will no longer face any ceiling linked to firms' profitability and companies will no longer be required to inform their shareholders which party to which they contribute to.

Mains : GS 2 Important aspects of governance, transparency and accountability,

Present situation

- Companies can only contribute up to 7.5% of their average net profits in the past three financial years to political parties. Moreover, they are required to disclose the amount of contributions made and the names of the political parties to which they were made, in their profit and loss accounts.

Amendments to the Finance Bill of 2017

- The limit of 7.5 % and requirement to disclose the name of the party has been done away with.
- Companies is amended to make it mandatory for all corporate donations to political parties to be made by a cheque, electronic means, a bank draft or any other instrument notified by the government.

Mains Perspective Model questions

“The move towards electoral bonds and non-declaration from companies might reduce the black cash problem of Indian politics, but it makes it much easier for American style special interests to pump significant amounts of money into parties without having to declare them,” Comment

Sources: [The Hindu](#)

'Rashtriya Vayoshri Yojana'

“Rashtriya Vayoshri Yojana”, a ‘Scheme for providing Physical Aids and Assisted-living Devices for Senior citizens belonging to BPL category’ will be launched in District Nellore, Andhra Pradesh.

Mains : GS 2 Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

'Rashtriya Vayoshri Yojana'

- The Physical Aids and Assisted-living Devices for Senior citizens will be distributed in Camp mode.
- The Scheme will be implemented through the sole implementing agency, ‘Artificial Limbs Manufacturing Corporation (ALIMCO)’.

- This is a Central Sector Scheme, fully funded by the Central Government.
- The expenditure for implementation of the scheme will be met from the “Senior Citizens’ Welfare Fund”.
- Free of cost distribution of the devices, commensurate with the extent of disability/infirmity that is manifested among the eligible senior citizens.
- In case of multiple disabilities/infirmities manifested in the same person, the assistive devices will be given in respect of each disability/impairment.

Prelims Perspective

‘Rashtriya Vayoshri Yojana’ by the Government of India pertains to

- (a) welfare of the disabled
- (b) providing bank accounts to senior citizens
- (c) Providing social security coverage to senior citizens
- (d) welfare of the disabled senior citizens

Mains Perspective

The syllabus clearly mentions about ‘Welfare schemes for vulnerable sections of the population and laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections’ and the questions from this part of the syllabus were asked in the previous year examinations. To see how questions can be framed asked from this section visit our [IAS preparation page](#)

Sources: pib

Aadhaar mandatory for several services

The Department of Telecommunications issued a notification, directing all phone service providers to reverify details for all existing subscribers through Aadhaar-based e-KYC (Know Your Customer) process.

Mains : GS 2 Structure, organization and functioning of the Executive and the Judiciary Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

Earlier government orders making Aadhaar mandatory

Supreme Court’s order on use of Aadhaar

- An earlier Supreme Court allowed voluntary use of Aadhaar for getting benefits
- It added that no citizen could be denied a service or subsidy for not having an Aadhaar or unique identity number.
- The government’s order violated Supreme court’s earlier judgement.

Provision in Aadhaar act supporting the government’s move

- The Aadhaar Act provides that the Central/State Government while making expenditure

from Consolidated Fund of India for any subsidy, may require such individual to furnish proof of possession of Aadhaar number or undergo authentication.

Mains Perspective Model questions [UPSC Mains 2013]

Electronic cash transfer system for the welfare schemes is an ambitious project to minimize corruption, eliminate wastage and facilitate reforms Comment.

Sources: [The Hindu](#) [The Hindu](#) [The Hindu](#) [The Hindu](#) [The Hindu Businessline](#)

The Lokpal and Lokayuktas Act 2013

The Centre informed the Supreme Court that appointment of the anti-corruption ombudsman, Lokpal, is not possible now.

Mains : GS 2 Dispute redressal mechanisms and institutions. Statutory, regulatory and various quasi-judicial bodies.

The issue

- The SC had earlier criticised the government for “dragging its feet” on the appointment of Lokpal.
- The Lokpal is selected by a committee comprising of the Prime Minister, Lok Sabha Speaker, Leader of Opposition (LoP) and the Chief Justice of India or a SC judge and an eminent jurist nominated by the President as per the Lokpal and Lokayukta Act of 2013. But the 16th Lok Sabha has no recognised LoP.
- Unless a proposed amendment making leader of the largest opposition party as LoP is passed by Parliament, the Lokpal cannot be appointed

The Lokpal and Lokayuktas Act 2013

- The Bill provides for establishment of the **Lokpal at the centre and Lokayuktas in the states** for inquiring into complaints of corruption against certain public servants.

Appointment and selection of Members

- The members of the Lokpal (Lokayuktas) shall be appointed by the President (Governor) on the basis of the recommendations of the Selection Committee.

Members

- The Lokpal and Lokayuktas shall consist of one chairperson and up to eight members.
- The Chairperson shall be the CJI or a present or former judge of the Supreme Court or a non-judicial member with specified qualifications (Chief Justice or a Judge of a High Court).
- Fifty percent of the other members shall be judicial members (judges of the supreme court and high courts).

Removal of members

- Members of the Lokpal may be removed by the President after an inquiry by the Supreme Court. The Supreme Court may inquire based on a reference from the President.

Powers of Lokpal

A Lokpal can enquire into offences under the Prevention of Corruption Act, 1988 (PCA) committed by:

- the PM with specified safeguards,
- current and former Union Ministers, current and former MPs, group A, B, C, D officers,
- employees of a company, society or a trust set up by an Act of Parliament, or financed or controlled by the central government.
- employees of association of persons that have received funding from the government or have received public donation subject to certain conditions.

The Lokayuktas shall have similar jurisdiction over the CM, Ministers, MLAs, all state government employees

Other details

- The Lokpal's inquiry wing is required to inquire into complaints within 60 days of their reference.
- The Bill removes the requirement of sanction for initiating investigation and prosecution.

Prelims Perspective Model Questions

Consider the following statements.

1. Lokayuktas can inquire into corruption allegations against the Prime Minister
2. The Lokayuktas shall consist of one chairperson and up to eight members.

Which of the above statements is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer B

Mains Perspective Model questions

A national Lokpal however strong it may be cannot resolve the problems of immorality in public affairs.' Discuss [UPSC Mains 2013]

Sources: [The Hindu](#) PRS

Kerala Achieves single digit IMR

Kerala Achieved a single digit IMR of 6 per 1000 live births comparable to any developed nation going by the data released by National Family Health Survey. With this the state has already overshoot the target it had set itself as far as Sustainable development goals are concerned

Shahpur Kandi Dam

The States of J&K and Punjab reached an agreement to resume works on Shahpur Kandi Dam project in Punjab/ J&K. The construction of Shahpur Kandi project was taken up in May 1999

but later halted in 2014 due to dispute between Punjab and J&K. The 55.5 high Shahpur Kandi dam, located in Gurdaspur district of Punjab, will help in providing irrigation facility to 5000 hectares of land in Punjab and 32173 hectares in J&K besides generation of 206 MW power.

Women Transforming India

On the occasion of International Women's Day 2017, NITI Aayog, in partnership with the UN in India and MyGov, presented the second edition of Women Transforming India, an online contest to celebrate women achievers, leaders and change makers from across the country. The theme for International Women's Day, 8 March 2017, focuses on "Women in the Changing World of Work: Planet 50-50 by 2030". This advances the Government of India's commitment to ensure gender parity in India, with special focus on women's economic empowerment.

Footwear Design and Development Institute (FDDI) Bill, 2017

The Footwear Design and Development Institute (FDDI) Bill, 2017 was introduced to declare the FDDI as an Institution of National Importance (INI). The objective of the proposed legislation is to facilitate and promote teaching, training and research in all disciplines relating to design and development of Footwear and leather products. The Footwear Design & Development Institute was established in 1986 with the objective of providing trained human resource and assistance to the sector. FDDI has pan-India presence.

Admiralty Bill, 2016

The Admiralty (Jurisdiction and Settlement of Maritime Claims) Bill, 2016 was passed by the Lok Sabha. The Bill aims to establish a legal framework to consolidate the existing laws relating to admiralty jurisdiction of courts, admiralty proceedings on maritime claims, arrest of vessels and related issues. It also aims to replace archaic laws which are hindering efficient governance. The Bill confers admiralty jurisdiction on High Courts located in coastal states of India and this jurisdiction extends upto territorial waters.

IISc among world's best 10 varsities

The Indian Institute of Science (IISc.) in Bengaluru achieved 8th rank in the Times Higher Education's (THE) Best Small Universities-2017 global rankings that looks only at universities with fewer than 5,000 students. It is the only Indian university in the list of 20, and is also the second-highest ranked Asian University. The list is topped by California Institute of Technology (Caltech). In the world university ranking, however, it sits in the range of 201-250 when compared with larger universities. IISc is a public university for scientific research and higher education, established in 1909 with active support from Jamsetji Tata and Sir Krishnaraja Wodeyar IV, the Maharaja of Mysore.

Top seven IITs to get Rs. 100 cr. each

The Centre will offer Rs. 100 crore each to the top seven Indian Institutes of Technology (IITs) in

the coming financial year to improve their quality further with a view to enhancing their global rankings. The IITs chosen are IIT Madras, IIT Mumbai, IIT Kanpur, IIT Delhi, IIT Kharagpur, IIT Roorkee and IIT Guwahati This offer would be seen as an initiative under **a project called Vishwajeet (literally, conqueror of the world), which aims at enhancing the global stature of the IITs and catapulting them to the big league.**

Committee to study University sports

The Union Ministry of Sports and Youth Affairs has appointed a six-member committee to study existing sports tournaments in the Universities and critical gaps in such areas and make recommendations for developing a new National University Sports Tournament and Development Framework. The committee, constituted early this month, is to be headed by Brig. Labh Singh, Olympian.

MoPNG e Seva

The MOPNG e-Seva is an integrated grievances redressal platform across social media for all Oil & Gas related service issues. This portal will be a single point interface for all customers to

On the table

A look at the two major hydro-electric projects in Jammu & Kashmir, to which Pakistan had objected

KISHENGANGA PROJECT

- Is in Bandipore on the river Kishenganga, a tributary of Jhelum
- Installed capacity: **330 MW**
- A 'Court of Arbitration' was set up due to Pakistan's objection to the project



A view of the Kishenganga project

- Commission date: **2016**
- Project cost: **₹ 5,783 crore (revised)**

RATLE PROJECT

- Is in Doda on the Chenab river
- Installed capacity: **850 MW**
- Project includes construction of a 195m long and 133m high concrete dam
- Commission: **2018**
- Cost (approx.): **₹ 6,400 crore**

reach out to the government for addressing their feedback or grievances related to Oil & Gas Sector on social media.

GS 2 INTERNATIONAL RELATIONS

Indus Waters Treaty

India has accepted an invitation to attend a meeting of the Permanent Indus Commission (PIC) to be held in Lahore in March.

Mains : GS 2 India and its neighbourhood- relations.

The Issue

- Pakistan had objected to two major hydroelectric power projects being constructed in Jammu and Kashmir.
- The dispute is over the Kishenganga (330 MW) and Ratle (850 MW) hydel plants India is constructing on the Kishenganga and Chenab rivers.
- Earlier India argued that world bank was favouring Pakistan in the dispute.

URI CASTS SHADOW ON INDUS TREATY

The Indus Waters Treaty, 1960, explained

1 What is the treaty?

The Indus Waters Treaty, 1960, is a water sharing pact between India and Pakistan that covers six rivers beginning in India and flowing into Pakistan. The treaty was signed on September 19, 1960.

2 What is the foundation of the treaty?

The preamble to the treaty aims at satisfactory utilisation of the Indus system of rivers (Ravi, Beas, Sutlej, Indus, Jhelum and Chenab) based on the goodwill between the two countries. It was essentially a confidence building measure between the two neighbours.

6 Can India abrogate or withdraw from the treaty?

Experts suggest that India can exercise the sovereign right of a state under Article 64 of the "Vienna Convention" to withdraw from any international treaty. Article 64 provides for sovereign states to withdraw from international treaties.

3 What are the Indian and Pakistani shares in the Indus rivers system?

The treaty divides the Indus system into two segments: Eastern Rivers – Sutlej, Beas and Ravi and Western rivers – Indus, Chenab and Jhelum. India gets right of unrestricted use over the Eastern rivers. Pakistan is entitled to "unrestricted" use of the Western rivers. India is under obligation to let flow the western rivers unrestricted.

4 What are the limits in using the treaty?

Both India and Pakistan have the right to non-consumptive use. However, both sides have the rights of drainage issues and river conservation aspects. Both sides are mandated to prevent pollution of the rivers. As responsible partners, both sides are expected to create permanent Indus Commissions with Commissioners in charge.

Why is the treaty vital for Pakistan?

The water of the Indus system flowing into Pakistan helps irrigate about 110,000 square kilometres and supports its agriculture belt in Punjab and Sindh.

5 What is the dispute resolution mechanism mentioned in the treaty?

Any dispute will have to be examined by the Commissioners. Under Article 8 of the treaty, both sides are expected to meet at least once a year to discuss bilateral problems. However, after the Uri attack, Prime Minister Narendra Modi has decided to suspend talks between the Commissioners, and has stopped short of reviewing the treaty.



COMPILED BY KALLOL BHATTACHERJEE

Image : The Hindu

consumptive use, Agricultural use as specified, Generation of hydro-electric power as specified

- India has been permitted to construct storage of water on Western Rivers up to 3.6 MAF for various purposes. No storage has been developed so far.
- Under the Treaty, India and Pakistan have each created a permanent post of Commissioner for Indus Waters. They together constitute the Permanent Indus Commission (PIC), which is entrusted with the implementation of the Treaty.
- India is under obligation to supply information of its storage and hydroelectric projects as

specified

Prelims Perspective

- A question can be expected from any of the following areas Any details or facts about Indus water treaty

Mains Perspective Model questions

Present an account of Indus Water Treaty and examine its ecological, economic and political implications in the context of changing bilateral relations. [UPSC Mains 2016]

Sources: [The Hindu](#) [The Hindu Ministry of water resources and Ganga rejuvenation](#) [Ministry of water resources and Ganga rejuvenation](#) [Wikipedia](#)

South Asian Association for Regional Cooperation (SAARC)

After months of difficulty posed mainly by India, Pakistan succeeded in getting its official elected to the post of the Secretary General of the South Asian Association for Regional Cooperation (SAARC). Pakistan was backed by all members, including India, which made the selection consensus-based.

Mains : GS 2 Important International institutions, agencies and fora- their structure, mandate. India and its neighborhood- relations.

SAARC Nations

- The South Asian Association for Regional Cooperation (SAARC) is regional intergovernmental organization and geopolitical union in South Asia. SAARC comprises 3% of the world's area, 21% of the world's population and 9.12% of the global economy, as of 2015.
- **Headquarters** : The Secretary-General of the South Asian Association for Regional Cooperation, is the head of the SAARC Secretariat, which is headquartered in **Kathmandu, Nepal**.
- **Members** : Its member states include Afghanistan, Bangladesh, Bhutan, India, Nepal, the Maldives, Pakistan and Sri Lanka.

Prelims Perspective

Consider the following statements : [UPSC Prelims 2016]

1. New Development Bank has been set up by SAARC
2. The headquarters of SAARC is in New Delhi.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Solution: D

Mains Perspective [UPSC Mains 2016] Model questions

“Increasing cross-border terrorist attacks in India and growing interference in the internal affairs of member-states by Pakistan are not conducive for the future of SAARC (South Asian Association for Regional Cooperation).” Explain with suitable examples.

Sources: [The Hindu](#) [Wikipedia](#)

Customs Convention on International Transport of Goods - TIR Carnets (TIR Convention)

The Union Cabinet has given its approval for India’s accession to the Customs Convention on International Transport of Goods under cover of TIR Carnets (TIR Convention) and for completion of necessary procedures for ratification, for its entry into force.

Mains : GS 3 International relations

What is Customs Convention on International Transport of Goods?

