

Price - 60/-NIMBUS NA ACADEMY FOR IAS तमसो मा जयोतरिगमय ॥ December - 2019 NIMBUS RAFALE FIGHTER AIRCRAFT **Financial** FATE Action Task Force IMPORTANT HIGHLIGHTS **PAKISTAN - SAFE FROM** FATF BLACKLIST ART & CULTURE **ECONOMY SOCIAL ISSUES** INTERNATIONAL ISSUES HP CURRENT AFFAIRS POLITY & GOVERNANCE SCIENCE & TECHNOLOGY **ENVIRONMENT & ECOLOGY CURRENT AFFAIRS (100 MCQ)** NOBEL IN PEACE **ABIY AHMED** HPSAS MODEL TEST PAPER USEFUL FOR UPSC AND STATE CIVIL SERVICES EXAMS



# **PREFACE**

This booklet of Current Affairs is an attempt so as to help the Civil Services Aspirants in their process of learning, understanding and analyzing each and every aspect of the current issue in the easiest possible manner. In order to make the understanding of the current affairs a long lasting affair and to help students score good marks in the examination; a balance between factual content and analytical approach has been maintained in this booklet.

The booklet has been meticulously designed to suit the needs of Civil Service Aspirants appearing in IAS and State PSC examinations. In addition, it would benefit all those who are preparing for other competitive examinations or such individuals who are knowledge starving and have a passion to learn more.

Owing to nature of the booklet, the Nimbus Academy Team has prepared the material with the help of the facts and the information provided by various Ministries of Govt. of India and merging those with the concepts developed by the subject matter experts.

Reader's suggestions and feedback directed towards improvements are welcome and can be e-mailed at nimbusias@gmail.com

**Nimbus Academy for IAS** 



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# **POLITY**

### LEGAL RIGHTS THAT THE DEITIES ENJOY IN INDIA

#### why in news?

• Among the parties in the Ayodhya title suit appeals, Lord Ram is considered a litigant in court since he is considered as a *juristic person*.

### Who is recognized as a juristic person?

- The Juristic Person means recognition of an entity to be in law a person which otherwise it is not, i.e. It is not an individual natural person but an artificially created person which is to be recognised to be in law as such.
- Gods, corporations, rivers, and animals, have all been treated as juristic persons by courts.

#### When did the concept came up?

- Started under the British: Temples owned huge land and resources, and British administrators held that the legal owner of the wealth was the deity, with a shebait or manager acting as trustee.
- Subsequently the principle was held up in the various judicial pronouncements, for example In 1887, the Bombay High Court held in *the Dakor Temple case:* "Hindu idol is a juridical subject and the pious idea that it embodies is given the status of a legal person."
- The concept was again *reinforced in the 1921 order in Vidya Varuthi Thirtha vs Balusami Ayyar*, where the court said, "under the Hindu law, the image of a deity is a 'juristic entity', vested with the capacity of receiving gifts and holding property".

#### Rights deities have:

- 1. Own property.
- 2. Pay taxes
- 3. Sue and being sued.
- 4. Do not have fundamental rights or other constitutional rights (Sabarimala case).

#### Is every deity a legal person?

- No, not every deity is a legal person.
- This status is accorded to an idol only after its public consecration, or pran pratishtha.
- The Supreme Court ruled in **Yogendra Nath Naskar vs Commissioner Of Income-Tax (1969)**: "It is not all idols that will qualify for being 'juristic person' but only when it is consecrated and installed at a public place for the public at large."

#### Other legal entities:

- In May, the Punjab and Haryana High Court held that the "entire animal kingdom" has a "distinct legal persona with corresponding rights, duties, and liabilities of a living person".
- On March 20, 2017, the Uttarakhand High Court declared that the Ganga and Yamuna would be legally treated as "living people," and enjoy "all corresponding rights, duties and liabilities of a living



# GLOBAL SMART CITIES ALLIANCE ON TECHNOLOGY GOVERNANCE

#### Why in news?

- India has joined the World Economic Forum's (WEF) G20 Global Smart Cities Alliance on Technology Governance.
- India's joining the league is a critical first step towards accelerating global best practices, fostering
  greater openness and public trust as well as mitigating risks regarding the collection of data in public
  spaces.

#### About: G20 Global Smart Cities Alliance on Technology Governance.

- It was established in June 2019, at the G20 Summit held in Osaka, Japan.
- It is a league of 15 of world's leading city networks and technology governance organisations that will work towards advancing responsible and ethical use of smart city technologies.
- It seeks to create global norms and policy standards for the use of connected devices in public spaces.
- The aim of the alliance is to promote the responsible and ethical use of smart city technologies by establishing global norms and policy standards for the use of connected devices in public spaces.
- The Global Smart Cities Alliance's founding set of institutional partners include the presidents and host nations of the Group of 20 (G20) in 2019 and 2020; Japan and the Kingdom of Saudi Arabia; the Smart City Mission of India; Cities for All; Cities Today Institute; Commonwealth Local Government Forum; Commonwealth Sustainable Cities Network among others.

#### Significance:

- The alliance unites municipal, regional and national governments, private-sector partners and cities' residents around a shared set of core guiding principles for the implementation of smart city technologies.
- Currently, there is no global framework or set of rules in place for how sensor data collected in public spaces, such as by traffic cameras, is used.
- The effort aims to foster greater openness and trust as well as create standards for how this data is collected and used.
- This marks the first time that smart city technologies and global technology governance have been elevated to the main agenda.
- Smart city technologies can help cut decrease traffic congestions, combat crime, improve resilience during natural disasters and reduce greenhouse emissions.
- Without the proper governance, these technologies pose significant risk, notably to privacy and security.
- To ensure data collected in public places is used safely and ethically, the Alliance will develop, pilot collectively implement new global policy standards.
- Towards a global policy: The Alliance has committed to co-design and roll out a first-of-its-kind global policy framework on smart city technologies in advance of the 2020 G20 Summit in Riyadh, Saudi Arabia. It is currently accepting nominations from cities interested in piloting and contributing to global policy standards.

# ARMED FORCES (SPECIAL POWERS) ACT (AFSPA)

#### Why in news?

The Ministry of Home Affairs have been empowered to continue or revoke AFAPA in the newly created UT of J&k



#### About AFSPA:

#### Background:

The Act came into force in the context of increasing violence in the Northeastern States during the initial decades after independence, which the respective State governments found difficult to control. The Armed Forces (Special Powers) Bill was passed by both the Houses of Parliament and it was approved by the President on September 11, 1958. It became known as the Armed Forces Special Powers Act, 1958.

AFSPA gives armed forces the power to maintain public order in "disturbed areas".

#### Various powers given to armed forces:

- The armed forces personnel have the authority to prohibit a gathering of five or more persons in an area, can use force or even open fire after giving due warning if they feel a person is in contravention of the law.
- If reasonable suspicion exists, the army can also arrest a person without a warrant; enter or search premises without a warrant; and ban the possession of firearms.
- Any person arrested or taken into custody may be handed over to the officer in charge of the nearest police station along with a report detailing the circumstances that led to the arrest.

#### What is a "disturbed area"?

A disturbed area is one which is declared by notification under **Section 3 of the AFSPA** as per provisions of which it can be invoked in places where "the use of armed forces in aid of the civil power is necessary".

#### Who has the power to declare it?

The Central Government, or the Governor of the State or administrator of the Union Territory can declare the whole or part of the State or Union Territory as a disturbed area.

A suitable notification would have to be made in the Official Gazette.

#### The stance of the judiciary:

There were questions about the constitutionality of AFSPA, given that law and order is a state subject. The Supreme Court has upheld the constitutionality of AFSPA in a **1998 judgement (Naga People's Movement of Human Rights v. Union of India).** 

The Supreme Court also ruled, in the same judgement, that;

- a) a **suo-motto declaration can be made by the Central government**, however, it is desirable that the state government should be consulted by the central government before making the declaration;
- b) AFSPA does not confer arbitrary powers to declare an area as a 'disturbed area';
- c) the declaration has to be for a limited duration and there should be a periodic review of the declaration 6 months have expired;
- d) while exercising the powers conferred upon him by AFSPA, the authorised officer should use minimal force necessary for effective action, and
- e) the authorised officer should strictly follow the 'Dos and Don'ts' issued by the army.

#### B P Jeevan Reddy committee:

The Central government appointed a five-member committee, on November 19, 2004, **headed by Justice B P Jeevan Reddy** to review the provisions of the act in the north eastern states.

The committee submitted its report in 2005, which included the following recommendations:

- a) AFSPA should be repealed and appropriate provisions should be inserted in the Unlawful Activities (Prevention) Act, 1967;
- b) The Unlawful Activities Act should be modified to clearly specify the powers of the armed forces and paramilitary forces and
- c) grievance cells should be set up in each district where the armed forces are deployed.



The 5th report of the Second Administrative Reforms Commission on public order has also recommended the repeal of the AFSPA.

These recommendations have not been implemented.

#### How has this Act been received by the people?

It has been a controversial one, with human rights groups opposing it as being aggressive. Manipur's Irom Sharmila has been one if its staunchest opponents, going on a hunger strike in November 2000 and continuing her vigil till August 2016. Her trigger was an incident in the town of Malom in Manipur, where ten people were killed waiting at a bus stop.

#### In which states AFSPA has been in force:

It is effective in the whole of Nagaland, Assam, Manipur (excluding seven assembly constituencies of Imphal) and parts of Arunachal Pradesh.

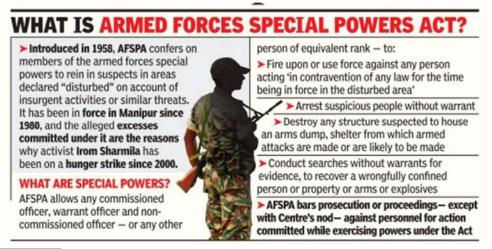
The law was first implemented on July 5, 1990, when the entire law-and-order machinery collapsed in the Valley and normal law was found inadequate to tackle the rising graph of armed militancy. The then state government declared the Kashmir Valley as a disturbed area under section 3 of AFSPA. Later, on August 10, 2001, the J&K government extended disturbed area provision to the Jammu province also.

#### Where it has been revoked:

The Centre revoked it in Meghalaya on April 1, 2018. Earlier, the AFSPA was effective in a 20 km area along the Assam-Meghalaya border.

In Arunachal Pradesh, the impact of AFSPA was reduced to eight police stations instead of 16 police stations and in Tirap, Longding and Changlang districts bordering Assam.

Tripura withdrew the AFSPA in 2015. Jammu and Kashmir too has a similar Act.



#### India Justice Report (IJR)

- India Justice Report (IJR) has been released.
- The India Justice Report 2019 ranks individual Indian states in relation to their capacity to deliver access to justice.
- The Tata Trusts brought together a group of sectoral experts <u>Centre for Social Justice</u>, <u>Common Cause</u>, <u>Commonwealth Human Rights Initiative</u>, <u>DAKSH</u>, <u>Tata Institute of Social Sciences Prayas</u> and <u>Vidhi Centre for Legal Policy</u> to develop a report that would measure the structural capacity of state-based instrumentalities of the justice system against their own declared mandates, with a view to pinpointing areas that lend themselves to immediate solutions.



#### Methodology:

- The ranking assesses the four 'pillars' of the justice system in each state to deliver on their mandates.
- 1. police,
- 2. prisons,
- 3. legal aid and
- 4. the judiciary —
- The report also examines 5-year trends to demonstrate a state's intention to improve access and delivery of justice by increasing resources, repairing shortfalls and clearing blockages.

#### Performance of various states:

- 1. The list is topped by Maharashtra.
- 2. Maharashtra is followed by Kerala and Tamil Nadu.

#### Key Issues highlighted:

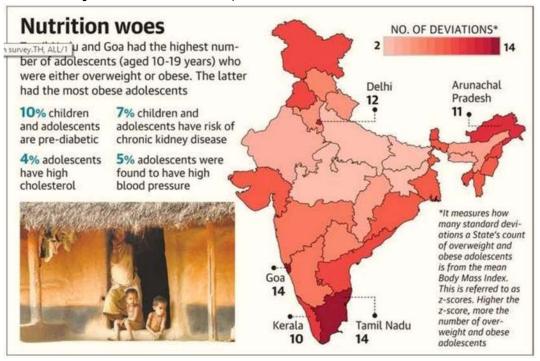
- 1. **Vacancy** was an issue across the pillars of the police, prisons, and the judiciary, with only about half the states having made the effort to reduce these over a five-year period.
- 2. The country as a whole has about 18,200 judges with about 23 per cent sanctioned posts vacant.
- 3. By 2017, women are also poorly represented in these pillars.
- 4. *The prisons in the country were over occupied* at 114 per cent, where 68 per cent are undertrials awaiting investigation, inquiry or trial.
- 5. Nationally, *high vacancies in the justice system*.
  - Only two states have met the 80 per cent of SC/ST/OBC reservation required to be followed and that there are high vacancies in prison staff.



# SOCIETY

### NATIONAL NUTRITION SURVEY

 The first-ever comprehensive National Nutrition Survey was recently conducted by the Ministry of Health and Family Welfare with the help of UNICEF.



#### About it:

- The survey recorded *malnutrition* that included *micronutrient deficiencies*
- **Details of non-communicable diseases** such as diabetes, hypertension, cholesterol and kidney function in children and adolescents.
- The National Nutrition Survey is different from the National Family Health Survey (NFHS) as, NFHS collects data to measure the prevalence of stunting, wasting and underweight and household dietary intake to measure deficiencies.
- Moreover, the survey collects data only for the age groups of 1-5 years and adults, and **not for school** going children between the age of 5 and 19 years.

#### Malnutrition and Undernutrition

- Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients.
- The term malnutrition covers two broad groups of conditions.
- Undernutrition—which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies (a lack of important vitamins and minerals).
- **Obesity—** which includes overweight and diet-related **noncommunicable diseases** (such as heart disease, stroke, diabetes, and cancer).



#### Key findings of the survey:

- Around 10% of children in the age group of 5 to 9 years and adolescents in the age group 10 to 19 years are pre diabetic. 5% of them were overweight and 5% suffered from blood pressure.
- The survey for the first time proved the coexistence of obesity and under nutrition.
- One in five children in the age group 5 to 9 years were stunted.
- Tamil Nadu and Goa had the highest number of adolescents who were obese or overweight.

#### Steps Taken by Government of India to curb incidences of Malnutrition:

- Pradhan Mantri Matru Vandana Yojana (PMMVY): Rs.6,000 is transferred directly y to the bank accounts of pregnant women for availing better facilities for their delivery.
- **POSHAN Abhiyaan:** aims to reduce stunting, under-nutrition, anaemia and low birth weight babies through synergy and convergence among different programmes, better monitoring and improved community mobilisation.
- National Food Security Act (NFSA), 2013, aims to ensure food and nutrition security for the most vulnerable through its associated schemes and programmes, making access to food a legal right.
- *Mid-day Meal (MDM) scheme* aims to improve nutritional levels among school children which also has a direct and positive impact on enrolment, retention and attendance in schools.

#### International measures to combat malnutrition:

• The United Nations Decade of Action on Nutrition: On 1 April 2016, the United Nations (UN) General Assembly proclaimed 2016–2025 the United Nations Decade of Action on Nutrition.

Led by WHO and the Food and Agriculture Organization of the United Nations (FAO), the UN Decade of Action on Nutrition calls for policy action across 6 key areas:

- 1. creating sustainable, resilient food systems for healthy diets;
- 2. providing social protection and nutrition-related education for all;
- 3. aligning health systems to nutrition needs, and providing universal coverage of essential nutrition interventions;
- 4. ensuring that trade and investment policies improve nutrition;
- 5. building safe and supportive environments for nutrition at all ages; and
- 6. strengthening and promoting nutrition governance and accountability, everywhere.

# SCHOOL EDUCATION QUALITY INDEX (SEQI)

- NITI Aayog releases the first edition of School Education Quality Index (SEQI).
- The index evaluates the performance of States and Union Territories (UTs) in the school education sector.
- **Aim**: To bring an 'outcomes' focus to education policy by providing States and UTs with a platform to identify their strengths and weaknesses and undertake requisite course corrections or policy interventions.
- The index recognises that school education is a subject on the Concurrent List and that State-level leadership is crucial for improving outcomes in a cost-effective manner. The index will serve as a regular and transparent review of the status of school education quality across the States and UTs.
- Developed through a collaborative process including key stakeholders such as MHRD, the World Bank and sector experts, the index consists of 30 critical indicators that assess the delivery of quality education.



#### About the School Education Quality Index (SEQI):

It consists of **30 critical indicators** that assess the delivery of quality education. These indicators are categorized as below:

#### Category 1: Outcomes;

- 1. Domain 1: Learning outcomes
- 2. Domain 2: Access outcomes
- 3. Domain 3: Infrastructure and facilities for outcomes
- 4. Domain 4: Equity outcomes

Category 2: Governance processes aiding outcomes.

#### How are they ranked?

- 1. *To facilitate a like-for-like comparison*, States and UTs have been grouped as Large States, Small States and UTs.
- 2. States' and UTs' performance on Learning Outcomes is driven by their results on the *National Achievement Survey (NAS) 2017*.
- 3. Their performance on *Access Outcomes* is primarily driven by enrolment ratios at the secondary level and transition rates from upper-primary to secondary level.
- 4. In terms of *Infrastructure & Facilities for Outcomes*, States' and UTs' performance is strongly linked to *the presence of Computer Aided-Learning (CAL)* at the elementary level and vocational education at the secondary and senior-secondary level.

#### Performance of various states:

- 1. Kerala has emerged on top among 20 large states in terms of quality of school education, followed by Rajasthan and Karnataka, while the most-populous Uttar Pradesh was ranked at the bottom position during 2016-17.
- 2. Among 20 large states in the country 18 have improved their overall performance between 2015-2016 and 2016-2017, which is otherwise referred to as the incremental performance in the report.
- 3. The highest incremental performance has been recorded in Kerala. As against 77.6% score in 2015-2016, the state has recorded 82.2% in 2016-2017.
- 4. The overall performance has declined in Karnataka and Uttarakhand.
- 5. All seven union territories have shown an improvement in their overall performance scores.
- 6. The performance and ranks have decreased in Mizoram, Sikkim and Arunachal Pradesh.

# **AYUSHMAN BHARAT**

#### Why in news:

- Ayushman Bharat scheme completes one year into its implementation.
- Arogya Manthan event was organised by the National Health Authority, to mark the completion of one year of Ayushman Bharat PM-JAY.
- The purpose of the event is to provide a platform to meet for all the important stakeholders of PM-JAY to meet and discuss the challenges faced in the implementation of the scheme in the past year and to forge new understanding and pathways to improving implementation.

#### About: AYUSHMAN BHARAT -NATIONAL HEALTH PROTECTION MISSION (AB-NHPM)

Note: It subsumes the centrally sponsored schemes - Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS).

**Objective** 



- Launched as recommended by the National Health Policy 2017, to achieve the vision of Universal Health Coverage (UHC).
- This initiative has been designed on the lines as to meet SDG and its underlining commitment, which is "leave no one behind".
- To provide medical cover up to Rs5 lakh per year per household for secondary and tertiary health care.
- National Health Authority (NHA)- was set up to manage NHPS.

#### Salient features:

- The world's largest health insurance/ assurance scheme fully financed by the government.
- Using JAM: It would be a cashless and Aadhaar enabled for better targeting of beneficiary
- It will be portable across the country and a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empanelled hospitals across the country.
- The scheme is creating a cadre of certified frontline health service professionals called Pradhan Mantri Aarogya Mitras (PMAMs) who will be primary point of facilitation for the beneficiaries to avail treatment at the hospital and thus, act as a support system to streamline health service delivery.
- Along with NHPS Ayushman Bharat programme has another component viz, Health and Wellness Centre.
- Health and Wellness Centre were envisioned under National Health Policy, 2017. Under this 1.5 lakh
  centres will bring health care system closer to the homes of people. These centres will provide
  comprehensive health care, including for non-communicable diseases and maternal and child health
  services.
- National Health Protection Scheme (Pradhan Mantri Jan Arogya Yojana): covers over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries selected on the basis of SECC data) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.

#### Eligibility:

- 1. No restrictions on family size, age or gender.
- 2. All pre-existing conditions are covered from day one.
- 3. Covers up to 3 days of pre-hospitalization and 15 days post-hospitalization expenses such as diagnostics and medicines.
- 4. Benefits of the scheme are portable across the country.
- 5. Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

# Why some states have not implemented the health protection plan and what is holding back its 100 per cent implementation?

Few states including Delhi, Telangana, West Bengal and Odisha are not covered.

*Health is a state subject*, and so far these states have declined joining the central government-led scheme.

- 1. **Delhi government** argues that it's existing health scheme has wider coverage and is "10 times bigger than Ayushman Bharat".
- 2. *Odisha* has pointed out certain flaws, saying that the existing *Biju Swastya Kalyan Yojana* has special provisions like an extra Rs 2 lakh cover for women, which the Ayushman scheme lacks.
- 3. *Telangana* too has raised concerns about the rather "narrow ambit" of PM-JAY, saying that its *Aarogyasri scheme*. benefits more people.
- 4. West Bengal opted out, refusing to pay its share of the expenditure.



# POSHAN ATLAS

The ministry of Women and Child Development (WCD) in association with the Bill & Melinda Gates Foundation and Deendayal Research Institute is developing a POSHAN atlas under POSHAN abhiyan.

#### About the POSHAN Atlas:

**Aim**: to map the crops and food grains grown in different regions of the country so that nutritious protein rich food in local areas can be promoted.

#### Need for and significance of the atlas:

According to the World Bank *Global Nutrition Report – 2018*, malnutrition costs India at least \$10 billion annually in terms of lost productivity, illness and death and is seriously retarding improvements in human development and further reduction of childhood mortality.

#### About: NATIONAL NUTRITION MISSION (POSHAN ABHIYAAN)

- National Nutrition Strategy laid down the roadmap to launch National Nutrition Mission.
- It is a flagship programme which would be executed with the Ministry of Women and Child Development (WCD) as the nodal ministry along with Ministry of Drinking Water and Sanitation and Ministry of Health and Family Welfare which ensures convergence with various programmes.

#### Target:

The mission has a target to reduce stunting, undernutrition, and low birth weigh by 2 per cent per annum, and anaemia by 3 per cent annually.

- It aims to focus mainly on children up to the age of 6 years, pregnant and lactating women, and adolescent girls.
- It would also strive to achieve reduction in stunting from 38.4% (NFHS-4) to 25% by 2022 (Mission 25 by 2022).

#### Salient features:

NNM as an apex body will monitor, supervise, fix targets and guide the nutrition related interventions through the life cycle concept.

- Mapping of various schemes contributing under malnutrition
- ICT (Information and Communication Technology) based real time monitoring system.
- Incentivizing states/UTs for meeting targets
- Incentivizing Anganwadi Workers (AWW) for using IT based tools and eliminating the need for registers
- Measurement of height of children at Anganwadi Centres
- Social Audits to track the health progress of the children
- Setting-up Nutrition Resource Centres

### NATIONAL DIABETES AND DIABETIC RETINOPATHY SURVEY

- National Diabetes and Diabetic Retinopathy Survey report for 2015-19 has been released.
- The survey conducted during 2015-2019 by Rajendra Prasad Centre for Ophthalmic Sciences,
   All India Institute of Medical Sciences (New Delhi) and released by the health ministry.

#### Key findings:

- 11.8% of the total population in India has been affected by diabetes in the last four years with almost same percentage of men and women suffering from the disease.
- The prevalence of diabetes among males was 12%, whereas among females it was 11.7%. Highest prevalence of diabetes (13.2%) was observed in the 70-79 years' age group.



- The prevalence of any form of diabetic retinopathy (DR) in diabetic population aged up to 50 years was found to be 16.9%.
- Prevalence of blindness among diabetics was 2.1% and visual impairment was 13.7%.

#### According to the World Health Organisation (WHO):

- 1. There are estimated 72.96 million cases of diabetes in adult population of India.
- 2. The prevalence in urban areas ranges between 10.9%-14.2% and prevalence in rural India is at 3.0-7.8% among population aged 20 years and above with a much higher prevalence among individuals aged over 50 years.

#### About: Diabetes mellitus:

- It is a group of metabolic diseases in which the person has high blood glucose (blood sugar) level either due to inadequate insulin production or because the body's cells do not respond properly to insulin or both.
- The main symptoms are: -
  - 1. Polyuria (frequent urination)
  - 2. Polydipsia (increased thirst)
  - 3. Polyphagia (increased hunger

#### The main types of diabetes are:

<u>Type 1 diabetes</u>: It is due to the body's malfunction to produce insulin in the body, and requires the person to inject insulin. This form was previously referred to as "Insulin-Dependent Diabetes Mellitus" (IDDM) or "Juvenile Diabetes".

<u>Type 2 diabetes</u>: It is due to insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. This form was previously referred to as non insulin-dependent diabetes mellitus (NIDDM) or "adult-onset diabetes".

#### Dabetic retinopathy (DR)

- It is characterised by changes in retinal blood vessels that occur in patients with diabetes mellitus. DR is a retinal microangiopathy affecting arterioles, capillaries and the venules. However, larger vessels may be involved as well.
- Central retina or macular area is located between main superior and inferior retinal artery and vein. The area beyond these main vessels is the peripheral retina.
- Retinopathy has features of both micro-vascular occlusion and micro-vascular leakage of plasma constituents due to breakdown of the blood-retinal barrier. Micro-vascular occlusion leads to arteriovenous shunts with capillary blockage and neovascularisation (new vessel formation). Microvascular leakage may cause haemorrhage and diffuse or localised retinal oedema. This disease can affect vision.

#### Diabetic retinopathy is broadly divided as:

- Background Diabetic retinopathy.
- Pre-proliferative Diabetic retinopathy.
- Proliferative Diabetic retinopathy (PDR).

# SURAKSHIT MATRITVA AASHWASAN (SUMAN)

The Union Government has launched Surakshit Matritva Aashwasan (SUMAN) to provide quality healthcare at zero cost to pregnant women, new mothers and newborns and Aiming zero preventable maternal and newborn deaths in India. Under which pregnant women, mothers up to 6 months after delivery, and all sick newborns will be able to avail free healthcare benefits.



#### About the scheme:

- It aims to provide dignified and quality health care at no cost to every woman and newborn visiting a public health facility.
- Under the scheme, the beneficiaries visiting public health facilities are entitled to several free services.
- These include at least four ante natal check-ups that also includes one checkup during the 1st trimester, at least one checkup under Pradhan Mantri Surakshit Matritva Abhiyan, Iron Folic Acid supplementation, Tetanus diptheria injection.

#### Intended beneficiaries:

 All pregnant women, newborns and mothers up to 6 months of delivery will be able to avail several free health care services

#### Features:

- The scheme will enable zero expense access to the identification and management of complications during and after the pregnancy.
- The government will also provide free transport to pregnant women from home to the health facility and drop back after discharge (minimum 48 hrs).
- The pregnant women will be able to avail a zero expense delivery and C-section facility in case of complications at public health facilities.
- The scheme will ensure that there is zero-tolerance for denial of services to such patients.

#### Need for and significance of the scheme:

The scheme aims to bring down the maternal and infant mortality rates in the nation and to stop all preventable maternal and newborn deaths.

The scheme provides a positive and stress-free birth experience to the mother and newborn.

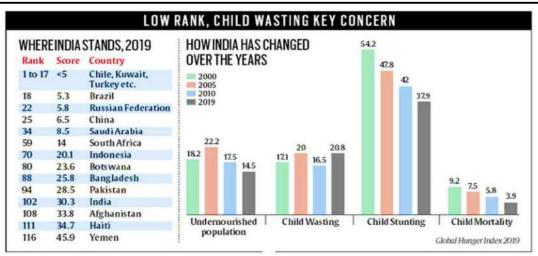
#### Definition:

The World Health Organization (WHO) defines quality of care for mothers and newborns as "the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, health care must be safe, effective, timely, efficiently integrated, equitable and people-centered."

According to government, India's maternal mortality rate has declined from 254 per 1,00,000 live births in 2004-06 to 130 in 2014-16. Between 2001 and 2016, the infant mortality rate came down from 66 per 1,000 live births to 34

# **GLOBAL HUNGER INDEX**

- The **2019 Global Hunger Index** report has been released.
- The report is a peer-reviewed publication released annually by Welthungerhilfe and Concern Worldwide since 2000; this year's report is the 14th one.
- The GHI ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst A low score gets a country a higher ranking and implies a better performance.
- Values less than 10 reflect low hunger, values from 20 to 34.9 indicate serious hunger; values from 35 to 49.9 are alarming; and values of 50 or more are extremely alarming.
- The 2019 GHI report has found that the number of hungry people has risen from 785 million in 2015 to 822 million.
- It further states that "multiple countries have higher hunger levels now than in 2010, and approximately 45 countries are set to fail to achieve 'low' levels of hunger by 2030".



The GHI scores are based on a formula that captures three dimensions of hunger, using four component indicators.

#### The three dimensions are:

- I. insufficient caloric intake,
- II. child undernutrition, and
- III. child mortality

#### The four indicators are:

- 1. **UNDERNOURISHMENT**: the share of the population that is under-nourished, reflecting insufficient caloric intake
- 2. **CHILD WASTING**: the share of children under the age of five who are wasted (low weight-for-height), reflecting acute undernutrition.
- 3. *CHILD STUNTING*: the share of children under the age of five who are stunted (low height-for-age), reflecting chronic undernutrition.
- 4. CHILD MORTALITY: the mortality rate of children under the age of five.

#### Key findings:

#### Global scenario:

- 1. The report is *topped by Central African Republic*.
- 2. It is becoming difficult to feed the world due to climate change.
- 3. While there has been progress in reducing hunger, but the gains are now being threatened and severe hunger persists in many regions across the world.
- 4. Multiple countries have higher hunger levels now than in 2010, and approximately 45 countries are set to fail to achieve low levels of hunger by 2030.
- 5. **Among the 117 countries**, **43 have "serious" levels of hunger**. The Central African Republic is in the "extremely alarming" level in the hunger index.
- 6. The Global Hunger Index recommends various steps the countries could take to tackle this serious problem: Prioritizing resilience among the most vulnerable groups, better response to disasters, addressing inequalities, action to mitigate climate change are among measures suggested in the report.

#### India and it's neighbours:

1. India *ranked 102* on the index among 117 qualifying countries with a score of 30.3. Even North Korea, Niger, Cameroon fared better than India.



- 2. Neighboring countries too bagged better spots Sri Lanka (66), Nepal (73), Pakistan (94) and Bangladesh (88).
- 3. India bagged the top spot in *child wasting rate* in the world with an increase of 4.3 percentage points in nine years.
- 4. Around 90 per cent of children aged between 6 and 23 months in the country don't even get minimum required food.
- 5. When it comes to *stunting in children under five*, the country saw a dip, but it's still high 37.9 per cent in 2019 from 42 per cent in 2010.
- 6. Despite the Swachh Bharat campaign, *open defecation is still practiced in India*. It jeopardises the population's health and severely impacts children's growth and their ability to absorb nutrients.

#### Concerns for India:

- 1. These findings point at a serious food crisis since wasting is "a strong predictor of mortality among children under five and is usually the result of acute significant food shortage and/or disease.
- 2. India's hunger indicators have a huge impact on the total indicators of the region owing to its large population.
- 3. The data shows that India's poor scores were pulling down South Asia to a point where it does worse than even sub-Saharan Africa.

The overall score of India is 30.3. In 2000, India's score was 38.8 and its hunger level was in the "alarming" category. Since then, India has steadily improved on most counts to reduce its score and is now slotted in the "serious" category.

But the pace of India's improvement has been relatively slow.

#### What are the reasons for which India's improvements have been slow?

Notwithstanding the broader improvements India has worsened on Child Wasting, that is, children
with low weight for their age, the percentage of children under the age of 5 years suffering from
wasting has gone up from 16.5 in 2010 to 20.8 now. Wasting is indicative of acute undernutrition and
India is the worst among all countries on this parameter.

# **GLOBAL TUBERCULOSIS (TB) REPORT**

- The report has been released by WHO.
- The report provides a *comprehensive and up-to-date assessment of the TB epidemic and progress* in the response at global, regional and country levels for India.

#### Key findings and observations:

- 1. *Tuberculosis incidence rate* in India has *decreased by almost 50,000 patients* over the past one year (26.9 lakh TB patients in India in 2018).
- 2. Incidence per 1,00,000 population has decreased from 204 in 2017 to 199 in 2018.
- 3. Number of patients *being tested for rifampicin resistance* has increased from 32% in 2017 to 46% in 2018.
- 4. *Treatment success rate* has increased to 81% for new and relapse cases (drug sensitive) in 2017, which was 69% in 2016.

#### Global scenario:

- 1. TB remains the top infectious killer in the world claiming over 4,000 lives a day.
- 2. However, more people received life-saving treatment in 2018 than ever before, largely due to improved detection and diagnosis.



- 3. **Reduction in the number of TB deaths:** 5 million people died from TB in 2018, down from 1.6 million in 2017.
- 4. Number of new cases of TB has been declining steadily in recent years.
- 5. The burden remains high among low-income and marginalized populations: around 10 million people developed TB in 2018.

#### Way ahead:

The world must accelerate progress if it is to reach the Sustainable Development Goal of ending TB by 2030.

Sustained progress on TB will require strong health systems and better access to services. That means a renewed investment in primary health care and a commitment to universal health coverage.

There is an urgent need for funding of TB research and development, with an annual shortfall of US\$1.2 billion.

**Priority needs include** a new vaccine or effective preventive drug treatment; rapid point-of-care diagnostic tests; and safer, simpler, shorter drug regimens to treat TB.

#### Global TB targets:

**SDG 3.3** includes a target of ending the TB epidemic by 2030

The World Health Assembly-approved Global TB Strategy aims for a 90 per cent reduction in TB deaths and an 80 per cent reduction in the TB incidence rate by 2030 compared with 2015 levels. The Strategy established milestones for 2020 of a 35% reduction in TB deaths and a 20% reduction in the TB incidence rate from 2015 levels.

#### The UN Political Declaration on TB in 2018 includes 4 new global targets:

- 1. Treat 40 million people for TB disease in the 5-year period 2018-22 (7 million in 2018).
- 2. Reach at least 30 million people with TB preventive treatment for a latent TB infection in the 5-year period 2018-22.
- 3. Mobilize at least US\$13 billion annually for universal access to TB diagnosis, treatment and care by 2022
- 4. Mobilize at least US\$2 billion annually for TB research.

#### About (TB):

- Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis.
- Tuberculosis commonly affects—the lungs, but can also affect other parts of the body.
- It spreads from person to person through the air, when people who are infected with TB infection cough, sneeze or otherwise transmit respiratory fluids through the air.
- It is a disease that can be cured with proper treatment. India accounts for one fourth of the global TB burden.
- In 2015, an estimated 28 lakh cases occurred and 4.8 lakh people died due to TB.

# **INDIA INNOVATION INDEX 2019**

• The India Innovation Index (III) 2019 has been released by the NITI Aayog with Institute for Competitiveness as the knowledge part ner

#### Key findings:

1. Karnataka is the most innovative major state in India.



- 2. *Others in top 10:* Tamil Nadu, Maharashtra, Telangana, Haryana, Kerala, Uttar Pradesh, West Bengal, Gujarat, and Andhra Pradesh.
- 3. The top ten major states are majorly concentrated in southern and western India.
- 4. Sikkim and Delhi take the top spots among *the north- eastern & hill states, and union territories/city states/small states respectively.*
- 5. Delhi, Karnataka, Maharashtra, Tamil Nadu, Telangana, and Uttar Pradesh are *the most efficient* states in translating inputs into output.

#### About the index:

The study examines the innovation ecosystem of Indian states and union territories. Thus attempts to create an extensive framework for the continual evaluation of the innovation environment of 29 states and seven union territories in India and intends to perform the following three functions:

- 1. Ranking of states and UTs based on their index scores.
- 2. Recognizing opportunities and challenges.
- 3. Assisting in tailoring governmental policies to foster innovation.

The aim is to create a holistic tool which can be used by policymakers across the country to identify the challenges to be addressed and strengths to build on when designing the economic growth policies for their regions.

The states have been bifurcated into three categories: Major States, North-East & Hill states, and Union territories/City States/Small States.

The Index is calculated as the average of the scores of its two dimensions - Enablers and Performance.

The Enablers are the factors that underpin innovative capacities, grouped in five pillars: (1) Human Capital, (2) Investment, (3) Knowledge Workers, (4) Business Environment, and (5) Safety and Legal Environment.

The Performance dimension captures benefits that a nation derives from the inputs, divided in two pillars: (6) Knowledge Output and (7) Knowledge Diffusion.

The Index is *calculated as the average of the scores of its two dimensions* – Enablers and Performance. *Significance of the index:* 

India has a unique opportunity among its myriad challenges to become the innovation leader in the world. Cluster-based innovation should be leveraged upon as the focal point of competitiveness.

The index is a great beginning to improve the environment of innovation in the country as it focuses on both the input and output components of the idea.

The index is a good effort to benchmark the performance of the state with each other and promote competitive federalism.



# **ECONOMY**

# SOVEREIGN GOLD BOND SCHEME

#### Why in news?

- Government of India, in consultation with the Reserve Bank of India, has decided to issue Sovereign Gold Bonds.
- The Bonds will be sold through Scheduled Commercial banks (except Small Finance Banks and Payment Banks), Stock Holding Corporation of India Limited (SHCIL), designated post offices, and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange Limited.

#### About the Sovereign Gold Bond Scheme:

- 1. The sovereign gold bond was introduced by the Government in 2015.
- 2. Government introduced these bonds to help reduce India's over dependence on gold imports.
- 3. The move was also aimed at changing the habits of Indians from saving in physical form of gold to a paper form with Sovereign backing.

#### Objectives:

Reducing the demand for physical gold by shifting a part of the estimated 300 tons of physical bars and coins purchased every year for **Investment into gold bonds**.

#### Salient Features:

Sovereign Gold Bonds will be issued on payment of rupees and denominated in grams of gold.

- Bonds will be issued **on behalf of the Government of India by the RBI**. Thus, the Bonds will have a sovereign guarantee.
- The Bonds shall be denominated in units of one gram of gold and multiples thereof.
- The bond would be restricted for sale to resident Indian entities.
- The **investment limit per fiscal year** has been increased to 4 kg for individuals, 4 Kg for Hindu Undivided Family (HUF) and 20 Kg for Trusts and similar entities notified by the Government from time to time.
- The Government will issue bonds with a rate of interest which will be calculated on the value of the gold at the time of investment.
- Bonds will be available both in demat and paper form.
- The tenor of the bond could be for a minimum of 5 to 7 years.
- Bonds can be used as collateral for loans.
- Bonds to be easily sold and traded on exchanges to allow early exits for investors who may so desire.
- On maturity, the redemption will be in rupee amount only which would not be a fixed sum, but linked to the price of gold.
- The deposit will not be hedged and all risks associated with gold price and currency will be borne by Gol through the **Gold Reserve Fund**.



### **EXCHANGE TRADED FUNDS**

#### Why in News:

The Further Fund Offer 2 (FFO 2) of Bharat 22 Exchange-Traded Fund (ETF), which is part of the government's divestment programme, will shortly open for subscription for anchor investors and for non-anchor investors.