- The Customs Convention on International Transport of Goods under cover of TIR Carnets, 1975 (TIR Convention), is an international transit system under the auspices of the United Nations Economic Commission for Europe (UNECE) to facilitate the seamless movement of goods within and amongst the Parties to the Convention.
- At present there are 70 parties to the Convention, including the European Union.

Significance of India’s accession

- The Convention will help Indian traders to have fast and hasslefree international system for movement of goods by road or multi- modal
- Customs clearance can take place at internal Customs locations thereby avoiding clearances at Border Crossing Points and ports that may often be congested.
- Enhanced security in the supply chain as only approved transporters and vehicles are allowed to operate in terms of the Convention.

TIR Carnets (TIR Convention)

The Convention on International Transport of Goods Under Cover of TIR Carnets (TIR Convention) is a multilateral treaty that was concluded at Geneva on 14 November 1975 to simplify and harmonise the administrative formalities of international road transport. (TIR stands for “Transports Internationaux Routiers” or “International Road Transports”.)

Prelims perspective Model questions

‘TIR Carnets’ sometimes seen in news is related to:

- a) International movement of goods
- b) Easing visa norms
- c) Environmental protection
- d) tax evasion by Multinational Corporations

Compassion International to shut down India operations

The U.S.-based NGO Compassion International (CI), the largest international donor in India, will shut down India operations. The final announcement to shut down the operations was made recently.

Mains : GS 2 Development processes and the development industry- the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders

Background

- Compassion International was put on watch list by the home ministry earlier.
- After this donors could not longer sent money directly to NGO in India. They had to get prior permission from the home ministry

Why CI was placed in watch list?

- CI, had been accused of funding NGOs unregistered for religious activity,
- The home ministry says it has evidence of religious conversions being done by NGOs funded by them
- CI, insists that it has not broken any Indian laws and said that it will shut down its operations in India.

Mains Perspective Model questions

Examine critically the recent changes in the rule governing foreign funding of NGOs under the Foreign Contribution (Regulation) Act (FCRA), 1976 [UPSC Mains 2015]

Sources: [The Hindu](#) [The Hindu Economic Times](#)

U.N. scientific panel - Commission on Legal Continental Shelf (CLCS) United Nations Convention on the Law of the Sea (UNCLOS)

India has decided not to field a candidate in the elections to a prestigious U.N scientific body called Commission on Legal Continental Shelf (CLCS)

Mains : GS 2 Important International institutions, agencies and fora- their structure, mandate.

Commission on Legal Continental Shelf (CLCS)

- It is a U.N. scientific body that decides what portions of the seabed can be exclusively mined for natural resources such as oil, precious metals and minerals.
- It is a part of the United Nations Convention on the Law of the Sea (UNCLOS)
- The purpose of CLCS is to facilitate the implementation of the United Nations Convention on the Law of the Sea (the Convention) in respect of the establishment of the outer limits of the continental shelf beyond 200 nautical miles (M) from the baselines from which the breadth of the territorial sea is measured.

Significance of the membership

- It will allow India to determine the scientific strength of claims by countries to parts of the seabed.
- India has had disputes with several neighbours — Pakistan, Bangladesh and Sri Lanka — over how the continental shelf can be fairly distributed.
- India has huge interest in CLCS and applied for extending the Exclusive Economic Zone (EEZ) up to 350 nautical miles from the existing 200 nautical miles.

United Nations Convention on the Law of the Sea (UNCLOS)

The United Nations Convention on the Law of the Sea (UNCLOS), also called the Law of the Sea Convention or the Law of the Sea treaty, is the international agreement that defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.

The convention set the limit of various areas, measured from a carefully defined baseline.

- **Internal waters** : Covers all water and waterways on the landward side of the baseline.
- **Territorial waters** : Out to 12 nautical miles (22 kilometres; 14 miles) from the baseline, the coastal state is free to set laws, regulate use, and use any resource. Vessels were given the right of innocent passage through any territorial waters
- **Contiguous zone** : Beyond the 12-nautical-mile (22 km) limit, there is a further 12 nautical miles (22 km) from the territorial sea baseline limit, the contiguous zone, in which a state can continue to enforce laws in four specific areas: customs, taxation, immigration and pollution.
- **Exclusive economic zones (EEZs)** : These extend from the edge of the territorial sea out to 200 nautical miles (370 kilometres; 230 miles) from the baseline. Within this area, the coastal nation has sole exploitation rights over all natural resources.

Prelims perspective Model questions

Details about UNCLOS, CLCS, significance of being a member of CLCS can be asked in the examination.

Sources: [The Hindu](#)

New Delhi, Kabul talks soon to boost trade

India will soon hold talks with Afghanistan on ways to boost bilateral trade and investment.

Mains : *GS 2 India and its neighbourhood- relations.*

Highlights

- The meeting aims at mounting pressure on Pakistan to facilitate trouble-free transit of goods from India to Afghanistan.
- It aims development of Afghanistan and boost trade and investment ties.
- It will also help India to improve trade ties with Central Asian nations.

- India is also planning to strengthen air cargo links with Afghanistan
- The meeting will also consider more support from India to Afghanistan through Line of Credit.
- The meeting will discuss ways to make use of the United Nations TIR (Transports Internationaux Routiers or International Road Transport) Convention to boost trade between India and Afghanistan through Pakistan. Pakistan and Afghanistan are also 'contracting parties' to the TIR Convention.

India Afghan trade status

- India-Afghanistan goods trade had jumped nearly 22% 2015-16 with. However, it is still far below potential.
- India's main export items to Afghanistan are textiles, pharmaceuticals, tobacco, iron & steel and electrical machinery, while its imports from Afghanistan are fruits and nuts, gums and resins, coffee, tea and spices.
- In the absence of transit route through Pakistan, India depends on other countries, including Iran, to send goods to Afghanistan

Mains Perspective Model questions

In respect of India-Afghan relations, discuss how other countries influence foreign policy.

Sources: [The Hindu](#)

American Hindu Coalition

An organisation launched by a group of influential American Hindus, most of them of Indian descent, aspires to emerge as a political platform for all Hindus in the country regardless of their ethnic origin.

Mains : Indian diaspora.

American Hindu Coalition

- Though led by Republicans, the AHC is a bipartisan platform that will bring together Democrats, independents and anyone who believes in "Hindu enlightenment principles,".
- The primary aim of the AHC is to represent Hindus in America who are U.S citizens, not all of them from India.
- The AHC will advocate strong strategic relations between the U.S and India

Mains Perspective Model questions

Write a short analytical note on Indian Diaspora. How is the "New Diaspora" different from the "Old Diaspora"? [UPSC Mains 2012]

Sources: [The Hindu](#)

Trade Facilitation in Services (TFS) Agreement

India pressed for expediting the negotiation process for a global services pact, that among other

things, aims to ease norms for movement of skilled workers across borders.

Mains : GS 2 Important International institutions, agencies and fora- their structure, mandate. GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Background

India had, submitted to the World Trade Organisation (WTO) a legally-vetted proposal for a Trade Facilitation in Services (TFS) Agreement. The proposal was taken up by an expert committee at the WTO headquarters in Geneva

What is Trade Facilitation in Services (TFS) Agreement?

- The proposed TFS pact, among other things, aims to make it easier for professionals and skilled workers to move across borders for short-term work, as well as ensure portability of their social security contributions.
- Proposed accord will ease travel across borders for work
- The proposed pact aims to create a single window mechanism for foreign investment approvals and cross-border insurance coverage to boost medical tourism.

TFA in Goods :

Meanwhile, the TFA in Goods – adopted by the WTO Members in 2014 – entered into force. The TFA in Goods aims to streamline, simplify and standardise customs procedures. By doing so, it will help to cut trade costs around the world.

Why TFS is mooted?

- According to a ‘communication’ from India to the WTO in November 2016, “while services occupy a significant and growing share of domestic and international transactions, trade flows in services still remain subject to numerous border and behind-the-border barriers as well as procedural bottlenecks.
- These impediments particularly limit the benefits of trade in services for small and medium enterprises as well as small exporters worldwide.

Merits of having TFS agreement

- The TFS Agreement will address the key issues pertinent to facilitating services trade, such as transparency, streamlining procedures, and eliminating bottlenecks.
- The TFS Agreement is aimed at ensuring that the market access arising out of existing as well as future liberalisation commitments is effective and meaningful

What is the WTO?

- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations.
- At its heart are the WTO agreements, negotiated and signed by the bulk of the world’s trading nations and ratified in their parliaments.

- The goal is to help producers of goods and services, exporters, and importers conduct their business.
- The WTO officially commenced on 1 January 1995 under the Marrakesh Agreement, signed by 123 nations replacing the General Agreement on Tariffs and Trade (GATT), which commenced in 1948.
- The WTO deals with regulation of trade between participating countries by providing a framework for negotiating trade agreements and a dispute resolution process aimed at enforcing participants' adherence to WTO agreements, which are signed by representatives of member governments and ratified by their parliaments.
- The WTO headquarters is located in Geneva Switzerland
- Presently WTO consists of 164 members

Prelims perspective Questions related to WTO affairs

In the context of which of the following do you sometimes find the terms 'amber box, blue box and green box' in the news?

- (a) WTO affairs
- (b) SAARC affairs
- (c) UNFCCC affairs
- (d) India-EU negotiations on FTA

Solution: A

Mains Perspective Questions related to WTO affairs

“The broader aims and objectives of WTO are to manage and promote international trade in the era of globalization. But the Doha round of negotiations seem doomed due to differences between the developed and the developing countries.” Discuss in the Indian perspective. [UPSC Mains 2016]

WTO is an important international institution where decisions taken affect countries in a profound manner. What is the mandate of WTO and how binding are their decisions? Critically analyse India's stand on the latest round of talks on Food security. [UPSC Mains 2014]

Sources: [The Hindu](#) [The Hindu](#) [WTO](#) [Wikipedia](#)

Double Tax avoidance agreement

The Third Protocol amending India-Singapore Double Taxation Avoidance Agreement (DTAA) has come into force.

Mains : GS 2 Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests GS 3 Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

Highlights

- The India-Singapore DTAA at present provides for residence based taxation of Capital Gains of shares in a company. The Third Protocol provide for source based taxation of capital gains arising on sale of shares in a company.
- The Third Protocol would facilitate relieving of economic double taxation in transfer pricing cases.
- The Third Protocol also enables application of domestic law and measures concerning prevention of tax avoidance or tax evasion.

Double Tax avoidance agreement

- A DTAA is a tax treaty signed between two or more countries.
- Its key objective is that tax-payers in these countries can avoid being taxed twice for the same income. A DTAA applies in cases where a tax-payer resides in one country and earns income in another.
- DTAAs can either be comprehensive to cover all sources of income or be limited to certain areas.
- India has DTAAs with more than eighty countries

Why are DTAA's signed

- DTAAs are intended to make a country an attractive investment destination by providing relief on dual taxation.
- DTAAs basically provide clarity on how certain cross-border transactions will be taxed and this encourages foreign investors to take the plunge.

How DTAA works an example

For instance, interest on NRI bank deposits attract 30 per cent TDS (tax deduction at source) here. But under the DTAAs that India has signed with several countries, tax is deducted at only 10 to 15 per cent.

The Mauritius issue with regard to DTAA

Favourable tax treatments for capital gains under certain DTAAs such as the one with Mauritius have encouraged a lot of foreign investment into India. It has remained a favoured route for foreign portfolio investors. But the problem is DTAAs can become an incentive for even legitimate investors to route investments through low-tax regimes to sidestep taxation. This leads to loss of tax revenue for the country.

Prelims Perspective

- A one sentence definition of DTAA can figure in the examination.

Mains Perspective

What do you mean by Double tax avoidance agreement. Explain how it helps in the generation of black money and also explain how the recent amendments made to the double tax avoidance agreements by India will help in curbing the black money menace.

India and Belgium sign Protocol amending the India-Belgium Double Taxation Avoidance Agreement and Protocol

India and Belgium have signed a Protocol amending the existing Agreement and Protocol

Hobbled by obstacles

The deal hinges on the completion of the nuclear cooperation pact between India and Japan, which was signed last November but is yet to be ratified by the Diet



Past decisions: In meetings between Barack Obama and Narendra Modi, the two sides decided to operationalise the deal by June 2017

How things unfolded

SEPT. 2013: NPCIL-Westinghouse sign early works agreement

JAN. 2015: Deal on liability announced by Obama and Modi

APRIL 2016: GE-Hitachi project for 6 x 1,594 MWe ESBWR units forced to shift from Gujarat's Mithivirdi

JUNE 2016: NPCIL-Westinghouse agree to begin site design, prepare commercial contract for 6 AP1000 Mwe reactors by June 2017

Signs of trouble

- Toshiba-owned Westinghouse announces \$6.3 bn. losses, likely to file for bankruptcy by March 31
- Creditors may await outcome of Westinghouse financial problems before signing on to India deal
- Land acquisition issues for GE-Hitachi in Andhra Pradesh not resolved yet
- Japanese Diet misses date in early March to table deal. Deals for reactors and parts with Toshiba-Westinghouse, GE-Hitachi, Mitsubishi-Areva await clearance

Image : The Hindu

between the two countries for Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income . India has either signed or amended international agreements, declarations or conventions for the Avoidance of Double Taxation & Prevention of Fiscal Evasion with respect to Taxes on Income and for the Exchange of Information with Switzerland, Mauritius, Cyprus, Japan, Republic of Korea, Kazakhstan, Singapore and Austria during the financial year 2016-17.

Indo-U.S. civil nuclear pact

The operationalisation of India US civil nuclear deal announced two years ago is in doubt due to many factors

Mains : GS 2 Effect of policies and politics of developed and developing countries on India's interests. GS 3 Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Highlights

- The reason for the concern is that the Indo-U.S. nuclear arrangement hinged on two major factors. The completion of the India-Japan Nuclear Cooperation Agreement (NCA), as Toshiba and other suppliers for reactor parts are bound by Japanese laws and by the actual contract to be negotiated by the U.S.-based Westinghouse.
- While the NCA was signed in Tokyo in November 2016, it is yet to be ratified by the Japanese Diet (Parliament).

Mains Perspective Model questions

Although the civil nuclear agreement in itself has encountered many hurdles in the decade since and, as sceptics note, has not resulted in a single commercial nuclear transaction between India and the US, it should still be credited with transforming relations between New Delhi and Washington. Comment

Sources: [The wwHindu](#)

G4 nations - UN reforms

India and other G4 nations have said they are open to innovative ideas and willing to not exercise veto as permanent members of a reformed Security Council until a decision on it has been taken.

Mains : GS 2 Effect of policies and politics of developed and developing countries on India's interests. Important International institutions, agencies and fora- their structure, mandate.

Background - UN reforms

- An overwhelming majority of UN members supports expansion of security council.
- Britain and France have earlier supported G4 nations UN Security council bid alongside African representation in UNSC saying that the UNSC should reflect emergence of new global powers

The UNSC bid of G4 nations

- The G4 nations comprising Brazil, Germany, India, and Japan are four countries which support each other's bids for permanent seats on the United Nations Security Council.
- The G4's primary aim is the permanent member seats on the Security Council.
- Their economic and political influence of these G4 countries has grown significantly
- In the last decades, reaching a scope comparable to the permanent members (P5).

United Nations Security Council (UNSC)

- It is one of the six principal organs of the United Nations, with primary responsibility of the maintenance of international peace and security.
- It consists of 15 members - 5 permanent and 10 non-permanent members
- The 5 permanent members - USA, UK, Russia, China and France - can veto any substantive Security Council resolution The non permanent members, elected on a regional basis to serve two-year terms.
- The body's presidency rotates monthly among its members.

Prelims Perspective

A question can be expected from any areas fact relating to United nations such as details of security council, United nations general assembly etc.

Mains Perspective Model questions

Discuss the impediment India is facing in its pursuit of a permanent seat in UNSC. [UPSC 2015

Mains]

Sources: [The Hindu](#)

J-20 stealth fighters

China has inducted J-20 stealth fighters in its arsenal, marking a solid incremental step in the transition of its air force to the next level. The J-20 stealth fighters are designed to compete with other fifth generation fighter jets, such as the F-22 Raptor of the United States and the Russian PAK-FA.

Shanti Prayas III

Shanti Prayas III, a multinational peacekeeping exercise, started in Nepal. Shanti Prayas III is a Global Peace Operations Initiative capstone exercise designed to train defense personnel for participation in United Nations peacekeeping missions. 28 Countries are participating in the exercise including India

World Happiness Report

The World Happiness Report 2017 was released by the United Nations on the International Day of Happiness 20th March. It is the fifth such report since the first was published in 2012. Norway is ranked first in the report followed by Denmark, Iceland, and Switzerland. The Central African Republic had the lowest ranking out of 155 countries ranked. India ranked 122 on the list coming behind China, Pakistan and Nepal.

GS 3 INDIAN ECONOMY

GDP growth forecast

The Central Statistics Office estimated the growth in GDP in 2016-17 at 7.1% while OECD cut its growth projection for India in 2016-17 to 7% from the 7.4%

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Highlights of CSO stats

- The estimate shows that demonetisation didn't have a major impact on the economy.
- CSO revised the GVA growth downwards
- The reason why GDP has maintained is because the reduction in GVA has been compensated for by an improved estimate in net indirect taxes

Gross Value Added - GVA

Gross value added is a productivity metric that measures the contribution to an economy, producer, sector or region. Gross value added provides a dollar value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

Gross Domestic Product - GDP

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Highlights of OECD 's Economic survey of India 2017 report

- The Organisation for Economic Cooperation and Development (OECD) cut its growth projection for India in 2016-17 to 7% from the 7.4% it had projected.
- Inflation, the current account deficit, and the central government deficit have all been brought down.
- Progress is needed on many fronts such as including making labour laws more flexible, bank recapitalisation, pricing of water and energy, easing stringent product market regulations and continuing to improve access to education
- High NPA levels and corporate debt could affect Indian Economy badly

OECD on India's Tax administration

- High corporate income tax rates, narrow base, tax evasions, tax disputes and low training levels of tax administrators are some of the issues identified by OECD with regard to India's tax administration
- In order to rectify this, the OECD recommended implementing the reduction of the corporate tax rate from 30% to 25%, provide certainty regarding tax rules and their implementation,

and increase the number and training of staff employed in the tax administration.

Prelims perspective Model questions

Definitions of basic concepts such as GDP, GVA ...could figure in the examination

Mains Perspective Model questions

At a time when global economy is mired in uncertainty, sustaining India's position at the global growth leader would not be sustainable without reviving long-term investment.

Sources: [The Hindu](#) [The Hindu](#) Investopedia

East Coast Economic Corridor

The Asian Development Bank (ADB) and the Government of India signed \$375 million in loans and grants to develop 800-kilometer Visakhapatnam-Chennai Industrial Corridor, which is the First Phase of a planned 2,500-kilometer long East Coast Economic Corridor (ECEC).

Mains : GS 3 Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

East Coast Economic Corridor

- The East Coast Economic Corridor (ECEC) is India's first coastal economic corridor along its eastern coast, stretching about 2,500 kilometers from Kolkata in the north to Kanyakumari in the south.
- ECEC's long coastline and strategically located ports allow multiple international gateways to connect India with global value chains (GVCs) in East and Southeast Asia.
- It will help in the development of India's eastern coast in line with the Government of India's Make in India policy and Act East policy to integrate the Indian economy with Asia's dynamic global production networks.

Why ECEC?

While India's trade with East and Southeast Asia has increased at a rapid pace in the past decade, the bulk of this trade is done through the ports on the country's west coast. This is largely due to lack of efficient transport networks linking the production clusters in northern and central India to ports on the east coast, and insufficient container capacities at the ports.

Prelims perspective Model questions

The East Coast Economic corridor Connects which places

- a) Kolkata - Kanyakumari
- b) Chennai - Vishakhapatnam
- c) Kolkata - Vishakhapatnam
- d) None of the above

Mains Perspective Model questions

Write a note on India's Industrial corridors as a solution to overcome infrastructural bottlenecks.

Sources: pib

GST levy may go up to 40%, 4-slab structure to remain

The Council raised the peak rate in the GST Bill to 20%. The GST levy may go up to 40% from the current 14%, to obviate the need for approaching Parliament for any change in rates in future.

Mains : Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.”

Why peak rate was pegged at 20%?

- If the upper cap is fixed at 20% in future in case of need to hike tax rate, there is no need to approach Parliament for a nod and the GST Council can raise it.
- This means the central GST and state GST can be up to 20% each, leaving the scope for a maximum levy at 40%.

The 4-tier rate structure that has been decided will hold for now.

Present rates determined by the council

- **Zero Rate** : Essential items including food, which presently constitute roughly half of the consumer inflation basket, will be taxed at zero rate.
- **5% slab** : The lowest slab of 5 per cent will be for items of common consumption
- **12% and 18 %** : These would be the two standard rates in which would fall on the bulk of the goods and services. This includes fast-moving consumer goods. Most services are expected to become costlier as the ones being taxed currently at the rate of 15 per cent are likely to be put in the 18-per cent slab. Some services would be taxed at 12%
- **28% rate** : This rate will include white goods and all those items on which the current rate of incidence varies from 30-31 per cent. Ultra luxuries, demerit and sin goods, will attract a cess for a period of five years on top of the 28 per cent GST.

How tax rates are determined

The principle for determining the rate on each item will be to levy and collect the GST at the rate slab closest to the current tax incidence on it. Current tax incidence refers to present rate of tax on a particular good

GST Council clears draft laws

The GST Council on Saturday gave its formal approval to the Central GST (CGST) and Inter-State GST (IGST) laws.

Main features of the two Bills

- A State-wise **single registration for a taxpayer** for filing returns, paying taxes, and to fulfil other compliance requirements. Most of the compliance requirements would be fulfilled online.
- A taxpayer has to file one single return state-wise to report all his supplies, whether made

within or outside the State or exported out of the country and pay the applicable taxes on them.

- A business entity with an annual turnover of **upto Rs. 20 lakhs** would not be required to take registration in the GST regime, unless he voluntarily chooses to do so to be a part of the input tax credit (ITC) chain. The annual turnover threshold in the Special Category States (as enumerated in Article 279A of the Constitution such as Arunachal Pradesh, Sikkim, Uttarakhand, Himachal Pradesh, Assam and the other States of the North-East) for not taking registration is **Rs. 10 lakhs**.
- In order to ensure a single administrative interface for taxpayers, a provision has been made to authorise officers of the tax administrations of the Centre and the States to exercise the powers conferred under all Acts.
- **An agriculturist**, to the extent of supply of produce out of cultivation of land, would not be liable to take registration in the GST regime.
- To provide certainty in tax matters, a provision has been made for an **Advance Ruling Authority**.
- Exhaustive provisions for Appellate mechanism have been made.
- Detailed transitional provisions have been provided to ensure migration of existing taxpayers.
- **An anti-profiteering provision** has been incorporated to ensure that the reduction of tax incidence is passed on to the consumers.
- In order to mitigate any financial hardship being suffered by a taxpayer, Commissioner has been empowered to allow payment of taxes in instalments.

GST laws ready for Parliament, State Assemblies

The Goods and Services Tax (GST) Council has approved cess to be levied on aerated drinks and luxury cars over enabling laws for state and union territories for GST implementation.

Highlights of the meeting

- 15 per cent cap on cess rate for aerated drinks, luxury cars over and above maximum proposed rate of 28%.
- The enabling laws for state and union territories to adopt the new indirect tax regime has been approved.
- Bidis have been kept out of the GST net.
- Separate cess ceilings have been approved for pan masala and tobacco products,
- The Council have already cleared three other GST laws pertaining to central GST, integrated GST and the compensation to be paid to states for loss of revenue
- The cess is to be levied on four or five commodities and the caps have been approved by the Council.

- The environment cess on coal, lignite and peat has been capped at the existing rate of Rs 400 per tonne.
- After these rules are approved the next step is fitment of various commodities into different tax slabs following which GST will be ready for implementation.

Lok Sabha passes GST Bills after marathon debate

The four Bills to operationalise the rolling out of the Goods and Services Tax (GST) were passed by the Lok Sabha.

Highlights

- The recommendation of the rates will come from the Council.
- **The Council has two-thirds voting by the States and one-third by the Centre.**
- The GST Council has been given the power to only make a recommendation regarding the model law.
- The plenary power to frame legislation can only be with Parliament or the state legislative assemblies.

Details of the bills

- 1. The Central Goods and Services Tax Bill 2017 (The CGST Bill) :** The CGST Bill makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Central Government.
- 2. The Integrated Goods and Services Tax Bill 2017 (The IGST Bill) :** IGST Bill makes provisions for levy and collection of tax on inter-state supply of goods or services or both by the Central Government.
- 3. The Union Territory Goods and Services Tax Bill 2017 (The UTGST Bill) :** The UTGST Bill makes provisions for levy on collection of tax on intra-UT supply of goods and services in the Union Territories without legislature. Union Territory GST is akin to States Goods and Services Tax (SGST) which shall be levied and collected by the States/Union Territories on intra-state supply of goods or services or both.
- 4. The Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill) :** The Compensation Bill provides for compensation to the states for loss of revenue arising on account of implementation of the goods and services tax for a period of five years as per section 18 of the Constitution (One Hundred and First Amendment) Act, 2016.

Also Read : [All you want to know about- Goods and Services Tax or GST](#)

Prelims Perspective

A question relating to GST such as its objective, purpose, taxation... can be asked in UPSC prelims

Mains Perspective

Discuss the rationale for introducing Goods and Services Tax (GST) in India. Bring out critically the reasons for the delay in rollout for its regime [UPSC Mains 2013]

Sources: [The Hindu](#) [The Hindu](#) [The Hindu](#) pib

U.S. nixed India's plea on reforms in medicine - Access to medicines

A month after the 140th World Health Organisation's (WHO) Executive Board meeting, the United States government had opposed including agenda items proposed by India.

Mains : GS 3 issues relating to intellectual property rights

Proposal made by the Indian government in the WHO

- The Indian government — along with 11 South East Asian countries — had proposed a discussion on an 'Access to Medicines' report by the United Nations High Level Panel which was opposed by U.S

Access to Medicine report

- It had recommended reforms in the funding of biomedical research and development.
- The report says there is a need for an RD treaty and it recommended reforms in the area of biomedical R&D.
- It had recommended solutions for remedying the policy incoherence between justifiable rights of inventors, trade rules and global public health targets.

Prelims perspective Model questions

Which of the following organisation has published 'Access to Medicine report'?

- a) World Health Organisation
- b) Doctors without borders
- c) World Economic Forum
- d) United Nations

Mains Perspective Similar questions [UPSC Mains 2014]

In a globalized world, Intellectual property rights assume significance and are a source of litigation. Broadly distinguish between the terms- Copyrights, patents and trade marks.

Sources: The Hindu

Contentions between Indian and U.S.A over Intellectual property rights

The incoming U.S trade representative said that he would take aggressive steps to protect intellectual property rights in India.

Mains : GS 3 Issues relating to intellectual property rights.

Background

- The U.S trade representative (USTR) annual report on IP rights has kept India on priority

watch list for years now, even as U.S. companies have sought stricter measures.

- “Priority Watchlist countries” are judged by the USTR as having “serious intellectual property rights deficiencies” that require increased USTR attention.

Major Contentions of U.S companies

- **Sec 3(d) of India’s Patent Act :** This section prevents pharmaceutical companies from continually extending patents by making minor changes in the product
- **Compulsory licensing :** Compulsory licensing is when a government allows someone else to produce the patented product or process without the consent of the patent owner.
- Copyright laws

Other details

- Indian maintains that its IPR regime and policies are within the framework of international treaties and agreements.
- International pharmaceutical companies worry that India’s IPR laws may encourage developing countries to introduce similar provisions in their laws.

Prelims Perspective

Section 3(d) of Indian Patent Act sometimes seen in news is related to

- a) preventing patents on incremental innovation
- b) patenting of software programmes
- c) granting of compulsory licensing
- d) None of the above

Mains Perspective Model questions

The paucity of patents and innovation in India is a larger ecosystem issue, related to the standards of science and technology education. To attribute inadequate R&D to a weak patents system would be a gross oversimplification. Comment

Sources: [The Hindu](#) Wikipedia

National Investment and Infrastructure Fund

National infrastructure fund eyes overseas co-investors in the wake of Centre’s \$3-billion commitment

Mains : GS 3 Infrastructure: Energy, Ports, Roads, Airports, Railways etc. Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

National Investment and Infrastructure Fund

- The National Investment and Infrastructure Fund (NIIF) Limited has been incorporated under the Companies Act, 2013
- The initial authorized corpus of NIIF would be Rs. 20,000 crore, which may be raised from time to time, as decided by Ministry of Finance. Government can provide upto 20000 crore

per annum into these funds. The government contribution to the scheme will be 49%

Objective

The objective of NIIF would be to maximize economic impact mainly through infrastructure development in commercially viable projects, both greenfield and brownfield, including stalled projects.

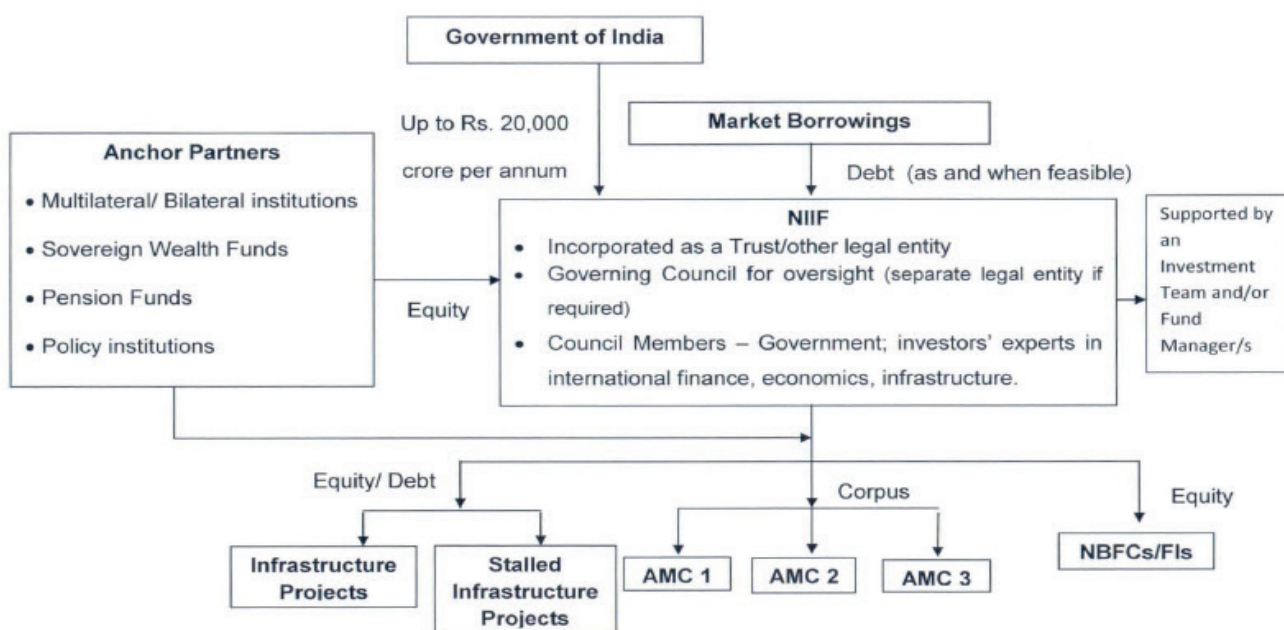
Functions of NIIF

- Fund raising through suitable instruments including off-shore credit enhanced bonds, and attracting anchor investors to participate as partners in NIIF;
- Servicing of the investors of NIIF.
- Considering and approving candidate companies/institutions/ projects (including state entities) for investments and periodic monitoring of investments.
- Investing in the corpus created by Asset Management Companies (AMCs) for investing in private equity.
- Preparing a shelf of infrastructure projects and providing advisory services.