#### What are ETFs?

- Exchange-Traded Funds (ETF) are a category of funds which are listed and traded in a stock exchange.
- The underlying assets held by an ETF can be stocks, commodities or bonds, oil futures, foreign currency, etc.
- The ownership of these underlying assets is divided by converting them into shares. Though shareholders do not directly own these assets, they are eligible to receive a percentage of the profits as dividends or interests.
- Just like stocks, ETFs units can be purchased, sold or transferred.

#### Advantages of Exchange Traded Funds

Exchange Traded funds carry several advantages which have contributed to making them one of the most popular types of investment. These funds hold many benefits for investors who may find it challenging to analyze and pick stocks to build their portfolio.

- To allow investors to take advantage of the prevalent price, exchange traded funds allow the offer the ease of making intra-day sales and purchases on the stock exchange.
- ETFs allow investors to not only grab but also utilize possible lucrative trading prospects which may arise during the day by providing funds which closely track performance of an index during the day, which can be bought or sold at any point in time.
- Exchange traded funds are low cost.
- As opposed to listed close-ended funds that usually trade at discounts to NAV, exchange traded funds
  are planned in a fashion which permits large institutions and authorized participants to generate new
  units and exchange the remaining units with the fund, hence making sure that the ETFs trade as
  close as possible to their original NAV.
- The functioning of exchange traded funds function is similar to that of index funds. Here, the redemption / subscription of units functions on the model where exchange is done with underlying securities and not with cash.
- Not only do exchange traded funds feature comparatively lower costs of distribution but also have a
  significantly wider reach. This can be attributed to the fact that these funds are listed on the stock
  exchange. As a result, the savings made on the distribution costs are transferred on to the investors
  by way of lower costs. Additionally, the structure of ETFs helps bring down various other processing
  related costs of disbursement, collection, etc.
- Since the fund helps keep a check on the extra transaction costs involved in the purchase a of index shares because of regular subscriptions and redemptions, exchange traded funds safeguard long term investors from the outflows and inflows of short term investors.
- Given the fact that they are highly flexible, exchange traded funds may be utilized as a tool to obtain immediate exposure to equity markets.



#### About BHARAT 22?

- Bharat 22 is a major part of the government's disinvestment programme to disinvest the shares of government held companies. It was launched in August 2017.
- Bharat 22 consists of 22 stocks of CPSE's, PSB's & strategic holding of SUUTI. Bharat 22 is a well Diversified portfolio with 6 sectors (Basic Materials, Energy, Finance, FMCG, Industrials & Utilities).
- ICICI Prudential AMC will be the ETF Manager and Asia Index Private Limited (JV BSE and S& P Global) will be the Index Provider.

# PM - KISAN SCHEME

#### Why in News:

• Cabinet approves relaxation of Aadhaar seeding of data of the beneficiaries under Pradhan Mantri Kisan Samman Nidhi (PM-Kisan).

#### What's the issue?

- Under the scheme, funds were to be released on the basis of Aadhaar seeded database.
- However, it has not been possible to get 100% Aadhaar seeding for release of funds as per the prescribed time schedule before release of instalments after 1st August, 2019.

#### About: Pradhan Mantri Kisan Samman Nidhi:

- The new Central Sector Scheme Pradhan Mantri KIsan SAmman Nidhi (PM-KISAN) to provide income support to all Small and Marginal landholding farmer families to supplement their financial needs for procuring various inputs related to agriculture and allied activities as well as domestic needs.
- Under the Scheme, the entire financial liability towards transfer of benefit to targeted beneficiaries will be borne by Government of India.

#### What are the benefits of the Scheme:

 Under the scheme, Landholder Farmer families with total cultivable holding upto 2 hectares shall be provided a benefit of Rs.6000 per annum per family payable in three equal installments, every four months.

#### What is a small and marginal landholder family?

• It comprises of husband, wife and minor children up to 18 years of age, who collectively own cultivable land up to two hectares as per the land records of the concerned states.

#### Significance of the scheme:

- Around 12 crore small and marginal farmer families are expected to benefit from this. It would not only provide assured supplemental income to the most vulnerable farmer families, but would also meet their emergent needs especially before the harvest season.
- It would pave the way for the farmers to earn and live a respectable living.

#### Similar programmes by states:

- 1. **Bhavantar Bhugtan Yojana** in **Madhya Pradesh** was sought to provide relief to farmers by providing the differential between MSPs and market prices.
- 2. The **Rythu Bandhu scheme** of the **Telangana** provides ₹4,000 per acre for every season to all the farmers of the state. Similar initiatives have also be framed in Jharkhand and Odisha.
- 3. **Krushak Assistance** for Livelihood and Income augmentation **(KALIA)** of **Odisha** is more complicated in design and implementation. It commits to give Rs 5,000 per SMF, twice a year, that is Rs 10,000 a year.



# **ASIAN DEVELOPMENT BANK (ADB)**

#### Why in news?

• Gol has signed a 190 million USD loan with the Asian Development Bank (ADB) to upgrade road transport in the state of Rajasthan.

#### About ADB:

- The Asian Development Bank was conceived in the early 1960s as a financial institution that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world.
- ADB assists its members, and partners, by providing loans, technical assistance, grants, and equity investments to promote social and economic development.
- ADB is composed of 68 members, 49 of which are from the Asia and Pacific region.
- The bank admits the members of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, formerly the Economic Commission for Asia and the Far East or ECAFE) and non-regional developed countries.

#### Voting rights:

• It is *modeled closely on the World Bank*, and has *a similar weighted voting system* where votes are distributed in proportion with members' capital subscriptions.

#### Roles and functions:

- 1. ADB defines itself as a social development organization that is dedicated to reducing poverty in Asia and the Pacific through inclusive economic growth, environmentally sustainable growth, and regional integration.
- 2. This is carried out through investments in the form of loans, grants and information sharing in infrastructure, health care services, financial and public administration systems, helping nations prepare for the impact of climate change or better manage their natural resources, as well as other areas.

## **LIBRA**

#### What is Libra:

- Libra is new cryptocurrency to be launched by Facebook officially launches Libra.
- *The Libra Association*, the nonprofit that will govern the currency, officially signed on 21 charter members at the organization's inaugural meeting in Geneva.
- The Libra Association is described by Facebook as **an independent**, **not-for-profit organisation based in Switzerland**.

#### What is cryptocurrency?

- Cryptocurrency is a type of **digital currency**.
- It's called "cryptocurrency" because it uses a very secure form of cryptography to verify transactions. Cryptocurrencies are built on **blockchain technology**, and the value of a cryptocurrency depends on the type of blockchain it is built on.

#### What is blockchain?

• Blockchain is a technology that can safely store transaction records on a peer-to-peer network instead of storing them in a single location. Independent servers around the world, called nodes, make up the network that operates the blockchain.

#### What is the difference between Libra and other cryptocurrencies?



Unlike many cryptocurrencies whose values fluctuate based on speculation, Libra is backed by a
reserve of assets. This is similar to how other currencies have been introduced in the past — to help
instill trust in a new currency and gain widespread adoption, it was guaranteed that a country's notes
could be traded in for real assets, like gold. Instead of backing Libra with gold, it will be backed by a
collection of established financial assets.

#### What is the Libra Reserve?

• The Libra Reserve was created to preserve the value of the Libra currency. Each Libra coin will be backed by a collection of stable assets held in the reserve. Read more about where the money for the reserve is coming from, the assets that will back each Libra coin, and how the reserve will change over time

#### Privacy concerns surrounding cryptocurrencies:

- 1. Cryptocurrencies allow anonymous funding potentially acting as conduits for money laundering and terror financing.
- 2. The anonymity of cryptocurrency has made way for cybercriminals to hold victims hard drives hostage to extort payment from them in terms of bitcoins.
- 3. Since cryptocurrency is borderless, it can be really attractive for terrorist finances as they can transfer funds across countries in a cheap way.
- 4. Certain characteristics of cryptocurrency like speed, cost, security make it a lucrative source to finance such activities
- 5. Cryptocurrency is being used to fund child pornography, sexual exploitation, and human trafficking
- 6. Most new users know close to nothing of the technology, or how to verify the genuineness of a particular crypto currency.
- 7. *Intense volatility* of cryptocurrency.

# **NOBEL PRIZE IN ECONOMIC SCIENCES 2019**

#### The winners are:

- Abhijit Banerjee, Massachusetts Institute of Technology, Cambridge, USA
- Esther Duflo Massachusetts Institute of Technology, Cambridge, USA
- Michael Kremer Harvard University, Cambridge, USA
- They won the prize "for their experimental approach to alleviating global poverty"

#### Their research is helping us fight poverty

- The research has considerably improved our ability to fight global poverty.
- In just two decades, their new experiment-based approach has transformed development economics, which is now a flourishing field of research.
- Despite recent dramatic improvements, one of humanity's most urgent issues is the reduction of global poverty, in all its forms. More than 700 million people still subsist on extremely low incomes. Every year, around five million children under the age of five still die of diseases that could often have been prevented or cured with inexpensive treatments. Half of the world's children still leave school without basic literacy and numeracy skills.
- This year's Laureates have introduced a new approach to obtaining reliable answers about the best ways to fight global poverty. In brief, it involves dividing this issue into smaller, more manageable, questions for example, the most effective interventions for improving educational outcomes or child health. They have shown that these smaller, more precise, questions are often best answered via carefully designed experiments among the people who are most affected.



- In the mid-1990s, Michael Kremer and his colleagues demonstrated how powerful this approach can be, using field experiments to test a range of interventions that could improve school results in western Kenya.
- Abhijit Banerjee and Esther Duflo, often with Michael Kremer, soon performed similar studies of other issues and in other countries. Their experimental research methods now entirely dominate development economics.
- The Laureates' research findings and those of the researchers following in their footsteps have dramatically improved our ability to fight poverty in practice. As a direct result of one of their studies, more than five million Indian children have benefitted from effective programmes of remedial tutoring in schools. Another example is the heavy subsidies for preventive healthcare that have been introduced in many countries.
- These are just two examples of how this new research has already helped to alleviate global poverty. It also has great potential to further improve the lives of the worst-off people around the world.

# WORLD ECONOMIC OUTLOOK (WEO)

#### Why in news?

• IMF has released World Economic Outlook (WEO) 2019.

#### About World Economic Outlook:

- It is a survey by the IMF usually published twice a year.
- It presents IMF's analyses of global economic developments during the near and medium term & gives
  an overview as well as more detailed analysis of the world economy; consider issues affecting
  industrial countries, developing countries, and economies in transition to market; and address topics
  of pressing current interest.

#### Key highlights of the report

- The Global growth rate is projected to improve to 3.4% by 2020.
- The growth of advanced economies is projected to slow down by 1.7%
- The emerging and developing economies are projected to experience a growth pick up from 3.9% in 2019 to 4.6% in 2020.
- The report downgraded India's growth projections to 6.1% in 2019 and 7% in 2020.
- According to the report, China is projected to grow at 6.1% in 2019 and 5.8% in 2020.
- The trade volume reached the lowest since 2012. It reduced by 1% since 2012.

#### India- specific observations:

- India retains its rank as the world's fastest-growing major economy, tying with China.
- It has a projected growth rate of 6.1 per cent for the current fiscal year, despite an almost one per cent cut in the forecast.
- However, India's economy is projected to pick up and grow by 7 per cent in the 2020 fiscal year.

#### Reasons for the cut in growth projection for India:

- Weaker-than expected outlook for domestic demand.
- India's economy decelerated further in the second quarter, held back by sectorspecific weaknesses in the automobile sector and real estate as well as lingering uncertainty about the health of non-bank financial companies.
- Corporate and environmental regulatory uncertainty are other factors that weighed on demand.

#### Measures needed for India to revive its growth:



- 1. Use monetary policy and broad-based structural reforms to address cyclical weakness and strengthen confidence.
- 2. A credible fiscal consolidation path is needed to bring down India's elevated public debt over the medium term.
- 3. This should be supported by subsidy-spending rationalisation and tax-base enhancing measures.
- 4. Reduce the public sector's role in the financial system, reform the hiring and dismissal regulations.

# **ALTERNATIVE INVESTMENT FUNDS (AIFS)**

#### Why in News?

• The Union Cabinet has approved the creation of an *Alternative Investment Fund (AIF)* of Rs. 25,000 crore to provide last-mile funding for stalled affordable and middle-income housing projects across the country.

#### About the Fund:

- Initially the fund will be of Rs. 25,000 crore with the government providing Rs. 10,000 crore and the State Bank of India and the Life Insurance Corporation providing the balance.
- The funds will be set up as Category-II Alternative Investment Fund registered with the Securities and Exchange Board of India and will be managed by SBICAP Ventures Limited.
- The open-ended fund is expected to swell over time. The government is also in talks with sovereign bonds and pension funds to put in money in AIF further.
- The Cabinet also approved the establishment of a 'Special Window' to provide priority debt financing for completion of stalled housing projects in the affordable and middle-income housing sector.

#### About: Alternative Investment Funds.

As defined in Securities and Exchange Board of India (Alternative Investment Funds)
Regulations, 2012 Alternative Investment Fund or AIF means any fund established or incorporated
in India which is a privately pooled investment vehicle which collects funds from sophisticated
investors, whether Indian or foreign, for investing it in accordance with a defined investment
policy for the benefit of its investors.

#### Categories:

As per SEBI (AIF) Regulations, 2012, AIFs shall seek registration in one of the three categories:

- 1. Category I AIF: AIFs which invest in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the government or regulators consider as socially or economically desirable and shall includes Venture capital funds (Including Angel Funds), SME Funds, Social Venture Funds, Infrastructure funds.
- 2. Category II AIF: AIFs which do not fall in Category I and III and which do not undertake leverage or borrowing other than to meet day-to-day operational requirements. Various types of funds such as real estate funds, private equity funds (PE funds), funds for distressed assets, etc. are registered as Category II AIFs.
- 3. Category III AIF: AIFs which employ diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives. Various types of funds such as hedge funds, PIPE Funds, etc. are registered as Category III AIFs.

#### In which legal forms can an AIF be set up?

• An AIF under the SEBI (Alternative Investment Funds) Regulations, 2012 can be established or incorporated in the form of a trust or a company or a limited liability partnership or a body corporate. Most of the AIFs registered with SEBI are in trust form.



# **ENVIRONMENT AND ECOLOGY**

### BAN ON SINGLE-USE PLASTIC

#### Why in News:

The Government of India has launched massive campaigns against single-use, or disposable, plastic products, as part of the year-long celebrations to mark 150th birth anniversary of Mahatma Gandhi.

### What are Single-use plastics?

- Single-use plastics are often referred to as disposal plastics that are meant to withstand a single-use.
- These are used for packaging and include items intended for use only once.
- *These comprise* polythene bags, plastic drinking bottles, plastic bottle caps, food wrappers, plastic sachets, plastic wrappers, straws, stirrers and Styrofoam cups or plates.

#### How big is the plastic industry?

- India's plastic industry recorded an annual revenue worth Rs 3.5-lakh crore in FY19. This was spread across 50,000 processing units, the bulk of these being small and medium enterprises.
- It is one of the fastest-growing industries in India as it sees its fortunes linked to the growth of every other industry.
- These units consume around 22 million metric tonnes per annum of plastic raw material, including recycled plastics (roughly about 8 million metric tonnes recycled plastic).
- Besides, some part of the total raw plastic material is also exported -- it was to the tune of around \$4.5 billion in FY19,

#### Which industries use single-use plastic?

- Fast Moving Consumer Goods (FMCG) companies; air conditioner, fridge and other consumer appliance manufacturers; e-commerce; hospitality; and restaurants.
- Also, small retail shop owners and grocery stores use single-use plastic for product delivery.

#### What are the alternatives to single-use plastic?

- There are alternatives such as glass, paper and cardboard. But, they too leave a significant impact on the environment. While paper means cutting trees, glass leaves a significant carbon footprint and consumes a lot of power.
- Other elements that need to be looked into are recycling rate, safety, weight, transportability and affordability.
- Also, there are some products wherein there is no clarity on the alternatives. For instance, many in the industry are not aware of any direct alternative to BOPP films that has high transparency and is considered a good barrier to moisture and is, therefore, used to cover a product.

#### How many states have already banned single-use plastic?

While most states -- around 18 -- have banned plastic carry bags, select states like Maharashtra, Tamil Nadu, Odisha, Madhya Pradesh have also banned 'one-time use and throw away plastic items' like cutlery, plates, cups, straws, etc.

#### Are these measures sufficient?

- Banning its usage while is a welcome move to save the environment, it is only one side of the story.
- Along with any move to impose a ban, there should also be equal emphasis on recycling and waste management.



- There is a need for a very *comprehensive waste collection*, *segregation and waste management eco-system* to be in place, which could take multi- billion dollar investment.
- While there is increased awareness in urban areas, the challenge will be to find a suitable cost effective alternatives in tier II and tier III towns and remote locations.

#### Harmful impacts of Single Use Plastics:

- 25,940 tonnes of plastic waste is generated every day in the country, with 40 per cent plastic waste being uncollected and 60 million tonnes of solid waste generated in one year.
- According to **World Wildlife Fund (WWF)**, plastic is harmful to the environment as it is non-biodegradable, takes years to disintegrate.
- Single-use plastics slowly and gradually break down into smaller pieces of plastic known as microplastics.
- It can take thousands of years for plastic bags to decompose, thus contaminating our soil and water in the process.
- The noxious chemicals used to produce plastic gets transmitted to animal tissue, and finally, enter the human food chain.

#### Government measures in place:

• Extended Producer Responsibility (EPR) scheme was introduced in the Plastic Waste Management (PWM) Rules, 2011, and was largely redefined in PWM 2016, wherein producers, importers and brand owners were asked to take primary responsibility for collection of used multi-layered plastic sachets or pouches or packaging.

# **DEEP CARBON OBSERVATORY**

#### Why in News?

- Deep Carbon Observatory (CDO) has released a report on Carbon, it's emissions and availability.
- The study's results are concerning due to *past extinction events linked to the mass release of atmospheric CO2*.

#### Key findings:

- Less than one percent of the planet's carbon is found above surface.
- The rest of the carbon about 1.85 billion gigatonnes is trapped in the planet's crust and mantle.
- The carbon that is found in the oceans, the land and the atmosphere, for the most part, appears to be disturbed by human activity.
- Human emissions of the greenhouse gas are 100 times greater than all of Earth's volcanoes.
- Human activity contributes about 10 gigatonnes of CO2 into the atmosphere each year. Natural
  geological process underground, for comparison, release about 10 times less of the global warming
  gas.
- Carbon dioxide emissions into the atmosphere and oceans from volcanoes account for about 280 to 360 million tonnes.
- The burning of fossil fuels, deforestation and other human actives contribute between 40 and 100 times the amount of CO2 into the atmosphere.

#### About Deep Carbon Observatory (DCO):

• The Deep Carbon Observatory (DCO) is a global research program designed to transform understanding of carbon's role in Earth.



- DCO is a community of scientists, including biologists, physicists, geoscientists and chemists, whose
  work crosses several traditional disciplinary lines to develop the new, integrative field of deep carbon
  science.
- To complement this research, the DCO's infrastructure includes public engagement and education, online and offline community support, innovative data management, and novel instrumentation development

# C40 CITIES CLIMATE SUMMIT

#### Why in News?

• C40 Cities World Mayors Summit is being held in Copenhagen.

#### About C40 Network:

- C40 is a network of the world's megacities committed to addressing climate change.
- C40 supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change.
- Around the world, C40 Cities connects 94 of the world's greatest cities to take bold climate action, leading the way towards a healthier and more sustainable future.
- Representing 700+ million citizens and one quarter of the global economy, mayors of the C40 cities are committed to delivering on the most ambitious goals of the Paris Agreement at the local level, as well as to cleaning the air we breathe.
- C40 is focused on tackling climate change and driving urban action that reduces greenhouse gas
  emissions and climate risks, while increasing the health, wellbeing and economic opportunities of
  urban citizens.
- *Composition*: While C40 originally targeted megacities for their greater capacity to address climate change, *C40 now offers three types of membership categories* to reflect the diversity of cities taking action to address climate change, i.e, Megacities, Innovator cities and Observer cities.
- *Criteria*: The categories consider such characteristics as population size, economic output, environmental leadership, and the length of a city's membership.