NIIF

- Provides equity / quasi-equity support to those Non Banking Financial Companies (NBFCs)/ Financial Institutions (FIs) that are engaged mainly in infrastructure financing. These institutions will be able to leverage this equity support and provide debt to the projects selected.
- Invest in funds engaged mainly in infrastructure sectors and managed by Asset Management Companies (AMCs) for equity / quasi-equity funding of listed / unlisted companies.
- Provides Equity/ quasi-equity support / debt to projects, to commercially viable projects, both greenfield and brownfield, including stalled projects.

Structure and Composition of NIIF



Prelims Perspective

Which of the following statements are correct regarding NIIF?

1. Infrastructure development of stalled projects will be undertaken by NIIF
2. Providing support to Financial Institutions (FIs) that are engaged mainly in infrastructure financing.

Select the correct answer using the code given

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Mains Perspective

Infrastructural development is a key to bring in more investors, more jobs and better growth for our economy. So major infra projects, policies, international cooperation, funding, laws and regulations etc are to be known to an aspiring civil servant. This makes the topic important from UPSC's point of view

Sources: Finance ministry [The Hindu](#)

Foreign Investment Promotion Board (FIPB)

The budget 2017-18 has proposed to abolish Foreign investment promotion board. The government will soon unveil an alternative mechanism for clearing foreign direct investment proposals in the country.

Mains : GS 3 Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

Why government want to abolish FIPB?

More than 92% of the FDI inflows were through the automatic route. For the rest of the FDI (about 8% of the total FDI inflows), every department concerned has a framework or a regulator for it.

Foreign Investment Promotion Board (FIPB)

- The Foreign Investment Promotion Board (FIPB) is housed in the Department of Economic Affairs, Ministry of Finance, is an inter-ministerial body, responsible for processing of FDI proposals and making recommendations for Government approval.
- The Foreign Investment Promotion Board (FIPB) offers a single window clearance for applications on Foreign Direct Investment (FDI) in India that are under the approval route.
- The sectors under automatic route do not require any prior approval from FIPB and are subject to only sectoral laws.
- The Minister of Finance who is in-charge of FIPB would consider the recommendations of

FIPB on proposals with total foreign equity inflow of and below Rs. 3000 crore.

- The recommendations of FIPB on proposals with total foreign equity inflow of more than Rs. 3000 crore would be placed for consideration of Cabinet Committee on Economic Affairs (CCEA).
- FIPB comprises of the secretaries to the Government of India from various departments.

Prelims perspective Model questions

The Foreign Investment Promotion Board (FIPB) is housed under which ministry?

- a) Ministry of commerce
- b) Ministry of Finance
- c) Ministry of Home
- d) Ministry of External affairs

Mains Perspective Model questions

Foreign direct investment related questions were asked in the previous examinations. To know more visit our [IAS preparation page](#)

Sources: The Hindu The Hindu FIPB

Centre to Launch Pilot Project on Ornamental Fisheries

The Government has envisaged a pilot scheme for the development of ornamental fisheries.

Mains : GS 3 Technology missions; economics of animal-rearing.

Highlights

Implementation of the pilot-scale Ornamental Fisheries Project focuses mainly on creating an enabling environment for a sustainable and holistic development of Ornamental Fisheries for the socio-economic development of the people involved in this activity as well as for exports.

Objectives

- To promote ornamental fish culture with cluster-based approach.
- To augment ornamental fisheries trade and export earnings.
- To create employment opportunities for the rural & periurban population
- Use of modern technology and innovation to make ornamental fisheries a thriving activity.
- **8 potential States have been identified for its implementation- Assam, West Bengal , Odisha, Maharashtra , Gujarat , Karnataka , Tamil Nadu and Kerala.**
- The pilot project on ornamental fisheries shall be implemented by the National Fisheries Development Board (NFDB) through the Fisheries Departments of States/UTs.
- Ornamental fishery, is a sub-sector of the fisheries sector dealing with breeding and rearing of coloured fish of both freshwater and marine water.
- Ornamental fisheries generated livelihood for rural and periurban population though it does not contribute to food security.

- The low production cost and high returns, growing demand makes it a potential sector to invest in.

Sources: pib

GI tag, Mattu Gulla

Growers of Karnataka brinjal variety with GI tag unite to fix selling price, cut middlemen out

Prelims : Economic and Social Development - Sustainable Development, Poverty, Inclusion, Demographics, Social Sector initiatives, etc.

Background

The growers of Mattu Gulla have eliminated middleman and started marketing their produce directly through the Mattu Gulla Belegara Sangha (Mattu Gulla Growers Association). This move gave farmers better incomes

Mattu Gulla

- Udupi Mattu Gulla, or Udupi Matti Gulla, is a variety of green brinjal grown in and around the village of Matti (also called Mattu) in Udupi, India.
- It was given the Geographical Indication tag in 2011 for its unusual and unique taste and exclusive location of production.
- As the word “Gulla” indicates, it is spherical in shape.
- It is a seasonal vegetable which is grown after the monsoon season from the months of September and October.
- It has low moisture content and is known for its unique taste.

What is GI Tag?

- A geographical indication (GI) is a name or sign used on certain products which corresponds to a specific geographical location or origin (e.g. a town, region, or country).
- India, as a member of the World Trade Organization (WTO), enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999
- GIs have been defined under WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement as: “Indications which identify a good as originating in the territory of a member, or a region or a locality in that territory, where a given quality, reputation or characteristic of the good is essentially attributable to its geographic origin.
- The GI tag ensures that none other than those registered as authorised users (or at least those residing inside the geographic territory) are allowed to use the popular product name.
- Darjeeling tea became the first GI tagged product in India, in 2004-05

How does it help?

- It is beneficial because it confers legal protection to the Geographical Indications in India. This identity helps in preventing misuse of a registered GI, helps boost a country’s exports

and increase economic prosperity of the producers.

- Registration of the product under the GI facilitates better legal protection and the authorised user can exercise his right to use the tag effectively.
- A registered GI is a public property which belongs to the producers of the goods.

Who can apply for GI tag?

Any established organisation or authority can apply for GI tag under the law.

Prelims perspective Model questions [UPSC Prelims 2015]

Which of the following has/have been accorded 'Geographical Indication' status?

1. Banaras Brocades and Sarees
2. Rajasthani Daal-Bati-Churma
3. Tirupathi Laddu

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Sources: [The Hindu](#) [The Hindu](#) Wikipedia

Micro finance institutions , Small Finance Bank

The importance of MFI's in India.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment. Inclusive growth

Background

RBI had given in-principle approval for ten institutions to start small finance banks. SFB are set up with the objective of supplying credit to small business units; small and marginal farmers; micro and small industries; and other unorganised sector entities, through high technology-low cost operations.

Significance of Micro finance institutions /small finance banks in India

- Universal banks found it difficult to deliver the last-mile connectivity in rural areas.
- Universal banks lacked proper understanding of rural needs, appropriate human resources.
- MFIs have employees who understand the rural customers
- MFIs could develop products and services that suits rural customers better.
- Small finance banks will have the local connect of Cooperative banks and technological might of universal banks.
- The last-mile connectivity can well be executed by the SFBs, who were the leaders in the microfinance domain in various markets.

Small Finance Bank Details

Eligible promoters :

- Resident individuals/professionals with 10 years of experience in banking and finance
- Companies and societies owned and controlled by residents
- Existing Non-Banking Finance Companies (NBFCs), Micro Finance Institutions (MFIs), and Local Area Banks (LABs) that are owned and controlled by residents

Scope of activities

- Basic banking activities of acceptance of deposits and lending to unserved and underserved sections mainly
- No restriction in the area of operations of small finance banks.

Capital requirement : The minimum paid-up equity capital for small finance banks shall be Rs. 100 crore.

Promoter's contribution : The promoters stake in the paid-up equity capital will be 40% initially which must be brought down to 26% in 12 years.

Foreign shareholding : As per the (FDI) policy for private sector banks as amended from time to time.

Prudential norms

- The small finance bank will be subject to all prudential norms and regulations of RBI as applicable to existing commercial banks
- 75 per cent of its Net Bank Credit should be in the priority sector
- At least 50 per cent of its loan portfolio should constitute loans and advances of upto Rs. 25 lakh.

Prelims Perspective : Similar question from UPSC Prelims 2016

The establishment of 'Payment Banks' is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?

1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks.
2. Payment Banks can issue both credit cards and debit cards.
3. Payment Banks cannot undertake lending activities.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

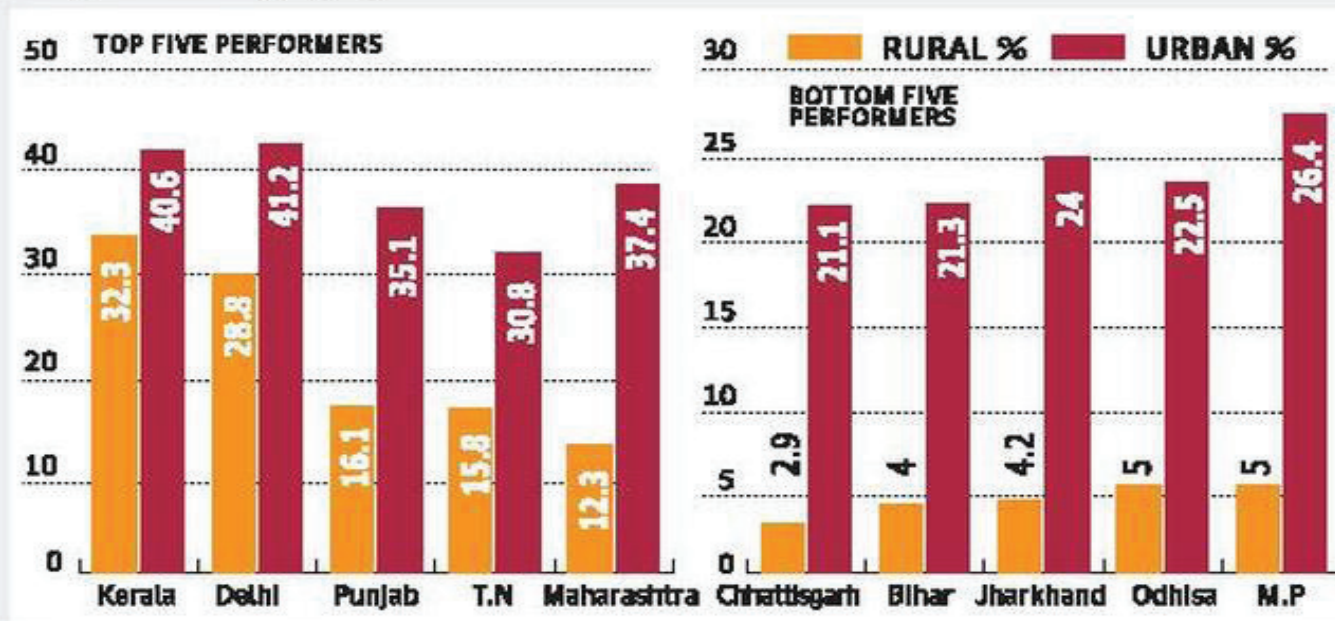
Solution: B

Mains Perspective Model questions

How far India's financial institutions have been able to cater to the needs of the poor and vulnerable. Explain how institutional credit can play a major role in achieving inclusive growth.

Sources: [The Hindu](#) [The Hindu](#) [RBI](#)

Capability gap



SOURCE: NSSO 71ST ROUND (2014) | % DEPICTS POPULATION ADEPT AT COMPUTER USE

Computing ability of people

The ability to use computers remains low in the country especially in rural areas in spite of campaigns for digitalisation, a study reveals.

Mains : GS 2 Governance, Constitution, Polity, Social Justice and International relations.

Highlights of the study

- An estimated 8.8% of the rural population and 30.2% of urban population has computing ability.
- Computing ability was found to be the lowest in the tribal population.
- **Computing ability :** Computing ability was defined as an user's ability to operate a desktop, laptop, palmtop, notebook, smartphone and tablets.
- Kerala has the highest computing ability at 32.3% in rural areas while in urban areas Kerala is in second position, after Delhi.

Mains Perspective Model questions

Without digital literacy digital India is bound to fail. Critically evaluate

Sources: The Hindu

Trade Infrastructure for Export Scheme (TIES)

The government has launched a new scheme — TIES — for developing export linked infrastructure in states with a view to promote outbound shipments.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Trade Infrastructure for Export Scheme (TIES) Objective

To enhance export competitiveness by **bridging gaps in export infrastructure, creating focused export infrastructure, first mile and last mile connectivity for export-oriented projects and addressing quality and certification measures.**

Details

- It is focussed on addressing the needs of the exporters.
- The scheme would provide assistance for setting up and up-gradation of infrastructure projects with export linkages (Border Haats, Land customs stations, quality testing labs..)
- The Central and State Agencies, including Export Promotion Councils, Commodities Boards, SEZ Authorities and Apex Trade Bodies recognised under the EXIM policy of Government of India; are eligible for financial support under this scheme.
- **Funding :** The cost of projects under TIES would be equally shared between the Centre and the states. For north—eastern and the Himalayan region states, the Centre may bear 80 per cent of the cost.
- The commerce ministry will engage a professional agency for project monitoring on a pan India or regional basis.

Why TIES?

- There are infrastructural gaps related to export promotion like adequate testing and certification labs, cargo handling facilities and last mile connectivity.
- The number of technical regulations and standards adopted by countries has grown significantly.

Prelims perspective Model questions

Which one of the following is a purpose of 'TIES', a scheme of the Government?

- (a) To enhance export competitiveness by bridging gaps in export infrastructure
- (b) Providing electricity to every household in the country by 2018
- (c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- (d) Providing for financial turnaround and revival of power distribution companies

Mains Perspective Model questions

The world economy is likely to see more turbulent days ahead. If foreign investors and foreign markets are going to be staggered in these uncertain times, India will have little to gain by going after them. Instead, the country's policymakers should turn their attention inward, devising strategies to unleash domestic markets and entrepreneurship in this large and diverse nation.

Discuss

Sources: [The Hindu](#) pib

Draft code on Social Security and Welfare

Government has proposed a labour code which will provide social security cover to the entire workforce in the country.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Draft code on Social Security and Welfare

- Households employing domestic help will have to contribute towards schemes including provident fund and gratuity for the worker,
- Factories employing even a single worker will have to contribute towards social security benefits
- Every working person in the country will be covered under the social security code whether she belongs to the organised sector or the unorganised sector.
- Agricultural workers along with self-employed people will be covered under the social security scheme.

National Social Security council : A National Social Security Council, chaired by the Prime Minister, has been proposed to streamline and make policy on social security schemes related to all the Ministries. Other members would include: Finance Minister, Labour Minister, Health and Family Welfare Minister along with employer and employees' representatives. The council will co-ordinate between central and State governments, monitor the implementation of social security schemes.

Sources: [The Hindu](#)

Payments bank

Vodafone m-pesa Ltd., one of the 11 entities which received in-principle approval from the Reserve Bank of India (RBI) in 2015 to start a payments bank, has not yet applied for a final licence.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment. Inclusive growth and issues arising from it.

Highlights

- All entities that received in-principle approval require to secure final approval from the RBI, after meeting norms mandated by the banking regulator. Among the 11 entities that had received in-principle approval, the RBI granted final approval to four. They are – Vijay Shekhar Sharma of One 97 Communications, which owns mobile wallet Paytm, Airtel M Commerce, Department of Posts and Mukesh Ambani's Reliance Industries.
- Three more entities – Fino Paytech, National Securities Depository Limited and Aditya Birla

Nuvo – are expected to receive the final approval .

- Three of the 11 entities – Cholamandalam, Dilip Shanghvi, MD of Sun Pharma and Tech Mahindra have dropped their plans.

Payment Banks Objectives

The objectives of setting up of payments banks will be to further financial inclusion by providing (i) small savings accounts and (ii) payments/remittance services to migrant labour workforce, low income households, small businesses, other unorganised sector entities and other users.