# **GRADED RESPONSE ACTION PLAN (GRAP)**

#### Context:

Soon, some stricter measures to fight air pollution will come into force in Delhi's neighbourhood, as part of *the Graded Response Action Plan (GRAP)*.

#### As per the plan:

Measures aimed at stopping the use of diesel generator sets will extend beyond Delhi to the NCR, where many areas see regular power cuts.

Measures will be *incremental*. As pollution rises, and it is expected to as winter approaches, more measures will come into play depending on the air quality.

#### What is GRAP?

Approved by the Supreme Court in 2016.

It works only as an emergency measure.

As such, the plan does not include action by various state governments to be taken throughout the year to tackle industrial, vehicular and combustion emissions.



When the air quality shifts from poor to very poor, the measures listed have to be followed since *the plan is incremental in nature.* 

#### Has it been helpful?

- 1. It has created a step-by-step plan for the entire Delhi-NCR region and getting on board several agencies including pollution control boards, industrial area authorities, municipal corporations, regional officials of the India Meteorological Department, and others.
- 2. It has been successful in fixing accountability and deadlines. For each action to be taken under a particular air quality category, executing agencies are clearly marked.
- 3. Coordination among as many as 13 agencies from four states is simplified to a degree because of the clear demarcation of responsibilities.
- 4. Three major policy decisions that can be credited to EPCA and GRAP are the closure of the thermal power plant at Badarpur, bringing BS-VI fuel to Delhi before the deadline set initially, and the ban on Pet coke as a fuel in Delhi NCR.

#### Overview of the plan:

- 1. The plan requires action and coordination among 13 different agencies in Delhi, Uttar Pradesh, Haryana and Rajasthan (NCR areas).
- 2. At the head of the table is the EPCA, mandated by the Supreme Court.
- 3. Before the imposition of any measures, EPCA holds a meeting with representatives from all NCR states, and a call is taken on which actions has to be made applicable in which town.

#### Measures announced:

#### Severe+ or Emergency- (PM 2.5 over 300 µg/cubic metre or PM10 over 500 µg/cu. m. for 48+ hours):

- 1. Stop entry of trucks into Delhi (except essential commodities).
- 2. Stop construction work.
- 3. Introduce odd/even scheme for private vehicles and minimise exemptions.
- 4. Task Force to decide any additional steps including shutting of schools.

#### Severe- (PM 2.5 over 250 µg/cu. m. or PM10 over 430 µg/cu. m.):

- 1. Close brick kilns, hot mix plants, stone crushers.
- 2. Maximise power generation from natural gas to reduce generation from coal.
- 3. Encourage public transport, with differential rates.
- 4. More frequent mechanised cleaning of road and sprinkling of water.

#### Very Poor- (PM2.5 121-250 µg/cu. m. or PM10 351-430 µg/cu. m.):

- 1. Stop use of diesel generator sets.
- 2. Enhance parking fee by 3-4 times.
- 3. Increase bus and Metro services.
- 4. Apartment owners to discourage burning fires in winter by providing electric heaters during winter.
- 5. Advisories to people with respiratory and cardiac conditions to restrict outdoor movement.

#### Moderate to poor- (PM2.5 61-120 µg/cu. m. or PM10 101-350 µg/cu. m.):

- 1. Heavy fines for garbage burning.
- 2. Close/enforce pollution control regulations in brick kilns and industries.
- 3. Mechanised sweeping on roads with heavy traffic and water sprinkling.
- 4. Strictly enforce ban on firecrackers.

#### Way ahead:

One criticism of the EPCA as well as GRAP has been the focus on Delhi. While other states have managed to delay several measures, citing lack of resources, Delhi has always been the first one to have stringent measures enforced.



For GRAP as well as EPCA, the next challenge is to extend the measures to other states effectively.

# 'GREEN WALL' OF INDIA

#### Why in News?

- The Government of India is planning an ambitious plan to create a *green wall* on North- Western part of India.
- It will be a 1,400km long and 5 km wide green belt from Gujarat to the Delhi- Haryana border, on the lines of the "Great Green Wall" running through the width of Africa, from Dakar (Senegal) to Djibouti, to combat climate change and desertification.
- If approved, this may turn out to be a legacy programme in India's efforts to deal with land degradation and the eastward march of the Thar desert.
- The green belt may not be contiguous, but would roughly cover the entire degraded Aravali range through a massive afforestation exercise.

#### Significance of the wall:

- The programme seeks to convert a huge tract of land as a green belt in high-intensive land-degraded states thus boosting India's target of restoring 26 milliopn hectares of degraded land.
- The idea of forming a green belt will also act as a barrier for dust coming from the deserts in western India and Pakistan.
- The Aravalli range, which separates western India's Thar desert from the relatively green plains to its east, has lost so much green cover that it is losing its ability to act as a natural barrier against the heat and dust that blows in from the west. The greener it remains, say ecologists, the less likely that the desert will expand into the rest of the Indian landmass.

### C40 CLEAN AIR CITIES DECLARATION

#### Why in News?

Clean Air Cities Declaration was unveiled at the C40 World Mayors Summit in Copenhagen, an event that occurs once every three years and is designed to implement "substantive clean air policies by 2025".

#### About C40 Clean Air Cities Declaration:

- The signatories will "set ambitious pollution reduction targets within two years that meet or exceed national commitments, putting them on a path towards meeting World Health Organization guidelines," and will implement substantive clean air policies by 2025, publicly reporting their progress on achieving cleaner air going forward.
- The idea is to spur a "race to the top" as cities compete to lower their own emissions.
- Through this Declaration, mayors commit to using their power and influence to reduce air pollution and work towards meeting the World Health Organization's Air Quality Guidelines.

#### Expected outcomes:

- If the 35 signatories reduce annual average PM2.5 levels to WHO guidelines (10 ug/m3) it could avoid 40,000 deaths each year.
- C40 research shows that if all C40 cities cleaned their transport, buildings and industry this would reduce GHG emissions by 87%, PM2.5 by nearly 50% and would avoid over 220,000 premature deaths per year.



• According to the World Health Organization (WHO), nine in 10 people around the world breathe dirty air, and 7 million people die prematurely each year due to air pollution. The organization's director-general, Dr. Tedros Adhanom Ghebreyesus, calls air pollution the "new tobacco." Roughly 100,000 Americans die each year due to the health impacts of air pollution, more than the number who die from car crashes and gun violence combined. If just the 35 cities involved in this declaration can hit WHO guidelines for particulate pollution, it will prevent an estimated 40,000 deaths each year.

# INTERNATIONAL DAY FOR DISASTER REDUCTION

#### Why in news?

- International Day for Disaster Reduction was observed on October 13th.
- Theme: Reduce disaster damage to critical infrastructure and disruption of basic services.

#### About it:

- International Day for Disaster Risk Reduction began in 1989, after a call by the United Nations General Assembly for a day to promote a global culture of risk-awareness and disaster reduction.
- the day celebrates how people and communities around the world are reducing their exposure to disasters and raising awareness about the importance of reining in the risks that they face.
- The 2019 edition continues as part of the "Sendai Seven" campaign, centred on the seven targets of the Sendai Framework. This year will focus on Target (d) of the Sendai Framework, reduce disaster damage to critical infrastructure and disruption of basic services.

#### About Sendai Framework:

The "Sendai Framework for Disaster Risk Reduction 2015-2030" was adopted during the *Third UN World Conference on Disaster Risk Reduction held in Sendai, Japan in March, 2015*.

#### Key features of the Sendai framework:

- 1. It is the first major agreement of the post-2015 development agenda, with seven targets and four priorities for action.
- 2. It was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction (WCDRR).
- 3. The Framework is for 15-year. It is a voluntary and non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.
- 4. The new Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.

#### Implementation:

 The implementation of the Sendai Framework involves adopting integrated and inclusive institutional measures so as to work towards preventing vulnerability to disaster, increase preparedness for response and recovery and strengthen resilience.

# US TO EXIT THE PARIS CLIMATE DEAL

#### Why in News?

United States initiated the process of leaving the Paris Agreement, notifying the United Nations of its
withdrawal from the landmark climate deal. The withdrawal will take effect one year from delivery
of the notification.



- After it leaves, the US will be the only country left out of the global protocol.
- **Syria and Nicaragua**, the last remaining countries who were earlier holding out, also became signatories in 2017.
- However *the US returns* can indeed, return later on as there is no bar on a country rejoining the Paris Agreement.
- It is also possible that the United States does a rethink and actually never leaves the Paris Agreement. It has one full year to reconsider its decision.

#### About: Paris Climate Deal

- From 30 November to 11 December 2015, the governments of 195 nations gathered in Paris, France for the 21st Conference of the Parties of the UNFCCC, and discussed a possible new global agreement on climate change, aimed at reducing global greenhouse gas emissions and thus reduce the threat of dangerous climate change.
- The 32-page Paris agreement with 29 articles is widely recognized as a historic deal to **stop global** warming.

#### Aims of Paris Agreement

As countries around the world recognized that climate change is a reality, they came together to sign a historic deal to combat climate change – Paris Agreement.

#### The aims of Paris Agreement is as below:

- 1. Keep the global temperature rise this century **well below 2 degrees Celsius** above the pre-industrial level.
- 2. Pursue efforts to limit the temperature increase even **further to 1.5 degrees Celsius**.
- 3. Strengthen the ability of countries to deal with the impacts of climate change.

#### How does a country leave the Agreement?

- Article 28 of the Paris Agreement allows countries to leave the Paris Agreement and lays down the process for leaving.
- A country can only give a notice for leaving at least three years after the Paris Agreement came into force.
- This happened on November 4, 2016. Therefore, the US was eligible to move a notice for leaving on November 4 this year, which it did.
- The withdrawal is not immediate, however. It takes effect one year after the submission of the notice. It means the United States will be out of Paris Agreement only on November 4 next year.

#### But why does the United States want to leave Paris Climate Deal?

- During his 2016 presidential campaign, Donald Trump had said the Paris Agreement was "unfair" to US interests. He had promised to pull out of the Agreement if he was elected.
- Under the Paris Agreement, developed countries are under obligation to mobilise at least \$100 billion every year from the year 2020 in climate finance meant for the developing world. This amount has to be revised upwards after five years. As it is, countries are struggling to reach this amount by next year. The US was opposed to this move.

#### Impacts of US withdrawal from the Paris Climate Deal:

As part of its commitment to the Paris Agreement, the United States had promised to reduce its
emissions by 26 per cent to 28 per cent by the year 2025 from 2005 levels. While exiting the
Paris Agreement does not automatically mean the abandonment of this target or of any future action
by the United States on climate change, it would no longer be committed to these actions.



- The United States is the world's second largest emitter of greenhouse gases. If it does not reduce its emissions befitting its status as the second largest emitter, it could seriously jeopardise the world's objective of keeping the global temperature rise to within 2 degrees Celsius from pre-industrial times.
- The biggest impact of the exit of the United States from the Agreement might be on the financial flows to enable climate actions as the United States plays a preeminent role in mobilising financial resources globally, and its absence from the scene could seriously hamper that effort.

# But assuming the US finally walks, will it mean the end of its entire association with the war on climate change?

- However the withdrawal does not mean that the US will be entirely missing from the climate negotiations as it remains part of the United Nations Framework Convention to Combat Climate Change (UNFCCC). The UNFCCC was the first international agreement to identify and acknowledge the problem of climate change. It had laid down the principles and guidelines to achieve the objective of stabilising the greenhouse gas concentrations in the atmosphere to levels that would cause least damage to climate system.
- The Paris Agreement is an instrument of the Framework Convention to achieve that objective.
- The United States will be out of the Paris Agreement, but by virtue of being a signatory to the UNFCCC would continue to be a part of the other processes and meetings under the Framework Convention.



# HISTORY, ART & CULTURE

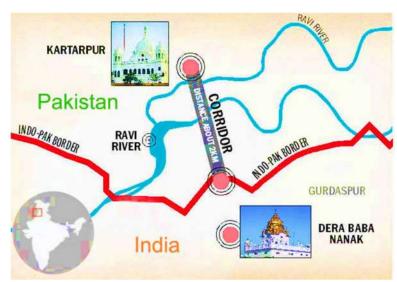
### KARTARPUR SAHIB CORRIDOR PROJECT, "THE ROAD TO PEACE"

### Why in News?

The Corridor became operational on 9 November 2019. On the eve of 550<sup>th</sup> Birth Anniversary celebration of Guru Nanak Dev ji.

### What is the "Kartarpur Corridor" project?

- The corridor will connect the Sikh shrines of Gurdwara Darbar Sahib in Pakistan's Kartarpur with Dera Baba Nanak shrine in India's Gurdaspur district.
- The shrine of Kartarpur Sahib is connected with the life of Guru Nanak Dev Ji, the founder of Sikhism, thus the shrine which during the partition was left to the west of Radcliff line has a place of reverence for the sikh community.



- ❖ The gurdwara in Kartarpur stands on the bank of the Ravi, about 120 km northeast of Lahore. It was here that Guru Nanak assembled a Sikh community and lived for 18 years until his death in 1539.
- ❖ The shrine is visible from the Indian side, as Pakistani authorities generally trim the elephant grass that would otherwise obstruct the view.Indian Sikhs gather in large numbers for darshan from the Indian side, and binoculars are installed at Gurdwara Dera Baba Nanak.
- ❖ The construction of the corridor will allow visa-free access to pilgrims from India.
- ❖ The proposal for the corridor has been on the table since 1988, but tense relations between the two countries led to the delay.

The Union Cabinet has already approved the building and development of the **Kartarpur corridor** from Dera Baba Nanak in Gurdaspur district to the international border, in order to facilitate pilgrims from India to visit **Gurdwara Darbar Sahib Kartarpur on the banks of the Ravi river**, in **Pakistan**, where **Shri Guru Nanak Devji spent eighteen years**.

### Concerns raised by India:

India conveyed its concerns to Pakistan on the possible attempts by individuals and groups to disrupt the Kartarpur Sahib pilgrimage and the possible flooding of the Dera Baba Nanak due to earth-filled embankment road or a causeway proposed by Islamabad.

### Implementation:

The Kartarpur corridor will be implemented as an **integrated development project** with Government of India funding, to provide smooth and easy passage, with all the modern amenities.



# INTERNATIONAL RELATIONS

# COUNTERING AMERICA'S ADVERSARIES THROUGH SANCTIONS ACT (CAATSA)

### Why in News?

• U.S. government has warned India that if India decides to go ahead with the purchase of the Russian S-400 missile defence system, then India may risk sanctions under the act.

### About CAATSA?

- The Act empowers the US President to impose at least five of the 12 listed sanctions on persons engaged in a "significant transaction" with Russian defence and intelligence sectors.
- It is a US federal law, enacted in 2017, that imposed sanctions on Iran, North Korea and Russia.
- *The act includes* sanctions against countries that engage in significant transactions with Russia's defence and intelligence sectors.

### What is S-400?

- It is *an air defence missile system* that can take down enemies' aircraft in the sky from the surface itself.
- It is known as *Russia's most advanced long-range surface-to-air missile defence system*, capable of destroying destroying hostile strategic bombers, jets, missiles and drones at a range of 380-km.
- S-400 would be like a "booster shot" in the Indian Air Force's (IAF) arm. India needs to be well-equipped against neighboring threats. Pakistan has over 20 fighter squadrons, with upgraded F-16s, and inducting J-17 from China in large numbers. China has 1,700 fighters, including 800 4-Gen fighters.

### INDIA- CHINA INFORMAL SUMMIT AT MAHABALIPURAM

### Why in News?

- Prime Minister Narendra Modi and Chinese President Xi Jinping met in the ancient coastal town of *Mamallapuram* or Mahabalipuram in Tamil Nadu for *a second Informal Summit*.
- The first India- China Informal Summit was held in central China's Wuhan in April 2018.

### Outcomes of the Mahabalipuram Summit:

- To celebrate the 70 anniversary of diplomatic relations the two countries will organise 70 activities including a conference on a ship voyage that will trace the historical connection between the two civilisations.
- A high- level economic and trade dialogue mechanism will be established with the objective of achieving enhanced trade and commercial relations.
- Mutual investments in identified sectors will be encouraged through the development of a manufacturing partnership.
- Sister- state relations will be established between Tamil Nadu and Fujian Province.

### What are Informal Summits?

They act as supplementary exchanges to annual Summits and other formal exchanges such as the G20 Summit, EU-India Summit and the BRICS Summit among others.



They allow for "direct, free and candid exchange of views" between countries, something that may not be possible to do through formal bilateral and multilateral meetings that are agenda driven, where specific issues are discussed, and outcomes are more concretely defined.

They are *impromptu* in the sense that they take place when a need for them is perceived by the concerned nations.

### 'DARK GREY' LIST OF FATF

### Why in news?

- Pakistan is on the verge of being listed in the 'Dark Grey' list, of FATF, that means the last warning to improve terror financing.
- Pakistan is on the verge of strong action by FATF, given its inadequate performance, whereby it managed to pass in only six of 27 items.

### What is Dark Grey list?

- According to FATF rules there is one essential **stage between 'Grey' and 'Black' lists, referred to as 'Dark Grey'**.
- 'Dark Grey' means issuance of a strong warning, so that the country concerned gets one last chance to improve, another official said.
- 'Dark Grey' was the term used for warning upto 3rd Phase. Now it's just called warning that is the 4th phase.
- Pakistan was placed on the Grey List by the Paris-based watchdog in June last year and was given a
  plan of action to complete it by October 2019, or face the risk of being placed on the black list with
  Iran and North Korea.

### Implications:

• If Pakistan continues with the 'grey list' or put in 'Dark Grey' list, it would be very difficult for the country to get financial aid from the IMF, the World Bank and the European Union, making its financial condition more precarious.

### About FATF:

- The Financial Action Task Force (FATF) was established in July 1989 by a Group of Seven (G-7) countries in a Summit held in Paris. Initial motive of FATF was to examine and develop measures to combat money laundering.
- In October 2001, the FATF expanded its wings to incorporate efforts to combat terror financing, money laundering and human trafficking.

### Functions of the FATF:

- 1. The FATF is an independent inter-governmental body that develops and promotes policies to protect the global financial system so that it could bot be used by the terrorists and other anti-social elements. However, the FATF is not in a position to give any advice regarding the credentials or work of associations.
- 2. Now the FATF has started dealing with the Virtual currency.
- 3. The FATF is an international policy-making body. It does not have any role in law enforcement matters, investigations or prosecution.

### FATF has 2 types of lists:

- 1. Black List
- 2. Grey List



- Meaning of Black List: Only those countries are included in this list that FATF considers as uncooperative tax havens for terror funding. These countries are known as Non-Cooperative Countries or Territories (NCCTs). In other words; countries which are supporting terror funding and money laundering activities are placed in the Black list.
  - The FATF blacklist or OECD blacklist has been issued by the Financial Action Task Force since 2000 and lists countries which it judges to be non-cooperative in the global fight against money laundering and terror funding.
- 2. Meaning of Grey List: Those countries which are not considered as the safe heaven for supporting terror funding and money laundering; included in this list. The inclusion in this list is not as severe as black listed.
  - Now Grey list is a warning given to the country that it might come in Black list (Just like a yellow card in a football match). If a country is unable to curb mushrooming of terror funding and money laundering; it is shifted from grey list to black list by the FATF.

### When a country comes in the Grey list, it faces many problems like;

- 1. Economic sanctions from international institutions (IMF, World Bank, ADB etc.) and countries
- 2. Problem in getting loans from international institutions (IMF, World Bank, ADB etc.) and countries
- 3. Overall Reduction in its international trade
- 4. International boycott

### **BIMSTEC**

### Why in News?

- The first ever 'BIMSTEC Ports' Conclave will be held at Visakhapatnam in Andhra Pradesh.
- The Conclave will explore the possibility of increasing economic cooperation by furthering EXIM trade and coastal shipping.
- It will also discuss various investment opportunities, best practices adopted for productivity and safety at Ports.

### About: Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

- The BIMSTEC is a regional organization comprising seven Member States lying in the littoral and adjacent areas of the Bay of Bengal constituting a contiguous regional unity.
- It came into being on 6 June 1997 through the Bangkok Declaration.
- It constitutes **seven Member States**: five deriving from South Asia, including **Bangladesh**, **Bhutan**, **India**, **Nepal**, **Sri Lanka**, and **two from Southeast Asia**, **including Myanmar and Thailand**.
- Initially, the economic bloc was formed with four Member States with the acronym 'BIST-EC' (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation).
- However following the inclusion of Myanmar on 22 December 1997 during a special Ministerial Meeting in Bangkok, the Group was renamed 'BIMST-EC' (Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation).
- With the admission of Nepal and Bhutan at the 6th Ministerial Meeting (February 2004, Thailand), the name of the grouping was changed to 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation' (BIMSTEC).
- BIMSTEC's Permanent Secretariat was established in Dhaka, Bangladesh on 13th September 2014 to serve the BIMSTEC Member States.



### Significance of the Bay of Bengal Region and BIMSTEC:

- The Bay of Bengal is the largest bay in the world. Over one-fifth (22%) of the world's population live in the seven countries around it, and they have a combined GDP close to \$2.7 trillion.
- Despite economic challenges, all the countries in the region have been able to sustain average annual rates of economic growth between 3.4% and 7.5% from 2012 to 2016.
- The Bay also has vast untapped natural resources. One-fourth of the world's traded goods cross the Bay every year.
- The regional group constitutes a bridge between South and South East Asia and represents a reinforcement of relations among these countries.
- BIMSTEC has also established a platform for intra-regional cooperation between SAARC and ASEAN members.
- The BIMSTEC region is home to around 1.5 billion people which constitute around 22% of the global population with a combined gross domestic product (GDP) of 2.7 trillion economy.
- In the last five years, BIMSTEC Member States have been able to sustain an average 6.5% economic growth trajectory despite global financial meltdown.

### India's stake:

- For India, it is a natural platform to fulfil our key foreign policy priorities of 'Neighborhood First' and 'Act East'.
- The two Southeast Asian countries in the grouping, **Myanmar and Thailand, have a crucial place for India's ambitious connectivity plans for northeastern region.** Myanmar is only Southeast Asian country India has a land boundary with. An **India-Myanmar-Thailand highway** is one of the key projects that figures in a big way in the government's Act East (earlier Look East) policy.
- With the India-Pakistan bickering coming in way of a smooth functioning of the SAARC, groupings such as BIMSTEC can take forward the concept of regional cooperation in a different manner.
- As the region's largest economy, India has a lot at stake. **BIMSTEC connects not only South and Southeast Asia**, but also the ecologies of the Great Himalayas and the Bay of Bengal.
- For New Delhi, one key reason for engagement is in the vast potential that is unlocked with *stronger* connectivity. Roughly one-quarter of India's population, live in the four coastal states adjacent to the Bay of Bengal (Andhra Pradesh, Orissa, Tamil Nadu, and West Bengal). And, about 45 million people, who live in landlocked Northeastern states, will have the opportunity to connect via the Bay of Bengal to Bangladesh, Myanmar and Thailand, opening up possibilities in terms of development.
- From the strategic perspective, the Bay of Bengal, a funnel to the Malacca straits, has emerged a key theatre for an increasingly assertive China in maintaining its access route to the Indian Ocean.
- Besides, as *China mounts assertive activities in the Bay of Bengal region*, with increased submarine movement and ship visits in the Indian Ocean, it is in India's interest to consolidate its internal engagement among the BIMSTEC countries.

# INDIA DECIDED THAT IT WON'T SIGN THE REGIONAL COMPREHENSIVE ECONOMIC PARTICIPATION AGREEMENT

A key reason that India forwarded for declining to sign on was *the existence of trade deficits with many of the constituents of the RCEP*.



### About RCEP:

- RCEP is **proposed between** the ten member states of the Association of Southeast Asian Nations **(ASEAN)** (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam) **and the six states with which ASEAN has existing FTAs** (Australia, China, India, Japan, South Korea and New Zealand).
- RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.
- Aim: RCEP aims to boost goods trade by eliminating most tariff and non-tariff barriers a move that is expected to provide the region's consumers greater choice of quality products at affordable rates. It also seeks to liberalise investment norms and do away with services trade restrictions.

### Significance:

• When inked, it would become the world's biggest free trade pact. This is because the 16 nations account for a total GDP of about \$50 trillion and house close to 3.5 billion people. India (GDP-PPP worth \$9.5 trillion and population of 1.3 billion) and China (GDP-PPP of \$23.2 trillion and population of 1.4 billion) together comprise the RCEP's biggest component in terms of market size.

### India's concerns:

- Greater access to Chinese goods may have impact on the Indian manufacturing sector.
- India has got massive trade deficit with China, in fiscal year 2017-18, the trade deficit with China was \$63 billion, which will increase further under the RCEP therefore under these circumstances, India proposed differential market access strategy for China.
- However if India is out of the RCEP, it would make its exports price uncompetitive with other RCEP members' exportsin each RCEP market, and the ensuing export-losses contributing to foreign exchange shortages and the subsequent extent of depreciation of the rupee can only be left to imagination.
- Apart from China, India is also losing out to financial and technological hub of Singapore, agriculture and dairy majors Australia and New Zealand, plantations of South East Asian countries, and pharmaceutical trade with China and the US.
- The free movement of investments will benefit investors in the US, Singapore, Japan and China, but very few Indians will be taking advantage of this.

### SCOJTEX- 2019

- The Shanghai Cooperation Organization Joint Exercise on Urban Earthquake Search & Rescue.
- The latest edition is being held in India.
- Hosted by NDRF.
- Aim to rehearse the disaster response mechanism, share knowledge, experience, technology & also for mutual coordination, etc.
- The participants of all 08 member countries namely China, India, Kazakhastan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan shall be participating in this exercise.
- Main focus shall be to test the region's preparedness and resilience towards effective activation of Inter-governmental interaction for immediate response.

### About SCO:

• The Shanghai Cooperation Organisation, also known as the **Shanghai Pact**, is a **Eurasian political**, **economic**, **and military organisation** which was founded in 2001 in Shanghai.



- Founding members: China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. The cooperation was renamed to Shanghai Cooperation Organisation after Uzbekistan joined the organisation in 2001.
- The SCO's main goals are: strengthening mutual trust and neighbourliness among the member states; promoting their effective cooperation in politics, trade, the economy, research, technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas; making joint efforts to maintain and ensure peace, security and stability in the region; and moving towards the establishment of a democratic, fair and rational new international political and economic order. currently:
- **Presently, the SCO comprises eight member states**, namely the Republic of India, the Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Republic of Tajikistan, and the Republic of Uzbekistan;.
- The SCO counts four observer states, namely the Islamic Republic of Afghanistan, the Republic of Belarus, the Islamic Republic of Iran and the Republic of Mongolia.
- The SCO has six dialogue partners, namely the Republic of Azerbaijan, the Republic of Armenia, the Kingdom of Cambodia, the Federal Democratic Republic of Nepal, the Republic of Turkey, and the Democratic Socialist Republic of Sri Lanka.





### KALAPANI TERRITORY DISPUTE

### Why in News?

- Nepal government has strongly objected to the inclusion of 'Kalapani' under the Indian Territory as per the newly released political map of India.
- In the latest map, India included Kalapani into the Pithoragarh district of Uttarakhand.
- Nepal government says that Kalapani is an integral part of the



country and that talks are still on between New Delhi and Kathmandu over this "unresolved" area.

Foreign secretaries of both countries have been assigned the responsibility to resolve the remaining border-related issues between India and Nepal.

### About the Kalapani Territory Dispute:

- Kalapani is located at an altitude of 3600m on the Kailash Manasarovar route.
- It borders Uttarakhand in India and Sudurpashchim Pradesh in Nepal.
- While Nepal claims Kalapani to be a part of its Darchula district, the region is administered in India as a part of Pithoragarh district in Uttarakhand.
- Since the Indo-China war of 1962, Kalapani is controlled by India's Indo-Tibetan Border Police.
- Nepal claims that the river located towards the west of the territory is the main Kali river and thus it falls in its territory, India claims a ridgeline towards the east of the Kalapani territory and hence, includes it in the Indian Union.
- Under the treaty of Sugauli signed between Nepal and the British East India Company in 1816, the Kali River was located as Nepal's western boundary with India. It, however, made no mention of a ridgeline and subsequent maps of the areas drawn by British surveyors showed the source of the Kali river at different places.
- This discrepancy has led to the boundary disputes between India and Nepal, with each country producing maps including the territory in their own area to support their claims. The exact size of the Kalapani territory also varies in different sources.

### Way ahead:

• While the two countries have made a lot of headway in ties, sensitive issues such as border need to be handled carefully and New Delhi has to be mindful of Nepal's concerns.



# **SCIENCE & TECHNOLOGY**

### **BRAHMOS MISSILE**

- BrahMos, derives its name from the Brahmaputra and Moscow rivers in India and Russia, is based on the earlier Russian design for the SS-N-26 (3M55 Oniks/Yakhont/Bastion) cruise missile.
- In 1998, a joint venture was set up between the Indian Defense Ministry's Defense Research and Development Organization and Russia's Mashinostroyeniye Company.
- The two entities formed a company now known as Brahmos Aerospace, which would develop and manufacture the BrahMos PJ-10.
- The BrahMos PJ-10 supersonic speed of between Mach 2.0-2.8, depending on the cruising altitude used.
- In addition to making it difficult to intercept, this speed also imparts a greater strike power.
- In addition, the BrahMos is equipped with stealth technology designed to make it less visible to radar and other detection methods. It has an inertial navigation system (INS) for use against ship targets, and an INS/Global Positioning System for use against land targets. Terminal guidance is achieved through an active/passive radar.
- In 2016, India agreed to sell Vietnam the Brahmos missile after gaining acceptance into the Missile Technology Control Regime (MTCR). Variants sold internationally only have a range of 290 km to fall under the 300 km restrictions in the MTCR.

### BrahMos Hypersonic Variant

• In addition to the supersonic version of the Brahmos, India and Russia are also collaborating on a hypersonic version of the missile. Reports suggest that the Brahmos-II will be powered by a scramjet engine rather than the ramjet version. Russian defense officials have also claimed that the missile will reach the Mach 5 threshold required to be classified as hypersonic by using a special new fuel.

### **NOBEL PRIZE IN PHYSICS**

### Winners are Three scientists-

• Canadian-American cosmologist James Peebles and Swissastronomers Michel Mayor and Didier Queloz- have jointly been awarded *the 2019 Nobel Prize in physics* for encouraging the growth of *the "understanding of our place in the Universe"*.

### New perspectives on our place in the universe

- This year's Nobel Prize in Physics rewards new understanding of the universe's structure and history, and the first discovery of a planet orbiting a solar-type star outside our solar system.
- James Peebles' insights into physical cosmology have enriched the entire field of research and laid a foundation for the transformation of cosmology over the last fifty years, from speculation to science. His theoretical framework, developed since the mid-1960s, is the basis of our contemporary ideas about the universe.
- The Big Bang model describes the universe from its very first moments, almost 14 billion years ago, when it was extremely hot and dense. Since then, the universe has been expanding, becoming larger and colder. Barely 400,000 years after the Big Bang, the universe became transparent and light rays were able to travel through space. Even today, this ancient radiation is all around us and, coded into it, many of the universe's secrets are hiding. Using his theoretical tools and calculations, James



Peebles was able to interpret these traces from the infancy of the universe and discover new physical processes.

- The results showed us a universe in which just five per cent of its content is known, the matter which constitutes stars, planets, trees and us. The rest, 95 per cent, is unknown dark matter and dark energy. This is a mystery and a challenge to modern physics.
- In October 1995, **Michel Mayor** and **Didier Queloz** announced the first discovery of a planet outside our solar system, an exoplanet, orbiting a solar-type star in our home galaxy, the Milky Way. At the Haute-Provence Observatory in southern France, using custom-made instruments, they were able to see planet 51 Pegasi b, a gaseous ball comparable with the solar system's biggest gas giant, Jupiter.
- This discovery started a revolution in astronomy and over 4,000 exoplanets have since been found in the Milky Way. Strange new worlds are still being discovered, with an incredible wealth of sizes, forms and orbits. They challenge our preconceived ideas about planetary systems and are forcing scientists to revise their theories of the physical processes behind the origins of planets. With numerous projects planned to start searching for exoplanets, we may eventually find an answer to the eternal question of whether other life is out there.
- This year's Laureates have transformed our ideas about the cosmos. While James Peebles' theoretical discoveries contributed to our understanding of how the universe evolved after the Big Bang, Michel Mayor and Didier Queloz explored our cosmic neighbourhoods on the hunt for unknown planets. Their discoveries have forever changed our conceptions of the world.

### RAFALE FIGHTER JET

### Why in News:

- First of 36 *Rafale Fighter Jets* Delivered to India by *France*.
- Rafale is Medium Multi-Role Combat Aircraft (MMRCA) twin-jet combat aircraft capable of carrying out a wide range of short and long-range missions, including ground and sea attacks, reconnaissance, high-accuracy strikes and nuclear strike deterrence.
- Rafale is a French word meaning "gust of wind".
- It is a French-origin Delta winged, twin-engine multirole fighter aircraft manufactured and designed by Dassault Aviation.
- The Rafale is 15.27 metre long and a wingspan of 10.80 metre. The empty weight of Rafale ranges from 9900 kg to 10600 kg depending on the variant and maximum take-off weight of 24500 kg.
- The engines push the Rafale to attain a high speed of 1.8 Mach (1912 kmph) and a range of more than 3700 km with 3 drop tanks.

### SATURN IS THE PLANET WITH THE HIGHEST NUMBER OF MOONS

- Recently the discovery of 20 new moons of Saturn has made Saturn the planet with the highest number of moons (82).
- The previous record- holder, Jupiter, has 79.
- This was announced by the International Astronomical Union's Minor Planet Center.
- Out of the 82 moons 53 moons are confirmed and named and another 29 moons are awaiting confirmation of discovery and official naming. Saturn's moons range in size from larger than



the planet Mercury — the giant moon Titan — to as small as a sports arena. The moons shape, contribute and also collect material from Saturn's rings and magnetosphere.

• Of Saturn's 20 newfound moons, 17 are retrograde, meaning they orbit in the opposite direction that Saturn rotates. Three orbit in the same direction that Saturn spins. Two of those prograde moons orbit fairly close to the planet while one oddball is farther out.

### THE NOBEL PRIZE IN CHEMISTRY 2019

### The winners are:

- John B. Goodenough, M. Stanley Whittingham and Akira Yoshino
- for the development of *lithium-ion batteries*, through their work, they have created the right conditions for a wireless and fossil fuel-free society, and so brought the greatest benefit to humankind.

### What are lithium-ion batteries?

- Lithium is the lightest of all metals, has the greatest electrochemical potential and provides the largest energy density for weight.
- Although slightly lower in energy density than lithium metal, *lithium-ion is safe, provided certain precautions* are met when charging and discharging.
- In 1991, the Sony Corporation commercialized the first lithium-ion battery. Other manufacturers followed suit.

### Importance of the Lithium ion Batteries:

- The energy density of lithium-ion is typically twice that of the standard nickelcadmium.
- There is potential for higher energy densities.
- The load characteristics are reasonably good and behave similarly to nickelcadmium in terms of discharge.
- The high cell voltage of 3.6 volts allows battery pack designs with only one cell.
- Lithium-ion is a low maintenance battery, an advantage that most other chemistries cannot claim.
- There is no memory and no scheduled cycling is required to prolong the battery's life.
- In addition, the self-discharge is less than half compared to nickel-cadmium, making lithium-ion well suited for modern fuel gauge applications.
- lithium-ion cells cause little harm when disposed.

### THE NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE 2019

### The winners are:

- William G. Kaelin Jr, Sir Peter J. Ratcliffe and Gregg L. Semenza f
- for their discoveries of how cells sense and adapt to oxygen availability, They established the basis for our understanding of how oxygen levels affect cellular metabolism and physiological function. Their discoveries have also paved the way for promising new strategies to fight anemia, cancer and many other disease

### SUMMARY

 Animals need oxygen for the conversion of food into useful energy. The fundamental importance of oxygen has been understood for centuries, but how cells adapt to changes in levels of oxygen has long been unknown.



• William G. Kaelin Jr., Sir Peter J. Ratcliffe and Gregg L. Semenza discovered how cells can sense and adapt to changing oxygen availability. They identified molecular machinery that regulates the activity of genes in response to varying levels of oxygen.

### Significance of the discovery:

- Oxygen is essential for animal life: it is used by the mitochondria present in virtually all animal cells in order to convert food into useful energy.
- While oxygen is essential for the survival of cells, excess or too little oxygen can lead to adverse health consequences.
- Oxygen supply temporarily reduces in muscles during intense exercise and under such conditions the cells adapt their metabolism to low oxygen levels.
- Proper growth of the foetus and placenta depends on the ability of the cells to sense oxygen. Many
  diseases can be treated by increasing the function of a particular pathway of the oxygen-sensing
  machinery.

### ONE NATION ONE FASTAG

### Why in news?

- One Nation One FASTag scheme inaugurated recently.
- The government has already announced that FASTags will be mandatory for all vehicles at all National Highways from December 1.

### About FASTAG:

- The scheme will be implemented from December 1, 2019, and can be availed upon activation by new cars having Radio Frequency Identification (RFID) tags on national and state highways throughout the country.
- The plan aims to integrate the collection of toll digitally and ensure seamless mobility of vehicles across India.
- The payment method is a part of the National Electronic Toll Collection (NETC) programme. The National Payments Corporation of India (NPCI) collects the payments.

### What is Fastag:

- FASTag is a simple to use, reloadable tag which enables automatic deduction of toll charges and lets
  you pass through the toll plaza without stopping for the cash transaction. FASTag is linked to a
  prepaid account from which the applicable toll amount is deducted. The tag employs Radio-frequency
  Identification (RFID) technology and is affixed on the vehicle's windscreen after the tag account is
  active.
- FASTag is a perfect solution for a hassle free trip on national highways. FASTag is presently operational at 180 toll plazas across national and state highways. More toll plazas will be brought under the FASTag program in the future.

### **BENEFITS**

- Saves Fuel and Time: FASTag is read by the tag reader at the plaza and the toll amount is deducted automatically, when the vehicle approaches the toll plaza. The vehicle with FASTag doesn't need to stop at the toll plaza for the cash transaction
- SMS alerts for transactions: Customer will receive SMS alerts on his registered mobile numbers for all the transactions done in his tag account



- Online recharge: Customer may recharge his tag account online through, Credit Card/ Debit Card/ NEFT/ RTGS or Net Banking
- No need to carry cash: Customer doesn't need to worry about carrying cash for the toll payments
- Web portal for customers: Customers can access their statements by logging on the FASTag customer portal

### Why do we need this scheme?

According to the National Highways Authority of India (NHAI), these devices will make passing through tolls considerably smoother since drivers will no longer have to carry cash or stop to make a transaction.

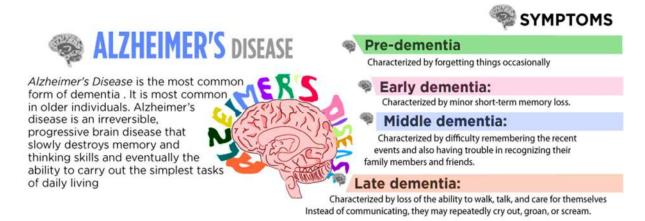
Cameras at toll booths will take photos of passengers in a vehicle, which will be useful for the Ministry of Home Affairs as there will be a record of a vehicle's movement.