Scope of activities:

- Acceptance of demand deposits. Payments bank will initially be restricted to holding a maximum balance of Rs. 100,000 per individual customer.
- Issuance of ATM/debit cards. Payments banks, however, cannot issue credit cards.
- Payments and remittance services through various channels.
- BC of another bank, subject to the Reserve Bank guidelines on BCs.
- Distribution of non-risk sharing simple financial products like mutual fund units and insurance products, etc.

Deployment of funds :

- The payments bank cannot undertake lending activities.
- Apart from amounts maintained as Cash Reserve Ratio (CRR) with the Reserve Bank on its outside demand and time liabilities, it will be required to invest minimum 75 per cent of its “demand deposit balances” in Statutory Liquidity Ratio(SLR) eligible Government securities/ treasury bills /fixed deposits.
- **Capital :** The minimum paid-up equity capital for payments banks shall be Rs. 100 crore.

Prelims Perspective Similar question from UPSC Prelims 2016

The establishment of ‘Payment Banks’ is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?

1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks.
2. Payment Banks can issue both credit cards and debit cards.
3. Payment Banks cannot undertake lending activities.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

Mains Perspective Model questions

How far India's financial institutions have been able to cater to the needs of the poor and vulnerable. Explain how institutional credit can play a major role in achieving inclusive growth?

Sources: [The Hindu](#) [RBI](#)

Foreign Direct investment norm to Multi brand retail

Centre is looking at ways to ease Foreign Direct investment norm to Multi brand retail trading.

Mains : GS 3 Effects of liberalization on the economy,

Highlights

The Centre is considering various options such as allowing FDI in non food items with conditions such that they should be locally manufactured.

The issue : BJP's 2014 Election Manifesto ruled out FDI in Multibrand retail sector. Final decision will be a political one.

Present position

- 51% of FDI in Multibrand retail through approval route is allowed
- The policy stipulates many conditions including on a specified level of minimum investment and local sourcing.
- Several states through their respective Shops & Establishment Act, do not currently allow foreign-owned and controlled firms to open multi-brand retail outlets in their territory.
- The NDA government, allowed 100% FDI under the government approval route for trading, including e-commerce, in respect of food products manufactured and/or produced in India.

Mains Perspective Model questions

Discuss the impact of FDI entry into Multi-trade retail sector on supply chain management in commodity trade pattern of the economy. [UPSC Mains 2013]

Sources: [The Hindu](#)

Human development index

India slipped down one place from 130 to 131 among the 188 countries ranked in terms of human development

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Highlights of the Human Development Report

- India's human development index (HDI) value of 0.624 puts it in the "medium human development" category, alongside countries such as Congo, Namibia and Pakistan.
- It is ranked third among the SAARC countries, behind Sri Lanka (73) and the Maldives (105)
- The world's top three countries in HDI are Norway, Australia and Switzerland. India had the lowest rank among BRIC nations.
- The report praised India's reservation policy, national rural employment guarantee

programme

What is Human Development Index?

The HDI is a measure for assessing progress in three basic dimensions of human development:

- A long and healthy life,
- Access to knowledge
- Access to a decent standard of living
- **The Human Development Report (HDR) is released by the United Nations Development Programme (UNDP).**

Prelims perspective Model questions

Which of the following factors are considered for assessing HDI?

- A long and healthy life
- Access to knowledge
- Access to a decent standard of living
- Gross Domestic Product

Select the correct answer using the code given below.

- a) 1,2 and 3 only
- b) All of the above
- c) 1 and 2 only
- d) 1 and 4 only

Mains Perspective Model questions

In the Human Development Index published by UNDP India's rank has been consistently below its neighbours. What are the reasons behind this? Explain

Sources: [The Hindu](#)

The Insolvency and Bankruptcy Code, 2016

Insolvency and Bankruptcy Board of India (IBBI) have stated that Entities will have to form a separate subsidiary with dedicated resources related to insolvency. An Insolvency professional must not engage in any employment according to IBBI.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

What is The Insolvency and Bankruptcy Code, 2016?

- The Code creates time-bound processes for insolvency resolution of companies and individuals. These processes will be completed within 180 days. If insolvency cannot be resolved, the assets of the borrowers may be sold to repay creditors.
- The Code also consolidates provisions of the current legislative framework to form a common forum for debtors and creditors of all classes to resolve insolvency.

What does the code contains?

- The resolution processes will be conducted by licensed insolvency professionals (IPs). These IPs will be members of insolvency professional agencies (IPAs).

Insolvency Professionals are specialised cadre of licensed professionals who will administer the resolution process, manage the assets of the debtor, and provide information for creditors to assist them in decision making.

Insolvency Professional Agencies: The agencies conduct examinations to certify the insolvency professionals and enforce a code of conduct for their performance.

- Information utilities (IUs) will be established to collect, collate and disseminate financial information to facilitate insolvency resolution.
- The National Company Law Tribunal (NCLT) will adjudicate insolvency resolution for companies. The Debt Recovery Tribunal (DRT) will adjudicate insolvency resolution for individuals.
- The Insolvency and Bankruptcy Board of India will be set up to regulate functioning of IPs, IPAs and IUs.

Why do we need a new law?

As of 2015, insolvency resolution in India took 4.3 years on an average. These delays are caused due to time taken to resolve cases in courts, and confusion due to a lack of clarity about the current bankruptcy framework.

Prelims Perspective Model Questions

Which of the following statements about The Insolvency and Bankruptcy Code is/are correct?

1. It will create licensed professional called Insolvency Professionals.
2. The National Company Law Tribunal (NCLT) will adjudicate insolvency resolution for individual

Select the correct answer using the code given below.

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Mains Perspective Model questions

Instead of facilitating ease of doing business, unwittingly The Insolvency and Bankruptcy Code would facilitate ease of undoing business. Ultimately, only better corporate governance and risk mitigation measures can ensure ease of doing business. Critically evaluate.

Sources: [The Hindu PRS](#)

Integrated Cold Chain Projects

The Centre has sanctioned 101 new integrated cold chain projects for creation of modern infrastructure for the food processing sector.

Mains : GS 3 Food processing and related industries in India- scope and significance, location, upstream and downstream requirements, supply chain management.

Objective of the project

- The projects are aimed at doubling farmers' income, reducing wastage in the agri-supply chain and creating huge employment opportunities.

Highlights

- These projects are for fruits and vegetables, dairy, fish, meat, marine, poultry, ready to eat/ ready to cook sectors.
- The scheme of cold chain and value addition infrastructure provides financial assistance of up to ₹10 crore for entrepreneurs.

Why Cold Chain Projects?

- Only 2.2% of fruits and vegetables in India are processed even though India is one of the largest producer of fruits and vegetables.
- Existing cold storages are concentrated in a few States and roughly 80% to 90% are used for potatoes
- The FPI Ministry is building National Cold Chain Grid in the country so that all food producing hubs are connected to cold storage and processing industries

Mains Perspective Model questions [UPSC Mains 2016]

What are the impediments in marketing and supply chain management in developing the food processing industry in India? Can e-commerce help in overcoming these bottlenecks?

Sources: [The Hindu](#)

UDAN (Ude Desh ka Aam Naagrik).

The Centre announced a list of routes awarded to five airlines which will operate flights under its regional connectivity scheme, named UDAN (Ude Desh ka Aam Naagrik).

Mains : GS 3 Infrastructure: Energy, Ports, Roads, Airports, Railways etc. GS 2 Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Highlights

- Several regional airlines have won the rights to operate flights under Regional connectivity scheme under which half of the seats on the plane will be capped at rs 2500 per hour's flight.
- The regional airports will be connected to nearest bigger airport under by the airlines.
- Centre will subsidise the losses incurred by airlines. 80% of the subsidy will be collected by charging a levy of up to ₹8,500 on each departing flight of domestic airlines and the rest 20% will come from the respective State governments.
- Government will provide subsidy to airlines for first three years of operations when they will have exclusive flying rights on the selected routes.

Also Read : [Regional Connectivity Scheme](#)

Sources: [The Hindu](#)

IDS-II - Pradhan Mantri Garib Kalyan Yojana (PMGKY)

Rs 10,000 cr was declared under Pradhan Mantri Garib Kalyan Yojana (PMGKY), the second initiative of the Income Declaration Scheme. Under IDS-I Rs 55,000Cr was collected.

Mains : GS 3 Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

The PMGKY permits voluntary declarations of previously undisclosed income with an effective tax rate of 50 per cent and requires assesseees to deposit a further 25 per cent of such wealth into a four-year interest-free deposit.

The Taxation Laws (Second Amendment) Bill, 2016

- It amended the Income Tax Act, 1961 and Finance Act, 2016.
- **Self-declaration of undisclosed income:** The Bill introduced the Pradhan Mantri Garib Kalyan Yojana, 2016. Under the scheme, taxpayers may declare undisclosed income possessed in the form of cash or deposited in banks, post offices or Reserve Bank of India before a notified date.
- It came into effect from December 17, and allowed assesseees to disclose previously unaccounted and undeclared income under its ambit till March 31, 2017.
- A cess will be charges over undisclosed income which will be known as the Pradhan Mantri Garib Kalyan Cess. The proceed of this will be used for welfare of economically weaker sections.
- The taxpayer has to deposit 25% of the undisclosed income into the Pradhan Mantri Garib Kalyan Deposit Scheme, 2016. The deposit will not earn any interest. This deposit may be withdrawn only after four years from the date of deposit.
- The declarations of undisclosed income made under the Yojana will not be used as evidence under provisions of any other law, except certain laws including: (i) the Prohibition of Benami Property Transactions Act, 1988, (ii) the Prevention of Money Laundering Act, 2002, (iii) the Unlawful Activities (Prevention) Act, 1967, (iv) the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015, (v) the Special Court (Trial of Offences Relating to Transactions in Securities) Act, 1992.

Disclosure of unexplainable income:

Currently, a tax is levied when the taxpayer is not able to explain any of his income. The Bill proposes to: (i) increase the tax rate and surcharges levied on such income, and (ii) levy of a penalty.

Income found during search of taxpayer's assets:

The Act increased the penalties payable for undisclosed income found during search and seizure operations conducted.

Prelims Perspective Similar Question - [UPSC prelims 2016]

Pradhan Mantri MUDRA Yojana is aimed at:

- (a) bringing the small entrepreneurs into formal financial system
- (b) providing loans to poor farmers for cultivating particular crops
- (c) providing pensions to old and destitute persons
- (d) funding the voluntary organizations involved in the promotion of skill development and employment generation

Solution: A

Mains Perspective Model questions

How far voluntary disclosure schemes be used to mop up government revenues. Is it a sustainable way forward. Evaluate

Sources: [The Hindu](#) [The Hindu pib](#) [PRS](#)

Central Board of Direct Taxes (CBDT) signs ten (10) more Advance Pricing Agreements (APAs) pertaining to various sectors

The Central Board of Direct Taxes (CBDT) has entered into 10 more Advance Pricing Agreements (APAs) taking the total number of APAs entered into by the CBDT to 140. The APA Scheme introduced in the Income-tax Act in 2012 aims to provide certainty to taxpayers in the domain of transfer pricing by specifying the methods of pricing and setting the prices of international transactions in advance. Since its inception, the APA scheme has evinced a lot of interest from taxpayers and that has resulted in more than 700 applications (both unilateral and bilateral) being filed so far in about five years.

GS 3 ENVIRONMENT AND ECOLOGY

Namami Ganga Programme National Green Tribunal

The government is unlikely to be able to clean the Ganga by 2018, a target set by Water Resources Minister.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Reasons why government will not be able to meet the deadline

- Directions by the National Green Tribunal (NGT) questioning the operating capacity of sewage treatment plants in Uttar Pradesh.
- Delay in clearances by State governments to execute projects.
- The NGT has routinely took action against CPCB and Water resources ministry and State boards for poorly executing the projects

National Green Tribunal

- The National Green Tribunal has been established in 2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.
- It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.

Namami Ganga Programme

- The Government launched an integrated Ganga conservation mission called 'Namami Gange' to arrest the pollution of Ganga River and revive the river.
- The Union Cabinet approved the action plan proposed by Centre to spend Rs 20,000 Crores till 2019-2020 on cleaning the river,
- The implementation of the program has been divided into entry-level activities (for immediate visible impact), medium term activities (to be implemented within 5 years of time frame), and, long-term activities (to be implemented within 10 years).

Mains Perspective Model questions

The Namami Gange and National mission for clean Ganga (NMCG) programmes and causes of mixed results from the previous schemes. What quantum leaps can help preserve the river Ganga better than incremental inputs? [UPSC Mains 2015]

Sources: [The Hindu](#) Yojana [NGT](#)

Olive Ridleys turtle

Tens of thousands of eggs laid by Olive Ridley sea turtles this year in Gahirmatha Sanctuary in Odisha, one of the world's largest nesting grounds, are getting destroyed due to shrinking coastal space.

Mains :GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Olive ridley turtles

- The Olive ridley turtles are the smallest and most abundant of all sea turtles found in the world, inhabiting warm waters of the Pacific, Atlantic and Indian oceans.
- These turtles, along with their cousin the Kemps ridley turtle, are best known for their unique mass nesting called Arribada, where thousands of females come together on the same beach to lay eggs.
- The species is recognized as **Vulnerable by the IUCN Red list.**
- Growing to about 2 feet in length, and 50 kg in weight, the Olive ridley gets its name from its olive colored carapace, which is heart-shaped and rounded.
- They are carnivores, and feed mainly on jellyfish, shrimp, snails, crabs, molluscs and a variety of fish and their eggs.
- These turtles spend their entire lives in the ocean, and migrate thousands of kilometers between feeding and mating grounds in the course of a year.
- Interestingly, females return to the very same beach from where they first hatched, to lay their eggs.
- The coast of Orissa in India is the largest mass nesting site for the Olive-ridley, followed by the coasts of Mexico and Costa Rica.

Prelims perspective Similar Questions

Which one of the following is the national aquatic animal of India?

- a) Saltwater crocodile
- b) Olive ridley turtle
- c) Gangetic dolphin
- d) Gharial

Sources: [The Hindu](#) [WWFIndia](#)

Centre dithers on Western Ghats issue

The Environment Ministry has dithered, for the second time in three years, from bringing into force a law that will make about 56,825 sqkm of the ecologically-rich Western Ghats out of bounds for industrial development.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Highlights

- States have forced the MoEF to consistently delay imposing Ecological Sensitive Area restrictions.
- The government have brought back a draft notification that was first published in March 2014 that specified how much land in various coastal States encompassing the Western Ghats would be earmarked as practically-inviolable.
- It wasn't made into a final law due to objection from the states earlier.

What is the notification about?

- The notification allows the Centre to create an Ecological Sensitive Area (ESA) in the Western Ghats (WG), a 1,500 km, ecologically-rich strip along the west coast spanning Gujarat, Maharashtra, Karnataka, Goa, Kerala and Tamil Nadu.
- Regions declared as the ESA will not be allowed to host mining and quarrying projects and building thermal power plants.

Background

- A committee headed by ecologist Madhav Gadgil recommended in 2011 that all of the Western Ghats be declared as the ESA
- Following wide protests by the affected states a committee headed by K. Kasturirangan, recommended that only about 37% of the Western Ghats be declared as ESA.
- The recent notification would not automatically become law but paves the way for fresh representation from States on how much area could be demarcated as the ESA.

Prelims perspective Model questions [UPSC Prelims 2016]

‘Gadgil Committee Report’ and ‘Kasturirangan Committee Report’, sometimes seen in the news, are related to:

- (a) constitutional reforms
- (b) Ganga Action Plan
- (c) linking of rivers
- (d) protection of Western Ghats

Mains Perspective Model questions

The purpose of environmental conservation programmes is to create a roadmap for ecological sustainability consistent with the needs of livelihood security and economic growth to meet aspirations of the people. Comment

Sources: [The Hindu](#)

Mission Kakatiya

The Lakkaram tank of Kakatiya period in Khammam has been restored at an estimated cost of Rs. 13.5 crore under the Mission Kakatiya scheme.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental

impact assessment.

Background

- The actual storage area of the historic tank dug up during the reign of the Kakatiya dynasty had shrunk drastically due to encroachments on a vast stretch of the tank bed in the past few decades.
- The Telangana government included the tank under its ambitious tank restoration project to rejuvenate the water body over two years ago.
- Subsequently, the desilting work was carried out and the weirs and feeder channels were repaired as part of the restoration project

Mission Kakatiya (Mana Ooru Mana Cheruvu) is a program of restoring all the tanks and lakes in Telangana State, India. The name 'Mission Kakatiya' is given in the remembrance and tribute to the Kakatiya rulers who developed large number of the irrigation tanks.

Prelims perspective Model questions

Mission Kakatiya project is related to

- a) Conservation of ancient monuments
- b) Restoration of water bodies
- c) River linking
- d) Protection of Eastern Ghats

Sources: The Hindu [Wikipedia](#)

Kolleru Lake

With the onset of summer, a major portion of the Kolleru Lake has dried up, raising anxiety among residents of lake-bed villages.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Kolleru Lake

- Kolleru Lake is one of the largest freshwater lakes located in Andhra Pradesh.
- Kolleru spans into two districts - Krishna and West Godavari.
- Many birds migrate here in winter, such as Siberian crane, ibis, and painted storks. T
- he lake was an important habitat for an estimated 20 million resident and migratory birds, including the grey or spot-billed pelican (*Pelecanus philippensis*).
- The lake was declared as a wildlife sanctuary in November 1999 under India's Wildlife Protection Act of 1972, and designated a wetland of international importance in November 2002 under the international Ramsar Convention.

Present status

The lake has dried up at the beginning of the summer season. Many birds are migrating to the

nearby tanks, fields in search of food.

Prelims perspective Model questions

Kolleru lake is located in

- a) Andhra Pradesh
- b) Maharashtra
- c) Telangana
- d) Tamil Nadu

Sources: [The Hindu](#) [The Hindu](#)

Ropar wetland, Asian waterbird census , Wetlands International

Lesser number of migratory birds were sighted in Ropar wetland in Punjab this season. The observation is based on Asian Waterbird census 2017 conducted by Wetlands international.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Why the number of birds decreased?

- Local disturbance such as threat and unavailability of food.
- Boating, fishing and human disturbances along the riverbanks.

Ropar Wetland

- Ropar Wetland, also named Ropar Lake, is a man-made freshwater riverine and lacustrine wetland.
- It is located in the Shivalik foothills of the Lower Himalayas and was created in 1952 on the Sutlej River, in the Punjab for water supply.
- Ramsar Convention has included Ropar Wetland (listed as Ropar Lake) as one of the Ramsar sites among the 26 sites listed under India.

Asian waterbird census

- Asian Waterbird Census is part of the International Waterbird Census of Wetlands International, South Asia, which conducts the exercise every January across Asia and Australia.
- The AWC initiated in 1987 in the Indian subcontinent and has grown rapidly to cover the region of Asia, from Afghanistan eastwards to Japan, Southeast Asia and Australasia.

Wetlands International

- Wetlands International is the only global not-for-profit organisation dedicated to the conservation and restoration of wetlands.
- Wetlands International is dedicated to maintaining and restoring wetlands— for their environmental values as well as for the services they provide to people.
- It is supported by governments, private donors and NGOs

Prelims perspective Model questions

Asian Waterbird census is conducted by which of the following organisation?

- a) World Wide Fund for Nature
- b) The International Union for Conservation of Nature
- c) Birdlife International
- d) Wetlands International

Sources: [The Hindu Wetlands International](#)

Coral bleaching again, Great Barrier Reef

Australia's Great Barrier Reef is experiencing an unprecedented second straight year of mass coral bleaching. The 2,300-km reef suffered its most severe bleaching on record last year due to warming sea temperatures during March and April.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment

About the Great Barrier Reef

- The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres over an area of approximately 344,400 square kilometres. The reef is located in the Coral Sea, off the coast of Queensland, Australia.
- It is a UNESCO world heritage site

What are corals ?

- Corals are formed by huge colonies of tiny organisms called polyps. They secrete calcium carbonate to form a protective crust around their soft bodies. When they die their outer skeletons remain as a platform for others to continue building the coral.
- The colour of Corals comes from zooxanthellae - a tiny single celled algae that live inside the tissues of polyps. the algae produce food through photosynthesis in return for the home provided by the polyps.

Coral Reefs and their importance?

- Coral reefs are diverse underwater ecosystems held together by calcium carbonate structures secreted by corals. Coral reefs are built by colonies of tiny animals found in marine waters that contain few nutrients..
- Most reefs grow best in warm, shallow, clear, sunny and agitated waters.
- Often called "rainforests of the sea", shallow coral reefs form some of the most diverse ecosystems on Earth. They occupy less than 0.1% of the world's ocean surface, yet they provide a home for at least 25% of all marine species

What is Coral bleaching?

- Bleaching occurs when abnormal environmental conditions, such as warmer sea temperatures, cause corals to expel tiny photosynthetic algae, draining them of their colour.
- The loss of algae makes the host vulnerable to disease may eventually lead to their death.

Recovery

- Coral can recover if the water temperature drops and the algae are able to recolonise them.

Prelims Perspective

A question can be expected from any of the following areas Questions like what are corals, which organism provides colour to corals ... can figure in the examination

Mains Perspective

To see how Environment and ecology questions are asked in the examination visit our [IAS preparation page](#)

Sources: [The Hindu](#) Wikipedia- [Great Barrier Reef](#) , [Coral Reef Environmental Studies From Crisis to Cure](#)

Pristine air-quality monitoring station at Palampur

National Physical Laboratory (NPL) has established an atmospheric monitoring station in the campus of Institute of Himalayan Bioresource Technology (IHBT) at Palampur (H.P.)

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Details

- The atmospheric monitoring station has been established for generating the base data for atmospheric trace species & properties to serve as reference for comparison of polluted atmosphere in India.
- At this station, NPL has installed state of art air monitoring system, greenhouse gas measurement system and Raman Lidar.

Why a new station to monitor air quality?

- In India the air quality parameters are mostly measured in industrial and residential areas, however, data for air quality of pristine atmosphere is not available in India. NPL's station will contribute to fill this important gap.
- The NPL's station will also serve as a base station for inter-comparison of air quality monitoring equipment being used in India to improve quality of monitored data in India.

How the data will be useful?

- The data generated by pristine CAAQMS station at Palampur will act as background data for the measured pollution at various cities in the country.
- The generated background data will be shared with different pollution control boards and agencies in the country so that the more precise pollution mapping traceable to standard values can be done, which in turn, would assist policy decisions for the abatement of air pollutants.

Prelims perspective Model questions

The Atmospheric monitoring station to measure pristine air quality by National physical laboratory has been established in which of the following states?

- a. Uttarakhand
- b. Himanchal Pradesh
- c. Kerala
- d. Arunachal Pradesh

Mains Perspective Model questions

The rising air pollution in India's major cities is a cause of concern. How far various initiatives taken by the government helped in curbing air pollution? Explain

Sources: pib

Ganga, Yamuna termed 'living persons'

The Uttarakhand High Court, declared the rivers Ganga and Yamuna as "living persons."

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Background

- New Zealand river Whanganui was granted legal human status on March 15- making it the first in the world to be granted a legal human status.
- The Uttarakhand government acting on a PIL granted legal status to Ganga and Yamuna.
- The court also ordered officials to serve as parents for the rivers to protect and conserve them
- The court directed the central government to constitute the Ganga Management Board to look into the issue of cleaning and maintaining the river.
- **Significance :** Recognizing a river as legal entity means that if someone pollutes it ,the law will prescribe a punishment equal to harming a human being. The rights can be used to protect the interests of the rivers.

Mains Perspective Similar questions

The Namami Gange and National mission for clean Ganga (NMCG) programmes and causes of mixed results from the previous schemes. What quantum leaps can help preserve the river Ganga better than incremental inputs? [UPSC Mains 2015]

Sources: [The Hindu Livemint](#)

The Animal Welfare Board of India

The Animal Welfare Board of India (AWBI), a statutory advisory body under the Union Ministry of Environment, Forests and Climate Change (MoEF), will now be permanently chaired by a senior MoEF official. The organisation has always been chaired by somebody outside government till now.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

The Animal Welfare Board of India

- The Animal Welfare Board of India is a statutory advisory body on Animal Welfare Laws and promotes animal welfare in the country.
- It was established in 1962 under the Prevention of Cruelty to Animals Act, 1960 under the stewardship of Late Smt. Rukmini Devi Arundale, well known humanitarian.
- The Board consists of 28 Members. The term of office of Members is for a period of 3 years.
- The organisation is based in Chennai

A petition by AWBI and a 2011 MoEF notification were instrumental to the SC banning jallikattu in Tamil Nadu in 2014 on the grounds that it was cruel to the animals and also put participants at risk.

Prelims perspective Model questions [UPSC Prelims 2014]

Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/ are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

Mains Perspective

Topics related to Climate change, Environment and Ecology are becoming more and more important to keep an eye on. Government policies regarding Climate change, environment should be closely followed by any aspirant. Most of the questions asked in the previous examinations were related to government initiatives aimed at tackling Climate Change, curbing pollution etc.

You can visit our [IAS preparation page](#) to know more

Sources: [The Hindu AWBI](#)

Heat waves

The India Meteorological Department, along with the National Disaster Management Authority (NDMA), is urging the States to implement Heat Wave Action Plans.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

What is Heat Wave?

- A heat wave is a prolonged period of excessively hot weather, which may be accompanied by high humidity, especially in oceanic climate countries. While definitions vary, a heat wave is measured relative to the usual weather in the area and relative to normal temperatures for the

season.

- The IMD broadly defines a heat wave as when a place's temperature is 5-6°C above normal.

Criteria for Heat Wave

The following is the criteria for determining heat wave.

Heat wave need not be considered till maximum temperature of a station reaches at least 40° C for Plains and at least 30° C for Hilly regions.

- **When normal maximum temperature of a station is less than or equal to 40° C**
- Heat Wave: Departure from normal is 5° C to 6° C
- Severe Heat Wave : Departure from normal is 7° C or more
- **When normal maximum temperature of a station is more than 40° C**
- Heat Wave : Departure from normal is 4° C to 5° C
- Severe Heat Wave : Departure from normal is 6° C or more
- **When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat wave should be declared.**

India Meteorological Department

- India Meteorological Department was established in 1875.
- It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology, seismology and allied subjects.
- IMD is under Ministry of Earth Sciences

Its functions are

- To take meteorological observations and to provide current and forecast meteorological information for optimum operation of weather-sensitive activities like agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.
- To warn against severe weather phenomena
- To provide meteorological statistics required for agriculture, water resource management, industries, oil exploration and other nation-building activities.
- To conduct and promote research in meteorology and allied disciplines.
- To detect and locate earthquakes and to evaluate seismicity in different parts of the country for development projects

Prelims perspective

A question about heat wave, criteria for determining heat wave can figure in the examination

Mains Perspective

Topics related to Climate change, Environment and Ecology are becoming more and more important to keep an eye on. Government policies regarding Climate change, environment should

be closely followed by any aspirant. Most of the questions asked in the previous examination were related to government initiatives aimed at tackling Climate Change. You can visit our [IAS preparation page](#) to know more

Sources: [The Hindu](#) [Wikipedia](#) [IMD](#)

Bharat Stage emission standards

The Supreme Court has banned registration and sale of BS III fuel compliant vehicles from April 1. From April 1 onwards only BS IV compliant vehicles can only be sold.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

The Issue

- Government had announced way back in 2010 that BS-IV emission norms would kick in by April 2017.
- Vehicle manufacturers had asked the court to extend the date for registration of BS - III compliant vehicles to dispose off their unsold inventory of BS III vehicles.
- The Supreme Court rejected the manufacturers demand citing that Public health is more important than auto industry's interests.

What are BS norms?

- Bharat Stage emission standards, introduced in 2000, are emission standards that have been set up the Central government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles.
- The different norms are brought into force in accordance with the timeline and standards set up by the Central Pollution Control Board which comes under the Ministry of Environment and Forests and Climate Change.
- The Bharat Stage norms are based on European regulations. India has been following the European (Euro) emission norms, though with a time-lag of five years.
- In 13 major cities, Bharat Stage IV emission standards were put in place in April 2010. BS-IV norms were supposed to come into effect nationwide from April 2017.

Prelims perspective Model questions

Consider the following statements about Bharat Stage emission standards:

1. Bharat Stage emission standards, introduced in 2000, are emission standards that have been set up the Central government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles.
2. The Bharat Stage norms are based on European regulations.
3. India had recently decided to skip the Bharath V stage to introduce Bharath VI emission standards.

Which of the above statement(s) is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- All of the above

Mains Perspective Model questions

India had recently decided to skip the Bharath V stage to introduce Bharath VI emission standards. What impact it will have on automobile and petroleum industries? Give your suggestions

Sources: [The Hindu](#) [The Indian Express](#)

International Renewable Energy Agency (IRENA)

The International Renewable Energy Agency (IRENA) study found that countries have to adopt renewable energy, energy efficiency measures and achieve reduction of carbon emissions at a much faster pace to keep global temperature rise to 2 degree celsius.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Highlights of the report

- IRENA estimates that global carbon emissions can be reduced by 70% by 2050 and completely phased out by 2060.
- The report emphasises the importance of considering the needs of those without energy access.
- The investment for decarbonising the energy sector would boost global GDP.

Stats of Renewable energy

Renewable energy now accounts for 24% of global power generation and 16% of primary energy supply.

International Renewable Energy Agency (IRENA)

- The International Renewable Energy Agency (IRENA) is an intergovernmental organization to promote adoption and sustainable use of renewable energy.
- It was founded in 2009 and its statute entered into force on 8 July 2010.
- The agency is headquartered in Abu Dhabi.

Prelims perspective Model questions [UPSC Prelims 2016]

Consider the following statements:

1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
2. The Alliance includes all the member countries of the United Nations.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer A

Mains Perspective Model questions

How far various international organisations, initiatives been effective in combating the effects of climate change? Explain with suitable examples

Sources: [The Hindu](#) [Wikipedia](#)

The International Energy Agency

India declared its “Association” status with the International Energy Agency (IEA).

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Significance of Association status

India can richly gain from IEA’s data gathering processes, survey methodologies and range of energy data.

International Energy Agency (IEA)

- The International Energy Agency (IEA) is a Paris-based autonomous intergovernmental organization established in the framework of the Organisation for Economic Co-operation and Development (OECD) in 1974 in the wake of the 1973 oil crisis.
- The IEA was initially dedicated to responding to physical disruptions in the supply of oil, as well as serving as an information source on statistics about the international oil market and other energy sectors.
- The Agency’s mandate has broadened to focus on the “3Es” of effectual energy policy: energy security, economic development, and environmental protection.
- The IEA has a broad role in promoting alternate energy sources (including renewable energy), rational energy policies, and multinational energy technology cooperation.
- Only the OECD member states can become members of the IEA.
- Presently it has 29 members

Prelims perspective Model questions

Consider the following statements:

1. The International Energy Agency (IEA) was launched at the United Nations Climate Change Conference in 2015.
2. The IEA consists of all members who are parties to UNFCCC.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Mains Perspective Model questions

How far various international organisations, initiatives been effective in combating the effects of climate change? Explain with suitable examples

Sources: [The Hindu](#) Wikipedia

“OPERATION THUNDERBIRD” and “OPERATION SAVE KURMA”

In a major success in the fight against wildlife crime, Wildlife Crime Control Bureau (WCCB), Ministry of Environment, Forest and Climate Change, coordinated “OPERATION THUNDER BIRD” in India Operation Thunderbird is the code-name for INTERPOL’s multi-national and multi-species enforcement operation. Preceding this operation, WCCB had convened a species specific operation on turtles, code named “OPERATION SAVE KURMA” from December 15 last year to January 30, this year. A total of 15, 739 live turtles were recovered from 45 suspects, having inter-state linkages.