### **NEW DRUG TO TREAT ALZHEIMER'S DISEASE**

### Why in News?

- China recently announced that a new drug called *GV-971 or "Oligomannate"*, meant to potentially treat *Alzheimer's disease*, will be available to Chinese patients by the end of this year.
- GV-971 is a seaweed-based drug, administered orally.

### What is Alzheimer's?



- Dementia is a disorder characterized by serious loss of cognitive ability in a previously unimpaired person, beyond what might be expected from normal ageing. Alzheimer's Disease is the most common form of dementia. It is more common in older individuals.
- Alzheimer's disease is an irreversible, progressive brain disease that slowly destroys memory and thinking skills, and eventually, the ability to carry out the simplest tasks of daily living.
- Although scientists are learning more every day, right now, they still do not know what causes Alzheimer's disease. Thus it is an Idiopathic disease.

### Treatment:

There is no cure for Alzheimer's disease; though symptomatic relief can be provided. Current treatments can be divided into Medical, Psychosocial and Care giving.



- Medical: Cholinesterase Inhibitors Acetylcholine is a chemical that keeps the nerve signals charged
  and helps the messaging system within the brain cells. Various medications to treat Alzheimer's are:
  Donepezil, Rivastigmine, Galantamine. These are used to treat mild to moderate Alzheimer's disease.
  NMDA Receptor blocker, Memantine can be used for moderate to severe Alzheimer's disease as well.
- **Psychosocial:m**Psychosocial interventions are used as an adjunct to medicinal treatment and can be classified as supportive, cognitive and behavioural approaches.
- Care giving: Since patient with Alzheimer's has no cure, it gradually renders people incapable of tending for their own needs, thus care giving essentially is the treatment and must be managed carefully over the course of the disease.

### **VOYAGER 2 SPACECRAFT**

### Why in news?

- NASA's Voyager 2 has exited heliosphere and has entered interstellar space. It is now at 11 billion miles from the earth.
- Voyager 2 is the only probe ever to study Neptune and Uranus during planetary flybys.
- It is the second man-made object to leave our planet.
- Voyager 2 is the only spacecraft to have visited all four gas giant planets Jupiter, Saturn, Uranus and Neptune and discovered 16 moons, as well as phenomena like Neptune's mysteriously transient Great Dark Spot, the cracks in Europa's ice shell, and ring features at every planet.

### About Voyager mission:

### Mission Overview

- The twin Voyager 1 and 2 spacecraft are exploring where nothing from Earth has flown before. Continuing on their more-than-40-year journey since their 1977 launches, they each are much farther away from Earth and the sun than Pluto.
- In *August 2012, Voyager 1 made the historic entry into interstellar space*, the region between stars, filled with material ejected by the death of nearby stars millions of years ago.
- Voyager 2 entered interstellar space on November 5, 2018 and scientists hope to learn more about this region.
- Both spacecraft are still sending scientific information about their surroundings through the Deep Space Network, or DSN.
- The **primary mission** was the **exploration of Jupiter and Saturn**. After making a string of discoveries there such as active volcanoes on Jupiter's moon to and intricacies of Saturn's rings the mission was extended.
- Voyager 2 went on to explore Uranus and Neptune, and is still the only spacecraft to have visited those outer planets. The adventurers' current mission, the Voyager Interstellar Mission (VIM), will explore the outermost edge of the Sun's domain. And beyond.

### What is Interstellar space?

• Scientists use the heliopause to mark where interstellar space begins, although depending on how you define our solar system it can stretch all the way to the Oort Cloud, which begins 1,000 times farther away from the sun than Earth's orbit.



### What is Heliosphere?

• The heliosphere is a bubble around the sun created by the outward flow of the solar wind from the sun and the opposing inward flow of the interstellar wind. That heliosphere is the region influenced by the dynamic properties of the sun that are carried in the solar wind–such as magnetic fields, energetic particles and solar wind plasma. The heliopause marks the end of the heliosphere and the beginning of interstellar space.

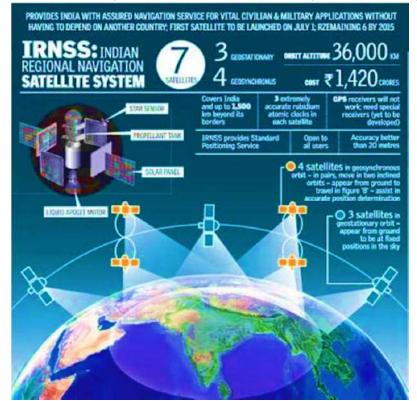
### **NAVIC**

### Why in News?

• Antrix, the commercial arm of ISRO has recently floated two separate tenders to identify industries that can develop dedicated NavIC-based hardware and systems.

### About: NAVIC

- Navigation with Indian Constellation (NavIC) is an independent regional navigation satellite system designed to provide position information in the Indian region and 1500 km around the Indian mainland.
- It is a constellation of seven satellites.
- Three of these will be *geostationary over the Indian Ocean*, i.e., they will appear to be stationary in the sky over the region, and
- Four will be geosynchronous appearing at the same point in the sky at the same time every day.
- This configuration ensures each satellite is being tracked by at least one of fourteen ground stations at any given point of time, with a high chance of most of them being visible from any point in India.





### Services provided:

### Its applications include:

- 1. Terrestrial, Aerial and Marine Navigation.
- 2. Disaster Management.
- 3. Vehicle tracking and fleet management.
- 4. Integration with mobile phones.
- 5. Precise Timing.
- 6. Mapping and Geodetic data capture.
- 7. Terrestrial navigation aid for hikers and travellers.
- 8. Visual and voice navigation for drivers.

### Why it is necessary to have indigenous global navigation system?

- Having a global navigation system bolsters the ability of a nation to serve as a net security provider, especially through the guarantee of such assurance policies.
- It can also play a significant role in relief efforts post disasters such as the tsunami in the Indian Ocean region in 2004 and the Pakistan-India earthquake in 2005.



# HIMACHAL PRADESH SUBORDINATE ALLIED SERVICES-2019

### **MODEL TEST-01**

Time Allowed: Three Hours Maximum Marks: 200

### **FULL LENGTH TEST HPSAS**

- 1. Consumer Price Index (CPI) has assumed greater significance as it is used:
  - I. As the base for policy rate revision by the Monetary Policy Committee.
  - II. As deflators in the National Accounts.
  - A. Only I is correct
  - B. Only II is correct
  - C. Both I and II are correct
  - D. Neither I or II is correct
- 2. The Centre has set up a five member committee headed by economist Kirit Parikh to-
  - I. Formulate the definition or quality standards of LPG being marketed.
  - II. Identify the scope for liberalizing government policies for private participation.
  - A. Only I
  - B. Only II
  - C. Both I and II
  - D. Neither I nor II
- 3. Which of the following is a development bank, but also functions as a regulator of its domain?
  - A. NABARD
  - B. SIDBI
  - C. EXIM Bank
  - D. National Housing Bank
- 4. In which state has 'chamakibukhar' taken a shape of an epidemic in May- July 2019?
  - A. Bihar
  - B. Jharkhand

- C. West Bengal
- D. Odisha
- Corporate Average Fuel Efficiency/ Economy Regulations in India came into force from-
  - A. April 1,2016
  - B. April 1, 2017
  - C. April 1, 2018
  - D. April 1, 2019
- 6. Which Multinational company has been found guilty to pay bribes to local middlemen to obtain permission and license in India, Brazil, China and Mexico?
  - A. Kroger Company
  - B. Amazon .Com, Inc
  - C. Wal- Mart Stores, Inc
  - D. The Home Depot, Inc
- 7. Interest rate on Public Provident Fund is determined by the-
  - A. Ministry of Finance
  - B. Reserve Bank of India
  - C. Employees Provident Fund Organization
  - D. Respective Commercial Bank
- 8. The term 'bootstrapping is often associated with-
  - A. Start-ups
  - B. Mutual Funds
  - C. Venture Capital Funds
  - D. Advertising Agencies



- 9. Which of the following bodies plays key role in examining any misappropriation in the expenditure of central government?
  - A. Comptroller and Auditor General of India (CAG)
  - B. Public Accounts Committee (PAC)
  - C. Estimates Committee (EC)
  - D. All of the above
- 10. The term of National Anti-Profiteering Authority has been extended by..... Years in the 35th meeting of GST Council.
  - A. One
  - B. Two
  - C. Three
  - D. Four
- 11. Which of the following Dy. Governors of RBI has resigned from his post on June 23, 2019?
  - A. M.K. Jain
  - B. Viral V. Acharya
  - C. B.P. Kanungo
  - D. N.S. Vishwanathan
- 12. As per a report presented in the Lok Sabha Gross NPAs of PSBs were ..... at the end of March 2019.
  - A. Rs. 8.06 lakh crore
  - B. Rs. 8.95 lakh crore
  - C. Rs. 9.29 lakh crore
  - D. Rs. 10.20 lakh crore
- 'LIBRA' an alternative of existing cryptocurrencies like bitcoin is being developed by-
  - A. Google
  - B. Microsoft
  - C. Facebook
  - D. Mozila Firefox
- 14. Which Indian woman has been India's full time minister of Finance?
  - A. Indira Gandhi
  - B. Nirmala Sitharaman

- C. Sushma Swaraj
- D. Mamta Benerji
- 15. Which of the following is not a full time member of newly constituted NITI Aayog after the formation of new government at the Centre in May 2019?
  - A. Shri V.K. Saraswat
  - B. Prof. Ramesh Chand
  - C. Dr. V.K. Paul
  - D. Dr. Bibek Deboroy
- 16. Which country made it mandatory, from June 2019 onwards, for VISA seekers to submit their social media details under new rules-
  - A. Germany
  - B. USA
  - C. UK
  - D. Canada
- 17. India's Rank in 'EM 2030 SDG Index 2019' is-
  - IS-
  - $A. 75^{th}$
  - B. 85<sup>th</sup>C. 95<sup>th</sup>
  - D. 105th
- 18. Which Tennis Grand slam Tournament offered the highest prize money in 2019?
  - A. Australian Open
  - B. French Open
  - C. US Open
  - D. Wimbledon
- 19. Which country is the largest CO<sub>2</sub> emitter of the world in 2018?
  - A. United States of America
  - B. China
  - C. India
  - D. Japan
- 20. 'Prahaar' is-
  - A. A battle tank
  - B. A surface-to-surface missile



- C. An aircraft carrier
- D. A submarine
- 21. Paul Allen, who died in October 2018, was the co- founder of-
  - A. Oracle
  - B. IBM
  - C. Microsoft
  - D. SAP
- 22. Who among the following won India's first ever gold medal in the International Youth Olympic Games (2018) held in Argentina?
  - A. Neeraj Chopra
  - B. Praveen Chitravel
  - C. Jeremy Lalrinnunga
  - D. Surajpanwar
- 23. Kisan Credit Cards are issued to-
  - A. All the categories of farmers
  - B. Persons engaged in animal husbandry
  - C. Persons engaged in fisheries
  - D. All of the above
- 24. Which of the following schemes has been announced in the Interim Union Budget 2019-20?
  - A. Pradhan MantriShram- Yogi Maandhan'
  - B. Atal Pension Yojana
  - C. Pradhan Mantri Jeevan JyotiBimaYojana
  - D. Pradhan mantra Suraksha BimaYojana
- 25. Which of the following commissions has/have done a commendable job to identify and list various nomadic, semi nomadic and de-notified communities?
  - A. Renke Commission
  - B. Idate Commission
  - C. Mandal Commission
  - D. Both A and B.
- 26. 59- Minute Loan portal is related to-
  - A. Foreign Investors in priority sectors
  - B. Micro, Small and medium Enterprises (MSME) sector

- C. Marginal and Small farmers
- D. Weaker Sections
- 27. The Hartz Reforms are associated with-
  - A. Initial Public Offer
  - B. Banks
  - C. Labour Unions
  - D. International Trade
- 28. Which was India's most profitable Hindi Film of 2018?
  - A. Stree
  - B. Padman
  - C. Badhaai Ho
  - D. Raazi
- 29. SWAYATT is an initiative to-
  - A. Promote Start- ups
  - B. Creating facilities for women and youth advantage through e –transaction on government e-marketplace
  - C. Both A and B.
  - D. Neither A nor B
- 30. 4th India ASEAN Expo and Summit was held on February 21, 2019 in-
  - A. Bali
  - B. Kuala Lumpur
  - C. New Delhi
  - D. Jakarta
- 31. Who among the following is not a member of NITI Aayog?
  - A. Dr. BibekDebroy
  - B. Prof. SurjeetBhalla
  - C. Prof. Ramesh Chand
  - D. Dr. V.K. Paul
- 32. India's rank in Global Passport Index 2019
  - is-
  - A. 35th
  - B. 49th
  - C. 52<sup>nd</sup>
  - D. 67th



- 33. Which of the following is a Central sector scheme?
  - A. National Women Fund
  - B. Pradhan MantriKisanSamman Nidhi (PM-KISAN)
  - C. Alternative Investment Funds (ALFs)
  - D. India Aspiration Fund
- 34. Infosys, a software giant, was associated with which Grand Slam tennis tournament?
  - A. Australian Open
  - B. French Open
  - C. Wimbledon
  - D. US Open
- 35. Notre- Dame Cathedral, a master- Piece building of twelfth century was hugely damaged by a fire in April 2019. It is situated in-
  - A. Paris (France)
  - B. Rome (Italy)
  - C. Athens (Greece)
  - D. Moscow (Russia)
- 36. Which of the following is off one out?
  - A. SAKSHAM
  - B. PAHAL
  - C. PRAGATI
  - D. ISHAN- UDAY
- 37. What is 'Tankan'?
  - A. Stock market Index
  - B. Economic Survey
  - C. Tax Treaty
  - D. Trade Agreement
- 38. Blue sheep's are found in -
  - A. Gangotri National Park
  - B. Great Himalayan National Park
  - C. Dachigam National Park
  - D. Mouling National Park
- 39. What is 'ParamShivay'?
  - A. A super computer designed and built by C-DAC

- B. A new class of submarine
- C. A feature film
- D. An environmental conservation project of Himalayan region
- 40. Energy Transmission Index, 2019 has been developed by-
  - A. World Economic Forum
  - B. United Nations Environment Programme
  - C. United Nations Development Programme
  - D. World Bank
- 41. Which of the following is the World's first country to introduce Gafa Tax?
  - A. USA
  - B. Australia
  - C. France
  - D. Canada
- 42. Fort knox is renowned as a repository of-
  - A. Silver
  - B. Gold
  - C. Diamonds
  - D. Platinum
- 43. Which of the following institutes has topped in government funded institutions category in Atal Ranking of Institutions on Innovation Achievements -2019?
  - A. Indian Institute of Science, Bangalore
  - B. IIT, Madras
  - C. IIT, Mumbai
  - D. IIT, Khadagpur
- 44. Which of the following financial institutions provide refinancing facilities to cooperative institutions?
  - A. Reserve Bank of India
  - B. Commercial Bank
  - C. NABARD
  - D. Regional Rural Banks
- 45. Citizenship can be acquired in which country on the basis of investment?
  - I. Antiqua



- II. St. Kits and Nevis
- III.Dominica
- IV. Grenada
- A. Only I and IV
- B. Only III and IV
- C. I, II, III and IV
- D. Only II
- 46. Which of the following groups of countries is said to be in the throes of the Thucydides Trap?
  - A. The UK and the Euro zone
  - B. The US and Russia.
  - C. China and the US
  - D. North Korea and South Korea
- 47. 'Sub-prime crisis' is a term associated with which one of the following events?
  - A. Economic recession
  - B. Political instability
  - C. Structural adjustment programmes
  - D. Growing social inequality
- 48. A market situation when many firms sell similar but not identical products is termed as-
  - A. Perfect competition
  - B. Imperfect competition
  - C. Monopolistic competition
  - D. Oligopoly
- 49. Which one of the following canons of taxation was not advocated by Adam Smith?
  - A. Canon of equality
  - B. Canon of certainty
  - C. Canon of convenience
  - D. Canon of fiscal adequacy
- 50. Consider the following statements about the Bureau of Pharma PSUs of India (BPPI)-
  - 1. It is implementing agency of Pradhan Mantri Bharatiya Janaushadhi Pariyojana (PMBJP).

2. It has been registered as an independent society under the Societies Registration Act, 1860.

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
- 51. Which of the following are the benefits of the Pradhan mantra Jan Arogya Yojana (PMJAY)?
  - 1. Free treatment available at all public and empanelled private hospitals in times of need.
  - 2. Cashless and paperless access to quality healthcare services.
  - Government provides health insurance cover of up to Rs. 5,00,000 per family per year.
  - Pre-existing diseases are not covered.
     Select the correct answer using the code given below-
  - A. 1 and 3 only
  - B. 1,2 and 3
  - C. 2 and 4 only
  - D. 2.3 and 4
- 52. Find the correct arrangement of the following urban agglomerations in descending order as per their population size according to Census 2011-
  - A. Delhi-Mumbai- Kolkata- Chennai
  - B. Mumbai- Delhi- Kolkata- Chennai
  - C. Mumbai- Kolkata- Delhi-Chennai
  - D. Kolkata-Chennai- Mumbai- Delhi
- 53. Afro- Asian solidarity as a central element of India's foreign policy was initiated by which of the following Prime Ministers?
  - A. Narendra Modi
  - B. I.K. Guiral
  - C. J.L. Nehru
  - D. Manmohan Singh



- 54. The Prime Minister's National Relief Fund is operated by which one of the following bodies?
  - A. The Prime Minister's Office (PMO)
  - B. The National Disaster Management authority
  - C. The Ministry of Finance
  - D. The National Development Council (NDC)
- 55. In which of the following states population of Scheduled Tribes is largest in the country in 2011?
  - A. Mizoram
  - B. Gujarat
  - C. Madhya Pradesh
  - D. Maharashtra
- 56. Which of the following type of migration has contributed most in population movement in India in 2011?
  - A. Rural to rural
  - B. Urban to Urban
  - C. Rural to Urban
  - D. Urban to urban
- 57. World's highest Astronomical Observator is located in
  - A. Columbia
  - B. India
  - C. Nepal
  - D. Switzerland
- 58. What is the base of Human Development Index?
  - A. Health, education, employment, standard of living
  - B. Health, education, employment
  - C. Health, education, standard of living
  - D. Education, employment, Standard of Living
- 59. 'Beaufort Scale' is used to measure
  - A. Atmospheric pressure
  - B. Wind velocity
  - C. Humidity
  - D. Hydraulic pressure

- 60. First Nuclear Power Plant in world was established in-
  - A. Britain
  - B. Germany
  - C. Russia
  - D. USA
- 61. Which one of the following viruses is responsible for the recent death of lions in Gir National Park?
  - A. Canine distemper Virus
  - B. Nipah Virus
  - C. Hendra Virus
  - D. Foot- and Mouth Disease Virus
- 62. The Shompens are the vulnerable tribal group of-
  - A. Jharkhand
  - B. Odisha
  - C. West Bengal
  - D. Andaman and Nicobar Islands
- 63. The Andaman group of islands and the Nicobar group of islands are separated by which one of the following latitudes?
  - A. 8°N latitude
  - B. 10° N latitude
  - C. 12°N latitude
  - D. 13°N latitude
- 64. Which one of the following statements with regard to India's surgical strike mission inside Pakistan Occupied Kashmir is correct?
  - A. It was conducted in the year 2018
  - B. It was led by the Indian Air Force
  - C. It was not given any name
  - D. It was sanctioned by the United Nations
- 65. The South China Sea Dispute involves which of the following countries?
  - 1. China
  - 2. Vietnam
  - 3. Malaysia
  - 4. Indonesia