Law to regulate use of air conditioners

The Union Environment Ministry is mulling laws that will require buildings — commercial spaces, airports, offices — to ensure that air conditioners function at pre-set temperatures. This was because several places frequently set their air conditioners to extremely low temperatures — irrespective of whether the weather required it to be so — and thereby consumed an excess of electricity.

2 more tiger reserves soon in Uttarakhand

With the Uttarakhand forest department focusing on tiger conservation, the State is soon to get two new tiger reserves, work towards which is under way. **The Nandhaur Wildlife Sanctuary**, which falls under the Terai Arc Landscape spanning across India and Nepal, and **the Surai Range** in the Terai East division of the Uttarakhand forest department are the two proposed tiger reserves. Presently Uttarakhand has two tiger reserves Corbett Tiger Reserve and the Rajaji Tiger Reserve.

Synchronous elephant count by four States in May

Four States — Odisha, West Bengal, Chhattisgarh and Jharkhand — which comprise India’s most human-elephant conflict-prone region, have decided to count elephants synchronously between May 9 and 12. This will be the first regional synchronous elephant census with an identical set of rules for direct and indirect counting methods.

GS 3 SCIENCE AND TECHNOLOGY

Indian Ballistic Missile Defence Programme

DRDO conducted the successful launch of the interceptor missile Advanced Area Defence (AAD)

Mains : GS 3 Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Ballistic Missile Defence system

- The DRDO labs have been developing the two layered (Endo & Exo or inside and above the Earth's atmosphere respectively) BMD system.
- The robust missile shield will aid in securing its skies, key installations and assets from incoming enemy missiles.
- It contains a host of technologies and the indigenous ballistic missile.
- With the successful testing of Ballistic Missile technology India entered into the exclusive club of four nations, which include the **US, Russia and Israel, to possess the technology.**

Indian Ballistic Missile Defence Programme

- The Indian Ballistic Missile Defence Programme is an initiative to develop and deploy a multi-layered ballistic missile defence system to protect from ballistic missile attacks.
- It is a double-tiered system consisting of two land and sea-based interceptor missiles, namely the Prithvi Air Defence (PAD) missile for high altitude interception, and the Advanced Air Defence (AAD) Missile for lower altitude interception.
- The two-tiered shield should be able to intercept any incoming missile launched 5,000 kilometres away. The system also includes an overlapping network of early warning and tracking radars, as well as command and control posts
- The **Prithvi Air Defence (PAD)** is an anti-ballistic missile developed to intercept incoming ballistic missiles outside the atmosphere (exo-atmospheric). Based on the Prithvi missile, PAD is a two-stage missile with a maximum interception altitude of 80 km.
- **Advanced Air Defence (AAD)** is an anti-ballistic missile designed to intercept incoming ballistic missiles in the endo-atmosphere at an altitude of 30 km.

Prelims perspective Model questions

With reference to the Indian Ballistic Missile Defence Programme, consider the following statements:

1. The Prithvi Air Defence (PAD) is developed to intercept incoming ballistic missiles inside the atmosphere (endo-atmospheric). Based on the Prithvi missile, PAD is a two-stage missile with a maximum interception altitude of 80 km.
2. Advanced Air Defence (AAD) is an anti-ballistic missile designed to intercept incoming ballistic

missiles outside the atmosphere (exo-atmosphere)

Which of the statements given below is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Mains Perspective Model questions

Since India is making advancements in Space and Missile technology, an aspirant is expected to be aware of these developments. Questions from the topic vary in number different mains examination. One question from previous year mains examination is given below. To know more visit our [IAS preparation page](#)

Sources: Pib The Hindu [The Hindu Businessline](#) Wikipedia

Swati weapon locating radar

The Army received an indigenous weapon locating radar (WLR), named Swati, from the DRDO. The organisation also handed over a Nuclear, Biological and Chemical (NBC) recce vehicle and NBC treatment drugs to the Army.

Mains : GS 3 Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Swati weapon locating radar

- It is an indigenous weapon locating radar (WLR) developed by DRDO.
- Swati has a range of 50 km, which brings all artillery guns presently in service worldwide under coverage.
- Swati provides quick, automatic and accurate location of all enemy weapons like mortars, shells and rockets firing within its effective zone of coverage and simultaneously handles multiple projectiles fired from different weapons at different locations.
- Swati can also direct artillery response based on the incoming enemy fire.
- It is being used extensively along the LoC

NBC Recce Vehicle Mk-I

The NBC Recce Vehicle Mk-I is intended for carrying out post event recce of nuclear, biological and chemical contamination. The Army had placed an order for 16 of these vehicles in 2010.

Prelims perspective Model questions

Which one of the following is the best description of 'Swathi' - developed by DRDO, that was in the news recently?

- (a) Weapon locating radar (WLR)
- (b) Surface to air missile

- (c) High-explosive anti-tank (HEAT)
- (d) Nuclear-powered mobile military base

Solution: C

Sources: [The Hindu](#)

Bt cotton varieties

Punjab Agricultural University developed the country's first genetically-modified varieties of cotton – the seeds of which could be reused by farmers with no commercial restrictions, resulting in savings on repeat purchases every season.

Mains : GS 3 Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Highlights

- The Indian Council of Agricultural Research (ICAR) has identified three Bt cotton varieties – PAU Bt 1, F1861 and RS2013 – for cultivation in Punjab, Haryana and Rajasthan.
- PAU Bt 1 and F1861 were developed by PAU, while RS2013 was developed at Rajasthan Agricultural University (RAU).
- All three varieties carry the Cry1Ac gene imparting resistance against bollworm complex

Bt cotton

- Bt cotton is a genetically modified organism (GMO) cotton variety, which produces an insecticide to bollworm.
- The genetic modification involves introduction of the Bt bacterial gene that codes for a protein which kills the bollworm cotton pest.

Significance

- Lower price for the new variety seeds developed will cut cultivation costs.
- With these varieties, farmers would not have to buy costly Bt cotton seeds every year. Presently the multinational Monsanto supplies seeds to Indian farmers through seed licencees

Cotton is the only GM crop allowed to be cultivated in India.

Prelims perspective Model questions

Which of the following statements regarding GM crops in India is correct

1. Recently Punjab Agricultural University has developed a genetically modified cotton
2. Cotton and Mustard are the only two GM crops allowed for commercial cultivation in India.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Mains Perspective

India's agricultural sector will need to devise strategies that will allow the sector to thrive and adapt in these unpredictable climatic changes. One way of this is through development of GM crops. Discuss

Sources: [The Hindu](#) Wikipedia [The Hindu BusinessLine](#)

Chandrayaan-1

India's first lunar probe, Chandrayaan-1, which was considered lost, is still orbiting the moon, NASA scientists have found by using a new ground-based radar technique.

Mains : GS 3 Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology. Awareness in the fields of IT, Space,

The News

The ISRO lost communication with Chandrayaan-1 on August 29, 2009, almost a year after it was launched on October 22, 2008. NASA scientists have discovered the spacecraft using a ground based radar.

Chandrayaan-1

- Chandrayaan-1, India's first mission to Moon, was launched successfully on October 22, 2008 from Sriharikota.
- The spacecraft was orbiting around the Moon at a height of 100 km from the lunar surface for chemical, mineralogical and photo-geologic mapping of the Moon.
- The spacecraft carried 11 scientific instruments built in India, USA, UK, Germany, Sweden and Bulgaria
- Chandrayaan-1 is very small and cuboid in shape, about 1.5 metres in length on each side.
- Chandrayaan operated for 312 days, as against the intended two years.

Prelims Perspective

ISRO and space related questions had repeatedly figured in the past civil service preliminary examinations [**UPSC civil service prelims 2016**]

With reference to 'Astrosat', the astronomical observatory launched by India, which of the following statements is/are correct?

1. Other than USA and Russia, India is the only country to have launched a similar observatory into space.
2. Astrosat is a 2000 kg satellite placed in an orbit at 1650 km above the surface of the Earth.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only

- (c) Both 1 and 2
- (d) Neither 1 nor 2

Solution: D

Mains Perspective Model questions

Discuss India's achievements in the field of Space Science and Technology. How the application of this technology has helped India its socio-economic development? [UPSC Mains 2016]

Sources: [The Hindu](#) [ISRO](#)

Europa Clipper mission

NASA's 'Europa Clipper' set to launch in the 2020s will probe the habitability of Jupiter's icy moon Europa.

Mains : GS 3 Awareness in the fields of IT, Space

Europa Clipper mission

- Europa is the icy moon on Jupiter. It holds a salty liquid water ocean beneath its icy crust.
- The mission 'Europa Clipper' set to launch in the 2020s will probe the habitability of Jupiter's icy moon Europa.
- The mission plan includes 40 to 45 flybys, during which the spacecraft would image the moon's icy surface at high resolution and investigate its composition and the structure of its interior and icy shell.
- The ultimate aim of Europa Clipper is to determine if Europa is habitable

Prelims Perspective UPSC Prelims 2016 similar question

What is 'Greased Lightning-10 (GL-10)', recently in the news?

- (a) Electric plane tested by NASA
- (b) Solar-powered two-seater aircraft designed by Japan
- (c) Space observatory launched by China
- (d) Reusable rocket designed by ISRO

Solution: A

Sources: [The Hindu](#)

Hyperloop

The futuristic transportation system hyperloop is being developed by Hyperloop one.

What is a hyperloop?

- It is a system where magnetically levitating capsules are sent at high speeds through low-pressure tubes, thereby potentially reducing transport time — of people and goods — by more than 80%.
- It was entrepreneur Elon Musk who came up with the idea for a hyperloop.

Present project

- Such a system is now being developed to connect Abu Dhabi and Dubai.

Potential of Hyperloop One in India

- Hyperloop One has announced its intentions to begin operations in India by 2021 which would enable India to jump forward in its transport infrastructure
- **Flip side** : At a time when railway infrastructure is abysmal and the airline industry is priced beyond the abilities of most of the populace, can India really afford another transport system only to be used by businesses and businesspeople is the question before India.

Prelims perspective Model questions

Hyperloop, sometimes seen in the news, is related to

- (a) transportation technology
- (b) wireless communication technology
- (c) solar power production technology
- (d) water conservation technology

Sources: [The Hindu](#)

Tuberculosis

India's target of eliminating TB by 2025 is unrealistic due to health ministry's budget cuts.

Mains : *GS 3 Science and Technology- developments and their applications and effects in everyday life . GS 2 Issues relating to development and management of Social Sector/ Services relating to Health, Education, Human Resources.*

India's TB burden

- Nearly 5 lakh patients died due to TB last year.
- The tuberculosis epidemic affects 28 lakh Indians
- 79,000 people suffer from type of TB resistant to most antibiotics.

About Tuberculosis

- Tuberculosis is a contagious infection caused by Mycobacterium tuberculosis It usually attacks the lungs.
- It can spread to other parts of the body like the brain and spine.
- Tuberculosis is contagious and spreads through the air, much like cold or flu.

The issues

- The unchecked rise of multidrug-resistant tuberculosis (MDR TB) in India will threaten the progress made globally.
- India's target of eliminating TB by 2025 is unrealistic due to health ministry's budget cuts.
- The two new WHO recommended drugs for DR TB, Delamanid & Bedaquiline, are not currently available in Indian national TB programme. People living with MDR and XDR-TB are not receiving adequate treatment in India.

Indian government will soon be releasing the National Strategic Plan for TB

Control (2017-2025), with an overarching framework to achieving the elimination goal.

Prelims Perspective Model Questions

Delamanid & Bedaquiline are drugs used in the treatment of

- a) Tuberculosis
- b) HIV aids
- c) Malaria
- d) None of the above

Mains Perspective Model questions

Can overuse and free availability of antibiotics without Doctor's prescription, be contributors to the emergence of drug-resistant disease's in India? What are the available mechanisms for monitoring and control? Critically discuss the various issues involved. [UPSC Mains 2014]

Sources: [The Hindu](#)

TB vaccine trial on adults begins in June

The Pune-based Serum Institute of India Pvt. Limited will begin a Phase II/III vaccine trial for tuberculosis using a novel, recombinant BCG (bacillus Calmette-Guérin) vaccine. The new TB vaccine (VPM1002), which will be tested, is based on the BCG vaccine that is in use. However, it is more powerful and efficacious as it contains a gene, better recognised by the immune system.

Biodiesel

High state taxes on biodiesel are effectively rendering the green fuel significantly more expensive than regular diesel, according to the Biodiesel Association of India.

Mains : GS 3 Conservation, environmental pollution and degradation, environmental impact assessment.

Highlights

- BDAI asked the central government to continue with the excise duty exemptions for the sector.
- The taxes imposed by the state government which remains very high acts as a hindrance to Industry's growth.
- The annual consumption of biodiesel in India is about 80 lakh litres needed to go up drastically if India is to meet its target of a 10% reduction in oil imports.

What is Biodiesel?

- Biodiesel refers to a vegetable oil – or animal fat-based diesel fuel consisting of long-chain alkyl (methyl, ethyl, or propyl) esters.
- Biodiesel is typically made by chemically reacting lipids (e.g., vegetable oil, soybean oil, animal fat (tallow)) with an alcohol producing fatty acid esters.
- Biodiesel is meant to be used in standard diesel engines and is thus distinct from the vegetable

and waste oils used to fuel converted diesel engines.

- Biodiesel can be used alone, or blended with petrodiesel in any proportions.

Significance

- Using biodiesel can reduce hydrocarbon usage by almost 80%, and particulate matter emissions can be reduced by 38-40%, and there is no sulphur emissions.

The Biodiesel Association of India (BDAI) : The Biodiesel Association of India (BDAI) is a non-profit national association representing the biofuels sector, and in particular the biodiesel industry. BDAI's membership is comprised of farmers/cultivators societies, national feedstock and feedstock processor organizations, biodiesel suppliers, fuel marketers and distributors and technology providers.

Prelims perspective Model questions

Consider the following statements:

1. The biodiesel usage will help in reducing air pollution.
2. Biodiesel can be used only in engines which are specially designed for it.

Which of the statements given above is/ are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Mains Perspective

Topics related to Climate change, Environment and Ecology are becoming more and more important to keep an eye on. Government policies regarding Climate change, environment should be closely followed by any aspirant. Most of the questions asked in the previous examinations were related to government initiatives aimed at tackling Climate Change, curbing pollution etc.

You can visit our IAS preparation page to know more

Sources: [The Hindu](#) Wikipedia [BDAI](#)

Methicillin-resistant Staphylococcus aureus (MRSA)

A new clone of methicillin-resistant Staphylococcus aureus (MRSA), which is exclusive to Kochi, has been identified. The new clone, named 't15669 MRSA', is unique to seafood and the aquatic environment of Kerala

Mains : GS 3 Science and Technology- developments and their applications and effects in everyday life .

What is Methicillin-resistant Staphylococcus aureus (MRSA)?

- Methicillin-resistant Staphylococcus aureus (MRSA) is a bacterium responsible for several difficult-to-treat infections in humans.

- Details MRSA can lead to diseases ranging from milder form of skin infections, boils, furunculosis to life-threatening septicemia and bacteraemia from post-surgical contamination.
- If the concentration of the bacterium increases, it can reach the seafood chain
- The presence of MRSA in fish meant for human consumption is a potential health hazard for food handlers.

Prelims perspective

‘Methicillin-resistant Staphylococcus aureus (MRSA)’, sometimes seen in the news, refers to

- (a) bacterium responsible for several difficult-to-treat infections in humans.
- (b) the full range of mRNA molecules expressed by an organism
- (c) the description of the mechanism of gene expression
- (d) a mechanism of genetic mutations taking place in cells

Mains Perspective Similar questions

Can overuse and free availability of antibiotics without Doctor’s prescription, be contributors to the emergence of drug-resistant disease in India? What are the available mechanisms for monitoring and control? Critically discuss the various issues involved [UPSC Mains 2016]

Sources: [The Hindu](#) Wikipedia

CRISPR gene editing

Gene editing experiments being conducted in human beings.

Mains : GS 3 Science and Technology- developments and their applications and effects in everyday life .

Background

A team from China has reported results from CRISPR-modified human embryos. So far research has been concentrated on nonhuman life forms.

What is CRISPR modified human embryos?

- CRISPR (clustered regularly interspaced short palindromic repeats), refers to a suite of gene-editing techniques. I
- It can be used to target specific stretches of genetic code and to edit DNA at precise locations, permanently modify genes in living cells and organisms, and possibly correct disease-causing mutations.

Details about gene editing on human embryos

- A team has corrected genetic mutations in a few cells in three normal human embryos using CRISPR. The normal embryos seemed to be more receptive to gene editing than previous attempts
- **Significance :** The gene-editing techniques are too risky to be made widely available. Though gene editing in humans can be a solution to several congenital abnormalities legal and ethical

issues surrounding gene-editing techniques continues to be unresolved and debated throughout the world.

Prelims perspective Model questions

CRISPR' technique sometimes seen in news is related to

- (a) a range of enzymes used in genome editing
- (b) gene editing technique
- (c) the description of the mechanism of gene expression
- (d) a mechanism of genetic mutations taking place in cells

Mains Perspective Model questions

Though gene editing in humans can be a solution to several congenital abnormalities legal and ethical issues surrounding gene-editing techniques continues to be unresolved and debated throughout the world. Discuss

Sources: The Hindu

GRAPES-3 experiment

The GRAPES-3 experiment at TIFR's (Tata Institute of Fundamental Research) Cosmic Ray Laboratory in Ootacamund is getting upgraded which will help in getting information about solar storm.

Mains : GS 3 Achievements of Indians in science & technology; indigenization of technology and developing new technology.

GRAPES- 3 Experiment

- The GRAPES- 3 experiment at TIFR's Cosmic Ray laboratory is getting upgraded The GRAPES-3 experiment located at Ooty in India started as a collaboration of the Tata Institute of Fundamental Research, Mumbai, India and the Osaka City University, Osaka, Japan.
- GRAPES-3 (Gamma Ray Astronomy PeV EnergieS phase-3) is designed to study cosmic rays with an array of air shower detectors and a large area muon detector.
- Muon is an unstable subatomic particle of the same class as an electron (a lepton), but with a mass around 200 times greater.
- Muons make up much of the cosmic radiation reaching the earth's surface.
- The upgraded detector will have an increased coverage of the sky and improved capacity to determine the direction of incident cosmic rays.
- **Significance** : GRAPES-3 has an important role in understanding the propagation of solar storms from the L1 point to its impact on the Earth. Charged particles in an extreme solar storm can also short current carrying over-head high voltage lines, leading to large-scale transformers burn out and thereby, power blackouts.
- The accurate determination of the time taken for the solar storm to travel to the earth can

be assessed using GRAPES -3 to switch off power supplies so that electrical systems are not affected by solar storms.

Prelims perspective Model questions

What is 'GRAPES- 3 ', recently in the news?

- (a) GM crop developed by Monsanto
- (b) An experiment to study cosmic rays
- (c) Multiple target missile developed by DRDO
- (d) Agriculture technology developed by India

Sources: [The Hindu GRAPES - 3](#)

India-based Neutrino Observatory (INO)

The National Green Tribunal suspended the Environmental Clearance (EC) granted to the India-based Neutrino Observatory (INO) and has asked the project proponent to make a fresh application.

Mains : GS 3 Indigenization of technology and developing new technology. Conservation, environmental pollution and degradation, environmental impact assessment.

Why Environmental Clearance was suspended ?

- The proposed project site falls within 5km from Madhikettan Shola National Park in Idukki district of Kerala and it is just one kilometer away from Tamil Nadu-Kerala border.
- Any project that falls within 5 km from an inter-State boundary or within a notified national park or a sanctuary has to be considered a Category 'A' project that involves a number of processes before an Environmental Clearance is granted.

India-based Neutrino Observatory (INO)

- India-based Neutrino Observatory (INO) is a particle physics research project under construction to primarily study atmospheric neutrinos in a 1,300 meters (4,300 ft) deep cave under Ino Peak near Theni, Tamil Nadu, India.
- This project is notable in that it is anticipated to provide a precise measurement of neutrino mixing parameters.
- The project is a multi-institute collaboration and one of the biggest experimental particle physics projects undertaken in India.
- When completed, the main magnetised iron calorimeter (ICAL) experiment include the world's most massive magnet, four times larger than the 12,500-tonne magnet in the Compact Muon Solenoid detector at CERN in Geneva, Switzerland
- The initial goal of INO is to study neutrinos.
- Neutrinos are fundamental particles belonging to the lepton family.

They come in three flavours, one associated with electrons and the others with

their heavier cousins the muon and the Tau. A lepton is an elementary, particle that does not undergo strong interactions.

Prelims perspective Model questions

Consider the following statements

1. The India-based Neutrino Observatory (INO) is being constructed in Karnataka.
2. Recently the National Green tribunal has suspended environmental clearance granted to INO

Which of the statements given above is/are correct?

- (a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Mains Perspective Model questions

Since India is making advancements in Science and technology, an aspirant is expected to be aware of these developments. Questions from the topic vary in number in 2013, 2014 and 2015 papers. To see how questions are asked from this topic visit our IAS preparation page

Sources: [The Hindu](#) [NGT](#)

Traditional Knowledge Database Library (TKDL)

The Traditional Knowledge Database Library (TKDL), an organisation of the Council of Scientific and Industrial Research will cease to exist in its current form.

Mains : GS 3 issues relating to intellectual property rights.

Highlights

- The TKDL has no committed funds beyond March It had earlier scouted for intellectual property infringements by Indian and foreign companies on traditional knowledge.

What is The Traditional Knowledge Database Library (TKDL)?

- TKDL is an online repository of about 300,000 formulations from Ayurveda, Siddha and Unani systems.
- Over two decades, the body translated, scanned and digitised texts from their Sanskrit, Arabic and Urdu originals.
- This was then made searchable, allowing patent offices in India, Europe, the United States, United Kingdom, Canada, Australia and Japan to check if patent applicants of herbal concoctions, creams and drugs were basing their claims on available traditional knowledge.
- Between 2009 and 2015, 219 patents were denied to Indian and foreign companies based on TKDL's challenges, including Unilever, Colgate-Palmolive, Avesthagen, the government's Central Council For Research in Unani Medicine, and Yale University in the U.S.
- Only 60% of the digitisation of traditional texts is completed and a project to integrate 1,500

yoga asanas (with video) is 25% done.

The Council of Scientific and Industrial Research (CSIR)

- The council of Scientific and Industrial research is a premier R&D organization in India.
- It was constituted in 1942
- It is an autonomous body registered under the Registration of Societies Act of 1860
- The 75-year-old CSIR has a large network of 38 laboratories spread across the country that are involved in a wide range of research from battery technology and genomics to glass-making.
- Over the years, the Council has emerged as India's biggest publisher of research papers as well as the largest patentee, though only a fraction of these have been become commercial products.

Prelims Perspective

Consider the following statements about India's Traditional Knowledge Digital Library (TKDL)

1. It has been instrumental in preventing patenting of Indian traditional knowledge
2. It is an organisation that functions under CSIR.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer C

Mains perspective

India's Traditional Knowledge Digital Library (TKDL) which has a database containing formatted information on more than 2 million medicinal formulations is proving a powerful weapon in the country's fight against erroneous patents. Discuss the pros and cons making this database publicly available under open-source licensing. [UPSC Mains 2015]

Sources: [The Hindu CSIR](#)

Dhruv's

India is in discussions with Sri Lanka and several Southeast Asian nations for the supply of Dhruv, the indigenously developed advanced light helicopter (ALH).

Mains : GS 3 indigenization of technology and developing new technology.

Dhruv

- The Dhruv is indigenously designed and developed helicopter by HAL, It is powered by a Shakti engine, jointly developed by HAL and Turbomeca of France. Over 200 of these choppers are currently in service in India.

Prelims Perspective

A question can be expected from any of the following areas UPSC usually ask questions on

newly developed Missiles, Aircrafts and other modern warfare systems of India.

THE HIGH-FLYING SENTINEL

Ecuador has ditched the Dhruv, but it has proven its worth elsewhere

ON BOARD

- It's a 5.5 tonne multi-mission helicopter for armed forces and civil use
- Its design features an Anti-Resonance Vibration Isolation system and automatic flight control system
- Cruise speed of 265km/h with a range of 700km
- Can carry up to 14 passengers



Weapons: The army and air force versions have

- Eight anti-armour missiles
- Four air-to-air missiles

Naval variant has torpedoes & anti-ship missiles

Military use: Dhruv is used in India, Israel, Maldives, Mauritius, Nepal, Suriname, Ecuador (contract terminated)

Civil use: India, Turkey, Peru

- A GPS unit
- Doppler navigation system
- True air speed indicator
- Automatic direction finder
- Radio altimeter, instrument landing system, marker beacons
- Radar and missile detectors, infrared jammers

Image : The Hindu

Mains Perspective

The issues relating to Defence Procurement, technology transfer in defence sector, FDI policy etc.

Sources: [The Hindu](#) [The Hindu](#)

Bitcoin

The government warned that use of virtual currencies like Bitcoins is not authorised by the RBI and could result in breach of anti-money laundering provisions. The creation of virtual currencies like Bitcoins as a medium of payments is not authorised by any central bank or monetary authority.

What are Bitcoins?

- Bitcoin is a digital currency that is not supported by any country's government or central bank. Also known as crypto-currency, it can be traded for services or goods with sellers who accept bitcoins as payment.
- The system is peer-to-peer and transactions take place between users directly, without an intermediary.
- Since the system works without a central repository or single administrator, the U.S. Treasury categorizes bitcoin as a decentralized virtual currency.

- Bitcoins are created as a reward in a competition in which users offer their computing power to verify and record bitcoin transactions into the blockchain.
- This activity is referred to as mining and successful miners are rewarded with transaction fees and newly created bitcoins. Besides being obtained by mining, bitcoins can be exchanged for other currencies, products, and services.

Prelims Perspective

With reference to 'Bitcoins', sometimes seen in the news, which of the following statements is/are correct? [UPSC 2016]

1. Bitcoins are tracked by the Central Banks of the countries.
2. Anyone with a Bitcoin address can send and receive Bitcoins from anyone else with a Bitcoin address.
3. Online payments can be sent without either side knowing the identity of the other.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

Solution: B

Sources: [The Hindu](#)

High Nitrogen Steel

Defence Research and Development Organization (DRDO) and Jindal Stainless (Hisar) Limited (JSHL) signed the Licensing Agreement for Transfer of Technology of High Nitrogen Steel (HNS) for armour applications here today. The HNS will be useful for manufacture of lighter and high performance armouring material. HNS is a tough, corrosion resistant, strong, non magnetic and cheap compared to Rolled Homogenous Armour Steel (RHA). This material has potential for a number of defence and civil applications like armouring, mine trawls, oil industries etc.

Fovea - Sweet spot in eye helps humans read

A team led by Kolkata-born scientists found a special sweet spot in the eye called 'fovea'. It plays a crucial role in humans being able to focus on computer screens and also read, an ability which is unique to Homo sapiens. The fovea is a specialised region that dominates visual perception in humans. It provides more than half of the input from the eyes to the visual cortex of the brain.

Lopinavir syrup

Stocks of Lopinavir syrup — a child friendly HIV drug — ran out after Cipla, the sole manufacturer of the drug, stopped manufacturing it over the issue of non-payment from the Health Ministry. Cipla is the dominant player in the Indian market across the HIV segment

and has not stopped participating in government tenders after the Health Ministry failed to pay Cipla for consignments sent in 2014.

International Smart Grid Action Network (ISGAN)

ISGAN is an agreement under International Energy Agency (IEA) and consists of representatives from 25 countries across the globe. ISGAN creates a mechanism for multilateral government-to-government collaboration to advance the development and deployment of smarter electric grid technologies, practices and systems.

About Smart India Hackathon 2017

All India Council for Technical Education (AICTE) in collaboration with others is conducting a unique initiative 'Smart India Hackathon 2017'. The event will feature technology students build innovative digital solutions for problems posed by different central govt. ministries/ departments. ICMR is a 'Premier Partner' in this initiative.

Brown dwarf planet SDSS J0104+1535

Scientists have identified a record breaking brown dwarf with the 'purest' composition that is about 90 times as massive as Jupiter, located 750 light years away in the outermost reaches of our galaxy. Brown dwarfs are intermediate between planets and fully-fledged stars. Their mass is too small for full nuclear fusion of hydrogen to helium (with a consequent release of energy) to take place, but they are usually significantly more massive than planets. The object, known as SDSS J0104+1535, is located 750 light years away in the constellation of Pisces, SDSS J0104+1535 is made of gas that is around 250 times purer than the Sun, so consists of more than 99.99% hydrogen and helium.

World's oldest algae fossil

Scientists in India have uncovered a pair of 1.6 billion-year-old fossils that appear to contain red algae, which may be the oldest plant-like life discovered on Earth. Until now, the oldest known red algae was 1.2 billion years old. The fossils were discovered in sedimentary rocks in the Chitrakoot region of Uttar Pradesh and Madhya Pradesh.

GS 3 INTERNAL SECURITY

NATGRID - National Intelligence Grid

A parliamentary panel was informed by the government that that it couldn't get qualified IT professionals to fill 35 posts in the National Intelligence Grid (NATGRID).

Mains : GS 3 Role of external state and non-state actors in creating challenges to internal security. Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security.

What is the NATGRID?

The NATGRID is a centralised agency which stores sensitive personal information on citizens, from almost two dozen agencies, to be made available for counter-terror investigations.

Why it was introduced?

In the aftermath of Mumbai attacks and due to the lack of real time information regarding movement of suspected terrorists. India failed to detect US terror suspect David Headley's movement across the country during his multiple visits between 2006 and 2009.

What does it contain?

NATGRID's data sources include records related to immigration entry and exit, banking and financial transactions and telecommunications. Data is collected from different agencies such as the Intelligence Bureau, local police and revenue and customs departments.

Prelims Perspective Model Questions

National Intelligence Grid (NATGRID) sometimes seen in news is an agency for

- a) preventing cyber crimes in India
- b) conducting anti terrorism operations
- c) storing information on citizens to be made available for counter terrorism investigation
- d) None of the above

Mains Perspective

When so much sensitive information about individuals is available on a single source, the potential for its misuse would dramatically go up. The functioning of NATGRID and intelligence agencies in India should be effectively monitored by Parliament or an eminent group.

Sources: [The Hindu](#) Business Standard

Bilateral exercises

India is leveraging bilateral military exercises to further strategic cooperation. The Army has conducted exercises with 18 countries in the last three years

Mains : GS 2 International relations.

Highlights

- The Indian Army is currently engaged in or has just concluded four separate exercises with the armies of Nepal, Oman, Singapore and the U.S.
- The bilateral exercises focuses on aspects like counter-insurgency, jungle warfare, heli-borne and special operations, meant to promote interoperability.
- During the last three years India has signed defence agreements/memorandum of understandings (MoU) with 21 countries.

Latest drills

- The Surya Kiran exercise with Nepal is underway at Pithoragarh in Uttarakhand The Al Nagah-II exercise with Oman is underway at Bakloh in Himachal Pradesh.

- They are infantry exercises meant to improve interoperability and focus especially on counter-terrorism.
- Both the exercises are spread over 14 days.
- The Bold Kurukshetra exercise with Singapore is an armoured exercise under way at the Babina field firing range in Uttar Pradesh.

Prelims perspective Model questions

Surya Kiran bilateral military exercise is conducted jointly by India and

- Israel
- Oman
- Nepal
- China

Mains Perspective Model questions

The number of bilateral exercise conducted by the defence forces have seen a rise in the recent past. Examine the significance of bilateral exercises and its political and security implications.

Sources: [The Hindu](#)