- Select the correct answer using the code given below:
- A. 1 and 4
- B. 1 and 2 only
- C. 1,2 and 3,4
- D. 2,3 and 4
- 66. The 'Kyoto Protocol' is an international treaty that commits State parties to reduction in-
  - A. Poverty
  - B. Greenhouse gases emission
  - C. Nuclear armaments
  - D. Agricultural subsidy
- 67. The 'Bejing Declaration' is concerned with which one of the following issue?
  - A. Rights of Children
  - B. Rights of women
  - C. Right of development
  - D. Reduction of tariffs
- 68. Which one among the following stars is nearest to the earth?
  - A. Sirius
  - B. Arcturus
  - C. Spica
  - D. Proxima Centauri
- 69. Which one of the following planets of solar system has least mass?
  - A. Neptune
  - B. Jupiter
  - C. Mars
  - D. Mercury
- 70. The city of Cartagena, which is famous for Protocol on Biosafety, is located in-
  - A. Colombia
  - B. Venezuela
  - C. Brazil
  - D. Guyana

- 71. Which one among the following is the most populated State in India as per Census 2011?
  - A. Goa
  - B. Mizoram
  - C. Meghalaya
  - D. Sikkim
- 72. Which among the following countries of South America does the Tropic of Capricorn not pass through?
  - A. Chile
  - B. Bolivia
  - C. Paraguay
  - D. Brazil
- 73. Which one of the following river valleys of India is under the influence of intensive gully erosion?
  - A. Kosi
  - B. Chambal
  - C. Damodar
  - D. Brahmaputra
- 74. Very small insoluble particle in a liquid may be separated from it by using-
  - A. Crystallization
  - B. Fractional distillation
  - C. Centrifugation
  - D. Decantation
- 75. Which one of the following elements cannot be detected by 'Lassaigne's test'?
  - A. I
  - B. CI
  - C. S
  - D. F
- 76. In which of the following functional group isomerism is not possible?
  - A. Alcohols
  - B. Aldehydes
  - C. Alkyl halides
  - D. Cyanides



- 77. When hot water is placed into an empty water bottle, the bottle keeps its shape and does not soften. What type of plastic is the water bottle made from?
  - A. Thermoplastic
  - B. PVC
  - C. Polyurethane
  - D. Thermosetting
- 78. For an ideal gas, which one of the following statements does not hold true?
  - A. The speed of all gas molecules is same
  - B. The Kinetic energies of all gas molecules are not same
  - C. The potential energy of the gas molecules is zero
  - D. There is no interactive force between the molecules
- 79. Hooke's law is valid for-
  - A. Only proportional region of the stressstrain curve
  - B. Entire stress- strain curve
  - C. Entire elastic region of the stress- strain
  - D. Elastic as well as plastic region of the stress- strain curve
- 80. Which of the following statements is correct?
  - A. Urea is produced in liver
  - B. Urea is produced in blood
  - C. Urea is produced from digestion of starch
  - D. Urea is produced in lung and kidney
- 81. Which one of the following functions is not carried out by smooth endoplasmic reticulum?
  - A. Transport of materials
  - B. Synthesis of lipid
  - C. Synthesis of protein
  - D. Synthesis of steroid hormone

- 82. Which one of the following cell organelles mainly functions as storehouse of digestive enzymes?
  - A. Desmosome
  - B. Ribosome
  - C. Lysosome
  - D. Vacuoles
- 83. Which one of the following tissues is responsible for increase of girth in the stem of a plant?
  - A. Tracheid
  - B. Pericycle
  - C. Intercalary meristem
  - D. Lateral meristem
- 84. Which one of the following has a bilateral symmetry in its body organization?
  - A. Asterias
  - B. Sea anemone
  - C. Neries
  - D. Fchinus
  - 85. Who was the author of the book, Plagues and Peoples?
  - A. W.L. Thomas
  - B. Rachel Carson
  - C. David canadine
  - D. William H. McNeill
- 86. In 1921, during which one of the following tours, Gandhi ji shaved his head and began wearing loincloth in order to identify with the poor?
  - A. Ahmedabad
  - B. Champaran
  - C. ChauriChaura
  - D. South India
- 87. Which politician in British India had opposed to a Pakistan that would mean "Muslim Raj here and Hindu Raj elsewhere"?
  - A. Khan Abdul Ghaffar Khan
  - B. Sikandar Hayat Khan



- C. MaulanaAbulKalam Azad
- D. Rafi Ahmed Kidwai
- 88. The 'Gujral Doctrine' relates to which one of the following issues?
  - A. Build trust between India and its neighbors
  - B. Initiate dialogue with all insurgent groups in India
  - C. Undertake development activities in Naxaldominated areas
  - D. Ensure food security
- 89. The summary Settlement of 1856 was based on which one of the following assumptions?
  - A. The Talukdars were the rightful owners of the land
  - B. The Talikdars were interlopers with no permanent stakes in the land
  - C. The Talikdars could evict the peasants from the lands
  - D. The Talikdars would take a portion of the revenue which flowed to the State
- 90. Who amongst the following organized the All India Scheduled Castes Federation?
  - A. JyotibaPhule
  - B. Periyar
  - C. B.R. Ambedkar
  - D. M.K. Karunanidhi
- 91. Which ruler founded the city of Agra?
  - A. Sikander Lodi
  - B. Akbar
  - C. FerozTuglaq
  - D. Shahjahan
- 92. When Mahatma Gandhi was arrested who among the following took over the leadership of Salt Satyagraha?
  - A. VinobaBhave
  - B. SardarVallabh Bhai Patel
  - C. Abbas Tyabji
  - D. Maulana Abdul Kalam Azad

- 93. Through which principle or device did Gandhiji strive to bridge economic inequalities?
  - A. Abolition of machinery
  - B. Establishment of village industries
  - C. Trusteeship theory
  - D. None of the above
- 94. Who persuaded the ratings of the RIN (Royal India Navy) to surrender on the 23rd February 1946?
  - A. Mahatma Gandhi
  - B. Jawaharlal Nehru and MaulanaAbulKalam Azad
  - C. Vallabh Bhai Patel an d M.A. Jinnah
  - D. Morarji Desai and J.B. Kripalani
- 95. In 1939, for the first time, Gandhi ji tried out hisspecific techniques of controlled mass struggle in a native state. He allowed a close associate of his tolead a Satyagraha. Who was he?
  - A. K. T. Bhashyam in Mysore
  - B. Jamnalal Bajaj in Jaipur
  - C. Vallabh Bhai Patel in Rajkot
  - D. NebakrushnaChaudhri in Dhenkanal
- 96. The first attempt to introduce a representative and popular element in the governance of India was made through:
  - A. Indian Council Act , 1861
  - B. Indian Council Act, 1892
  - C. Indian Council Act, 1909
  - D. Government of India Act , 1919
- 97. In which of the following movements did Mahatma Gandhi make the first use of Hunger Strike as a weapon?
  - A. Non-Cooperation Movement, 1920-22
  - B. Rowlatt Satyagraha, 1919
  - C. Ahmedabad Strike, 1918
  - D. Bardoli Satyagraha
- 98. The original name of Swami Dayananda Saraswati was
  - A. Abhi Shankar
  - B. Gowri Shankar
  - C. Daya Shankar
  - D. Mula Shankar



### 99. Match the following:

List: I

A. Jayprakash Narayan

B. C. F. Andrew

C. DadabhaiNauroji

D. LalaLajpat Rai

List: II

1. Dinbandh u

2. Grand old man of India

3. LokNayak

4. Punjab Kesari

5. Raja Jee

(A) (B) (C) (D)

(1) 5 4 3 2

(2) 3 1 2 4

(3) 1 2 5 3

(4) 4 3 1 5

## 100. The Indian Universities were first founded in the time of

A. Macaulay

B. Warren Hastings

C. Lord Canning

D. Lord William Bentinck

# 101. Apart from the Quit India Movement which started on 9th August 1942, what other sensational activity of the freedom fighters was done on 9th August?

A. Salt Satyagraha

B. Boycott of Simon Commission

C. Champaran Satyagraha

D. Kakori Mail train "robbery"

## 102. Who started the first English newspaper in India?

A. Bal GangadharTilak

B. Raja Rammohan Roy

C. J.A. Hickey

D. Lord William Bentinck

## 103. Who was the advocate at the famous INA Trials?

A. Bhulabhai Desai

B. Asaf Ali

C. Subhash Chandra Bose

D. C. Rajagopalachari

# 104. Which year did Bankim Chandra Chattopadhyay write Anandmath?

A. 1858

B. 1892

C. 1882

D. None of these

### 105. Gandhiji considered Khadi as a symbol of

A. industrialization

B. economic independence

C. economic growth

D. moral purity

## 106. The Round table conference at London met for the discussion of

A. Provision of Provincial Autonomy

B. A future Administration of India

C. Gandhi's demands for calling off Civil Disobedience Movement

D. Congress claim to be the sole representative of Indians

## 107. In which state was the first Non-Congress Government set up in independent India?

A. Punjab

B. Bihar

C. Maharashtra

D. Kerala

# 108. Which is the oldest trade union organization in India?

A. Indian National Trade Union Congress (INTUC)

B. Cent re of Indian Trade Unions (CITU)

C. All India Trade Union Congress (AITUC)

D. BharatiyaMazdoorSangh (BMS)

# 109. Which Governor General had entertained Ranjit Singh with great honour at Ropar?

A. Minto I

B. William Bentinck

C. Hastings

D. Auckland

# 110. When was the All India Women's Conference Founded

A. 1924

B. 1925

C. 1926

D. 1927

# 111. What was the reason for Gandhiji's support to decentralization of power?



- A. Decentralization ensures more participation of the people into democracy
- B. India had decentralization of power in the past
- C. Decentralization was essential for the economic development of the country
- D. Decentralization can prevent communalism
- 112. Which one of the following was the first English ship that came to India?
  - A. Elizabeth
  - B. Bengal
  - C. Red Dragon
  - D. Mayflower
- 113. Which of the Directive Principles can be described as Gandhian in character?
  - A. Protect ion of workers and children
  - B. Organization of Village Panchayat s as effective units of self-Government
  - C. Equal work for both men and women
  - D. Separation of the executive from the judiciary
- 114. The Bandung Conference was a major milestone in the history of :
  - A. The Non -aligned movement
  - B. Indo-Chinese relationship
  - C. U.S.-Vietnam War
  - D. Creation of ASEAN
- 115. After Independence, Hyderabad, the State of Nizam, was taken over by the Indian Government through
  - A. police action
  - B. militay action
  - C. persuasion
  - D. negotiations
- 116. The Interstate Council was set up in 1990 in the recommendation of-
  - A. Punchhi Commission
  - B. Sarkaria Commission
  - C. Rajamannar Commission
  - D. Mungerilal Commission
- 117. Which one of the following writs is issued to quash the order of a Court or Tribunal?
  - A. Mandamus

- B. Prohibition
- C. Quo Warranto
- D. Certiorari
- 118. Which among the following statements about the power to change the basic structure of the constitution of India is/are correct?
  - 1. It falls outside the scope of the amending powers of the Parliament.
  - 2. It can be exercised by the people through representatives in a Constituent Assembly.
  - 3. It falls within the constituent powers of the Parliament.

Select the correct answer using the code given below-

- A. 1 and 3
- B. 1 and 2
- C. 1 only
- D. 2 and 3
- 119. When a Proclamation of Emergency is in operation, the right to move a Court for the enforcement of all Fundamental Rights remains suspended, except-
  - A. Article 20 and Article 21
  - B. Article 21 and Article 22
  - C. Article 19 and Article 20
  - D. Article 15 and Article 16
- 120. Which one of the following Articles of the Constitution of India lays down that no citizen can be denied the use of wells, tanks and bathing Ghats maintained out of State funds?
  - A. Article 14
  - B. Article 15
  - C. Article 16
  - D. Article 17
- 121. In which article of the Constitution the Adult Suffrage is recognized?
  - A. Article 324
  - B. Article 325
  - C. Article 326



- D. Article 327
- 122. What are the restrictions in the freedom to manage religious affairs in the Article 26 of the Constitution?
  - 1. Public Order
  - 2. National Security
  - 3. Education
  - 4. Morality
  - 5. Health
  - 6. Secularism
  - A. 123
  - B. 2 3 5
  - C. 2 46
  - D. 1 4 5
- 123. What will be happened if President summons for the joint session of Parliament and in the meantime Lok Sabha dissolved?
  - A. Joint session will be held in scheduled time
  - B. Joint session will be cancelled
  - C. Joint session will be held after composition of New Lok Sabha
  - D. Bill will be lapsed
- 124. When is international Yoga Day celebrated?
  - A. 2 April
  - B. 21 June
  - C. 5 June
  - D. 21 May
- 125. Which article of the Constitution provides the right to be informed of the grounds of arrest?
  - A. Article 20
  - B. Article 21
  - C. Article 22
  - D. Article 23
- 126. By which constitutional amendment the term 'Internal disturbance' was replaced by 'armed rebellion' under article 352?
  - A. 42<sup>nd</sup> Amendment
  - B. 44th Amendment
  - C. 48th Amendment

- D. 52<sup>nd</sup> Amendment
- 127. To review the annual statement of accounts and annual progress report of the Panchayat is the main function of-
  - A. Gram Panchyat
  - B. Gram Sabha
  - C. Jila Panchayat
  - D. Collector
- 128. To consult the chief minister of a state before nominating the governor of that state is a
  - A. Convention
  - B. Constitutional provision
  - C. Rule
  - D. Supreme Court verdict
- 129. Under article 323 of the Constitution the State Public Service Commission has a duty to present annually a report of the work done by the commission. To whom this report is presented?
  - A. Chief Minister
  - B. Vidhan Sabha
  - C. Cabinet
  - D. Governor
- 130. For deliberations on the Wavels (1945) plan, a conference was called at?
  - A New Delhi
  - B. Calcutta
  - C. Shimla
  - D. Nainital
- 131. MakhanlalChaturvedi Festival is organized at-
  - A. Bhopal
  - B. Shajapur
  - C. Hoshangabad
  - D. Khandwa
- 132. Where and when the first Olympic Flag was furled?
  - A. 1912 Stockolm (Swedem)



- B. 1908 London (England)
- C. 1920 Antwarp (Belgium)
- D. 1896 Athens (Greece)
- 133. When was the Directorate of Primary Education in H.P. re-named as Directorate of Elementary Education?
  - A. 1984
  - B. 1992
  - C. 2005
  - D. 2007
- 134. Which occupational group in H.P. thrives largely on offerings on the occasion of death of Hindus?
  - A. Bhat
  - B. Khatik
  - C. Purohit
  - D. Acharaj
- 135. In Bodh literature, Mandi and Rewalsar area is calledas-
  - A. Mohar
  - B. Johan
  - C. Satsar
  - D. None of these
- 136. During the reign of which ruler an epidemic broke out in Chamba state and taking the advantage of the situation KirsattackedChamba?
  - A. AjayVarman
  - B. Lakshmi Varman
  - C. MushanVarman
  - D. YugankarVarman
- 137. HP govths established Women Home to provide shelter, food, clothing, education etc to destitute and women who are in Moral danger at:
  - A. Jogindernagar
  - B. Dharamshala
  - C. Mashobra
  - D. Palampur
- 138. Monitoring of Ambient Air Quality was Started in Himachal Pradesh in

- A. 1987
- B. 2001
- C. 1989
- D. 2004
- 139. The Initial Campaign against plastic began in the hill station of Shimla the state of H.P. passed India's First Non- Biodegradable Waste Act on
  - A. July ,1996
  - B. July ,1995
  - C. August, 1996
  - D. September, 1996
- 140. The Dharamkot limestone deposit is located in which district of Himachal Pradesh?
  - A. Kangra
  - B. Mandi
  - C. Shimla
  - D. Bilaspur
- 141. Thirot hydel project is in
  - A. Shimla
  - B. Lahul
  - C. Kullu
  - D. Kinnaur
- 142. H.P. Mineral policy for regularization of mines and minerals was announced in
  - A. 2010
  - B. 2012
  - C. 2015
  - D. 2013
- 143. In which year, H.P. became 'Nirmal Himachal' under total sanitation programme launched in panchayat's?
  - A. 2009
  - B. 2010
  - C. 2012
  - D. 2013
- 144. The 'Giriraj' weekly newspaper of Govt. of H.P., started its first publication in the year
  - A. Oct., 1975
  - B. Oct., 1978
  - C. Nov 1975
  - D. Nov 1976



- 145. During the period 200 BC. Shivdas, Rudradas, Dharaghosh, Mahadev etc. were the ruler of which kingdom?
  - A. Bushar
  - B Kulutas
  - C. Audumbaras
  - D. Trigartas
- 146. During 1361 AD. Which sultan of Delhi personally led expedition to Nagarkot against Raja Roop Chand & Plundered his country far & wide?
  - A. Tipu Sultan
  - B. Muhammad-bin-Tuglag
  - C. Firoz shah Tuglag
  - D. Alau-din-khilji
- 147. Which brave son of soil was sentenced to death by British Govt. on 25<sup>th</sup> Aug. 1944 AD. At Red fort Delhi?
  - A. Major Durga
  - B. Mul
  - C. Major SomNath
  - D. Captain Pratap Singh
- 148. During which period of history durga temple hatkoti remained under the joint control of Bushair, Jubbal&Rawin Hill states?
  - A. 1761-80 AD
  - B. 1886-89 AD
  - C. 1805-08 AD
  - D. 1816-19 AD
- 149. Makkar& Cham dances are the dance of which district?
  - A. Chamba
  - B. Kinnaur
  - C. Lahaul-spiti
  - D. None
- 150. Which Ruler of Chamba built the Khijji Nag temple (Khajjial) & Hidimba temple (Mehla) in the state?
  - A. Chatter Singh
  - B. Sham Singh
  - C. Batlu Nurse of Prithvi Singh
  - D. Pratap Singh
- 151. Which Raja Sansar Chand-II made an attempt to free kangra fort from Mughal

# domination with the help of Sikh Emperor Jai Singh Kanhiya?

- A. 1781-82 AD
- B. 1680-81 AD
- C. 1764-65 AD
- D. 1750-51 AD
- 152. Which Pal rule liberated Kullu and Chamba estate from the control of Spiti?
  - A. Basuda Pal
  - B. Prashid Pal
  - C. Rudra Pal
  - D. Bhoop Pal
- 153. It around which year was Bishop Cotton School, Shimla shifted from its original site, Jutogh?
  - A. 1846
  - B. 1866
  - C. 1876
  - D. 1886
- 154. According to ISFR2017 Forest cover of the total geographical area of the Himachal Pradesh is
  - A. 24.6 percent
  - B. 26.4 percent
  - C. 26.8 percent
  - D. 28.6 percent
- 155. The State of Himachal Pradesh has an estimated Hydro Potential of
  - **A.** 26,442 MW
  - **B.** 27,244 MW
  - C. 27,436 MW
  - **D.** 27,442 MW
- 156. Match the following projects being implemented in the first phase of "NaiRaaheinNaiManzilein" scheme; district wise,
  - [1] Eco-Tourism Project
  - [2] Paragliding Destination
  - [3] Ski Destination
  - [4] Larji Project
  - A. Disrtict Shimla
  - B. DistricKinnaur



- C. DisrtictKangra
- D. District Mandi
- a) 1-B 2-A 3-C 4-D
- b) 1-A 2-B 3-D 4-C
- c) 1-D 2-C 3-A 4-B
- d) 1-A 2-C 3-B 4-D
- 157. On which day after the death of a person is ShipchuSherku ritual observed among the Khampas?
  - A. 4th day
  - B. 7th day
  - C. 13th day
  - D. 49th day
- 158. The number of Panchayat Samities in Himachal Pradesh are
  - A. 56 panchayat Samities
  - B. 58 panchayat Samities
  - C. 68 panchayat Samities
  - D. 78 panchayat Samities
- 159. Which of the following is an artificial ecosystem?
  - A. Rice field
  - B. Forest
  - C. Grassland
  - D. Lake
- 160. The e-Procurement System of Himachal Pradesh enables the Tenderers to download the Tender Schedule free of cost and then submit the bids online through this portal, is financed by
  - A. Asian Development Bank
  - B. JICA
  - C. World Bank
  - D. NABARD
- 161. Which is last tributary of the river Ravi which divides the borders of Jammu &Chamba?
  - A. Buddal
  - B. Siul
  - C. Tunda
  - D. Siowa

- 162. When Vihangmanipal, Pradumman, Maru, Sen & Pravar Sen-I of Jammu established new kingdom of kulutas, Bushair, Chamba, spiti&kangrarespectivity?
  - A. After 320 AD.
  - B. After 280 AD.
  - C. After 310 AD.
  - D. After 260 AD
- 163. Who inaugurated the statehood function of Himachal Pradesh at Ridge Shimla on 25<sup>th</sup> Jan 1971 A.D.?
  - A. Indira Ghandhi
  - B. Rajiv Gandhi
  - C. Dr. YS parmar
  - D. GianiZail Singh
- 164. On 20th August, 1925 AD. Which viceroy of British-India opened the legislative assembly's council chamber (Now the heritage building of HP. Vidhan Sabha)?
  - A. Lord Lytton
  - B. Lord Reading
  - C. Lord Dalhousie
- 165. In Himachal 'Haryali' festival is celebrated in the beginning of Shrawan or in the mid of July & by which name it is popular?
  - A. 'Dakhrein' in kinnaur
  - B. 'Shegtsum' in Lahaul&spiti
  - C. 'Rehyali' in Shimla, solan&Sirmour
  - D. All are true
- 166. Kala zeera, Saffron, Buck wheat, Quality potato seeds & European type vegetables are the crops of which zone in H.P.?
  - A. Dry temperate
  - B. Sub-Tropical
  - C. Sub Humid
  - D. None
- 167. Under the Central University Act 2009 of Indian Parliament Centre University of Himachal Pradesh at Dharamshala in Kangra district was established on
  - **A**. 25 April,2009
  - **B.** 20 march, 2009



- C. 18 December, 2009
- **D**. 15 July,2009
- 168. The Jonang Takten Phuntsok Choeling Monastery in Sanjauli (Shimla) is one of its kind in India there is only one other in Tibet that teaches the practice of
  - A. Theravada
  - B. Mahayana
  - C. Kaalchakra
  - D. Samsara
- 169. Duling, Soldang and Gambhar are the tributaries of :
  - A. Beas
  - B. Satluj
  - C. Ravi
  - D. Chenab
- 170. For the effective operation of the Praja Mandal in their respective areas, the representatives of Praja Mandal of the Hill States of Himachal Pradesh established which of the following organization in January, 1946?
  - A. Himalayan Hill States Regional Council
  - B. Himalayan Regional Council
  - C. Shimla Mandal
  - D. Shimla PremPracharani Sabha
- 171. Who attacked India on 326 BC and his troops reached on the bank of river Vipasha (Beas) and refused to march onward?
  - A. Mahmood Gaznavi
  - B. Sikander
  - C. Jahangir
  - D. Temur the lame
- 172. When the official residence of HP. Governor was shifted from Peterhoff to Barnes court?
  - A. 1981 & 1993 AD.
  - B. 1980 & 1984 AD.
  - C. 1982 & 1988 AD.
  - D. 1984 & 1987 AD.
- 173. During the ruling period 1712-14 AD. Which ruler of kullu built Kupil Muni temple at kalath?

- A. Man Singh
- B. Raj Singh
- C. Vidhi Singh
- D. Jagat Singh
- 174. What is the term "Naswai" prevailing in Chamba on marriage?
  - A. Social marriage
  - B. Love marriage
  - C. Traditional Marriage
  - D. None
- 175. What was the golden age of miniature paintings in Hill states?
  - A. 1640-1800 AD.
  - B. 1820-1850 AD.
  - C. 1745-1808 AD.
  - D. 1600-1720 AD
- 176. Budhil Valley is present?
  - A. Chamba
  - B. Kangra
  - C. Mandi
  - D. Kullu
- 177. When did captain Hodgson and Lieutenant Herbert establish a station for pursuing their great trigonometrical operations to determine the altitude of Himalayan mountain range which is clearly visible from this place?
  - A. Hatu peak
  - B. Shalli peak
  - C. Prospect Hill
  - D. Jakhu Hill
- 178. Which Buddhist sage, who was a great teacher and a tantrick, went to Tibet from Rewalsar in order to spread Mahayana Buddhism?
  - A. Padmasambhava
  - B. Rimpochh Lama
  - C. Dorji lama
  - D. Avlokiteshwara
- 179. When did Nora Richard, the famous writer and wife of Philip Ernest Richard settle in Andretta village and join Indian freedom movement and also oppose the British rule?



- A. 1923 AD
- B. 1924 AD
- C. 1925 AD
- D. 1926 AD
- 180. Which of the following are true regarding establishment of Shimla town?
  - A. In 1830, Lord William Bentick acquired 4,000 acres of land from rulers of Patiala and keonthal to establish Shimla.
  - B. Rana of keonthal gave 13 villages.
  - C. In exchange, Patiala got pargana of Bharauli (Consisting of 7 villages), and keonthal got pargana of Rayin.
  - D. All are true.
- 181. Gaiety Theatre, designed on the model of Royal Albert Hall, London, was built in?
  - A. 1884 AD
  - B. 1887 AD
  - C. 1885 AD
  - D. 1889 AD
- 182. 60% of Christian population in H.P. is concentrated in districts
  - A. Shimla
  - B. Solan
  - C. Kangra
  - D. All
- 183. Which king of Chamba has defeated the strong tribal turukash and after Victory joyous people of Chamba offered Minjar (maize tresses) to the King and he gave them Asharfis (gold) and since then Minjar fair was started to commemorate this victory?
  - A. Raja Sahil Varman
  - B. Raja Meru Varman
  - C. Raja Aditya Varman
  - D. None of these
- 184. When was HPTDC formed?
  - A. 1st September 1972
  - B. 1st September 1971
  - C. 2<sup>nd</sup> September 1972
  - D. 2nd September 1971
- 185. 'Gsnga-3',' Vijaya', 'Amber' and 'Him-123' are the varieties of which crop?
  - A. Apple

- B. Ginger
- C. Potato
- D. Maize
- 186. Which are the leading districts in wool production in H.P.?
  - A. Chamba, Mandi, Kullu& Shimla
  - B. Solan, Sirmaur, Knagra& Una
  - C. Both of these
  - D. None
- 187. Which of the following terminology is/are mentioned in the Preamble of the Right to Information Act, 2005?
  - 1. Transparency of Information
  - 2. Revelation of Information
  - 3. Informed Citizenry
  - 4. Paramountcy of the democratic ideal Select the correct answer using code given below:

### Codes:

- A. 1,2 and 3
- B. 1 only
- C. 1,2,3 and 4
- D. 1 and 2
- 188. In which country the concept of Public Interest Litigation was originated?
  - A. United Kingdom
  - B. Canada
  - C. Australia
  - D. United States of America
- 189. Central Vigilance Commission was set up on the recommendation of-
  - A. Santhanam Committee
  - B. Gorwala Report
  - C. Administrative Reforms Commission of India
  - D. Kriplani Committee
- 190. "The age o a judge of the Supreme Court of India shall be determined by such authority and in such manner as Parliament may by laws provide", inserted by-
  - A. 17th Constitution Amendment



- B. 15th Constitution Amendment
- C. 18th Constitution Amendment
- D. 16th Constitution Amendment
- 191. Which of the following is not part of geological disaster?
  - A. Volcanoes
  - B. Earthquakes
  - C. Tsunami
  - D. Sea Surge
- 192. Which of the following were members of the Swaran Singh Committee (1976)?
  - 1. A. R. Antulay
  - 2. S. S. Ray
  - 3. Haridev Joshi
  - 4. C. M. Stephem
  - Select the correct answer using code given

#### Codes:

- A. 1, 2 and 4
- B. 1,2, 3 and 4
- C. 2, 3, and 4
- D. 1.2 and 3
- 193. When was Forest Conservation Act passed in India?
  - A. 1978
  - B. 1979
  - C. 1980
  - D. 1981
- 194. Identify the correct order of various factors in grassland ecosystem.
  - A. Grass, Grasshopper, Frog, Snake
  - B. Grass, Grasshopper, Snake, Frog
  - C. Grasshopper, Frog, Grass, Snake
  - D. Grasshopper, Snake, Frog, Grass
- 195. Emphysema is a disease that cause because of environmental pollution and this disease affects which human's body part:
  - A. Liver
  - B. Kidney

- C. Lungs
- D. Brain
- 196. Which of the following is not a correct pair?
  - A. Blue green algae- Biofertilizer
  - B. Cryosopa Mahocontrol
  - C. Bio- 902 Clone of mustard
  - D. Azotobactor- Bio Pesticides
- 197. Match the following list- I and list- II and choose the correct answer from the codes given below:

List- I

List-II

(Radioactive isotope) (Diagnose indicator usage)

- a) Arsenic -74
- b) Cobalt- 60 c) lodine -131
- d) Sodium-24
- A. a-1; b-2; c-3; d-4
- B. a-4; b-3;c-1; d-2 C. a-3; b-4; c-1; d-2
- D. a-4:b-3:c-2:d-1

- 1. Thyroid grand
- 2. Blood flow 3. Tumour
- 4. Cancer
- 198. The main reason for the decrease in biodiversity is
  - A. Habitat pollution
  - B. Introduction of exotic species
  - C. Over exploitation
  - D. Natural habitat destruction
- 199. Which of the following Acts provides for protection to wild animals in India?
  - A. Wild Animal Protection Act- 1972
  - B. Forests Protection Act- 1982
  - C. Environment Protection Act-1996
  - D. West Bengal Wild Animal Protection Act-1959
- 200. Which one of the following gases, released from bio- gas plant is used as a fuel gas?
  - A. Butane
  - B. Propane
  - C. Methane
  - D. Ethane



Answer Key

ANSWERS D Α С D Α В D Α С Α С D С D Α С

1         C         47         A         93         C         139         C         185           2         C         48         C         94         C         140         D         186           3         D         49         D         95         C         141         B         187           4         A         50         C         96         C         142         D         188           5         B         51         B         97         C         143         B         189           6         C         52         B         98         D         144         B         190           7         A         53         C         99         B         145         C         191           8         A         54         A         100         C         146         C         192           9         D         55         C         101         D         147         A         193           10         B         56         C         102         C         148         B         194           11         B         57	Q.NO	ANSWERS	O NO	ANSWERS	Q.NO	ANSWERS	Q.NO	ANSWERS	Q.NO
2         C         48         C         94         C         140         D         186           3         D         49         D         95         C         141         B         187           4         A         50         C         96         C         142         D         188           5         B         51         B         97         C         143         B         189           6         C         52         B         98         D         144         B         190           7         A         53         C         99         B         145         C         191           8         A         54         A         100         C         146         C         192           9         D         55         C         101         D         147         A         193           10         B         56         C         102         C         148         B         194           11         B         57         B         103         A         149         C         195           12         A         58 <t< th=""><th></th><th></th><th>Q.NO</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>			Q.NO						
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# HIMACHAL PRADESH SUBORDINATE ALLIED SERVICES-2019

### **MODEL TEST-02**

Time Allowed: Three Hours Maximum Marks: 200

### **FULL LENGTH TEST HPSAS**

- 1. Which one of the following is part of the electoral college for the election of the President of India but does not form part of the forum for his impeachment?
  - A. Lok Sabha
  - B. Rajya Sabha
  - C. State Legislative Councils
  - D. State Legislative Assemblies
- 2. The Chief Justice of India can be removed in accordance with the procedure laid down in the Constitution, by the
  - A. President on a resolution by the Parliament
  - B. Parliament alone
  - C. Majority of the judges of the Supreme Court
  - D. The President only
- 3. The position of the Chief Minister is:
  - A. Similar to that of the Prime Minister
  - B. Identical to that of the President
  - C. A combination of the position of the Prime Minister and President
  - D. Not constitutional
- 4. Which of the following categories of persons are entitled to exercise his vote through postal ballot?
  - i. Members of foreign service postal abroad.
  - ii. Members of the armed forces
  - iii. Civil servants on election duty.
  - iv. Indian nationals settled abroad.

### Codes:

- A. Ii and iii
- B. I, ii and iii

- C. I, ii, iii and iv
- D. Land iii
- 5. The Vice- President of India can be removed from his office before the expiry of his term
  - A. By the Rajya Sabha through a resolution passed by two-thirds majority and agreed to by the Lok Sabha
  - B. By the President on the recommendation of the Supreme Court of India
  - C. By the Central Council of Ministers
  - D. By the President
- 6. The right to freedom guaranteed under Article 19 can be restricted:
  - A. In the interest of security of state
  - B. In the interest of friendly relations with a foreign state
  - C. In the interest of public order, decency and morality
  - D. On all the above grounds.
- 7. The appointment of the Pro- tem speaker in Lok Sabha has to be approved by the :
  - A. President
  - B. Members of Lok Sabha
  - C. Council of Ministers
  - D. Speaker
- 8. Which of the following matters can never be discussed in a State Legislature?
  - i. The autonomy of States
  - ii. The conduct of any High Court judge
  - iii. The conduct of the Governor
  - A. I



- B. II
- C. III
- D. II and III
- 9. Which Amendment of the Constitution gave priority to Directive principles over fundamental rights?
  - A. 24th Amendment
  - B. 39th Amendment
  - C. 42<sup>nd</sup> Amendment
  - D. 40th Amendment
- 10. Consider the following statements regarding the National Commission for SC's
  - 1. The chairperson is a person who is or has been a judge of the Supreme Court of a High Court
  - 2. Two persons, who have special knowledge in matters relating to the backward classes
  - Every member shall hold office for a term of two years from the date he assumes office Choose the correct codes from the given below
  - A. 2 and 3
  - B. 1 and 2
  - C. 1 and 3
  - D. None of these
- 11. What was the reason for Gandhi's support to decentralization of power?
  - A. Decentralization ensures more participation of the people into democracy
  - B. India had decentralization of power in the past
  - C. Decentralization was essential for the economic development of the country
  - D. Decentralization can prevent communalism
- 12. The Governor- General was given ordinance making power for the first time by the
  - A. Indian Councils Act, 1861
  - B. Indian Council Act. 1892
  - C. Government of India Act, 1858
  - D. None of the Above

### 13. The case involving an interpretation of the Constitution fall within the

- A. Advisory jurisdiction of the Supreme Court.
- B. Original jurisdiction of the Supreme Court.
- C. Appellate jurisdiction of the Supreme Court.
- D. None of these

### 14. The Indian Constitution establishes a secular State, meaning

- i. The State treats all religious equally
- ii. Freedom of faith and worship is allowed to all the people
- iii. Educational institutions, without exception, are free to impart religious instruction.
- iv. The State makes no discrimination on the basis of the religion in matters of employment.
- A. I and ii
- B. I, ii, iii and iv
- C. Ii, iii, and iv
- D. I. ii and iv

#### 15. In India, Mandamus will lie against:

- A. Officers bound to do a public duty
- B. Government
- C. Both officers and the Government
- D. None of these

### 16. A member of Parliament enjoys immunity from prosecution for having said anything

- A. During the session of the Parliament anywhere.
- B. In the Parliament and its committees.
- C. At the press conference.
- D. On the floor of the Parliament.
- 17. Who among the following is hailed as the 'Father of local self- government' in India?
  - A. Lord Mayo
  - B. Lord Ripon
  - C. Jawaharlal Nehru
  - D. Mahatma Gandhi



- 18. Which one of the following Articles of the Indian Constitution provides that 'It shall be the duty of the and internal disturbance'?
  - A. Article 215
  - B. Article 275
  - C. Article 325
  - D. Article 355
- Which of the following schedules of the Constitution was added by the 35<sup>th</sup> Amendment in 1974 and deleted by the 36<sup>th</sup> Amendment in 1975.
  - A. Eighth
  - B. Ninth
  - C. Tenth
  - D. None of the above
- 20. Which part of the Constitution of India refers to the responsibility of the state toward international peace and security?
  - A. Fundamental Rights
  - B. Directive Principles of State Policy
  - C. Emergency Provisions
  - D. Preamble to the Constitution
- 21. The Preamble enshrines the ideals of "liberty, equality and fraternity"- inspired by the :
  - A. Russian Revolution
  - B. Irish Revolution
  - C. French Revolution
  - D. US Constitution
- 22. The role of Finance Commission in Centre-State fiscal relations has been undermined by the
  - A. State Governments
  - B. Zonal Councils
  - C. Planning Commission
  - D. Central Government
- 23. Shiva Ayyadurai is renowned for procuring a copyright for-
  - A. SMS

- B. Email
- C. MMS
- D. Paging
- 24. India ranks 77th in World Bank's 'Ease of Doing Business' 2019. Which of the following statements is/are correct in this regard?
  - India has been recognized among the top ten improvers for the second consecutive year.
  - 2. The top area of improvement for India was in dealing with construction permits (Its ranking improved to 52 in 2019 from 181 in 2018.
  - India made little improvement in paying taxes, resolving insolvency, enforcing contracts, and protecting minority investors.
  - **4.** India is highest ranking country in South-Asia.

#### Correct code is-

- A. 1,2,3 and 4 are correct
- B. Only 4 is correct
- C. Only 1 and 3 are correct
- D. Only 1 is correct
- 25. Which country is termed as the king of global finance?
  - A. US Dollar
  - B. Sterling Pound
  - C. Chinese Renminbi
  - D. French Frank
- 26. India's first multi- modal terminal on the Ganga river has been opened in-
  - A. Varanasi
  - B. Patna
  - C. Sahibgani
  - D. Haldia
- 27. .....has instructed the media to refrain from using the 'Dalit' and instead use the constitutional term 'Scheduled Caste'.
  - A. The Supreme Court of India



- B. Delhi High Court
- C. Prime Minister Office
- D. Ministry of Information and Broadcasting
- 28. India has entered into an agreement with which country to collaborate for Gaganyaan Mission?
  - A. USA
  - B. Russian Federation
  - C. France
  - D. Germany
- 29. World's first Hydrogen- Powered Train has been launched in-
  - A. China
  - B. Germany
  - C. Australia
  - D. Russia
- 30. World Standards Day is celebrated on-
  - A. 1 October
  - B. 11 October
  - C. 14 October
  - D. 30 October
- 31. Which of the following countries of the European Union is the poorest among the group?
  - A. Bulgaria
  - B. Georgia
  - C. Kosovo
  - D. Maldova
- 32. Which of the following currencies is not a part of Special Drawing Rights (SDRs) of IMF?
  - A. Japanese Yen
  - B. Sterling Pound
  - C. Swiss Franc
  - D. Renminbi
- 33. National War Memorial has been built in-
  - A. Amritsar
  - B. New delhi
  - C. Mumbai

- D. Ahmedabad
- 34. Period: End of Sentence', an Indian documentary film on.... Bags Oscar at 91st Academy Awards (2019).
  - A. Menstruation
  - B. Child Labour
  - C. Plights of Nomadic Tribes
  - D. Sex Workers
- 35. As on March 1, 2019, which of the following countries is/are not the member of UNESCO?
  - **1**. USA
  - 2. ISRAEL
  - 3. China
  - 4. Cuba
  - A. Only 1 and 2
  - B. Only 1
  - C. Only 3 and 4
  - D. 1,2,3 and 4
- 36. One the eve of the Republic Day, 2019 the Rashtrapati Bhavan announced conferring the Bharat Ratna, the country's highest civilian award, on:
  - 1. Bhupen Hazarika
  - 2. Nanaji Deshmukh
  - 3. Pranab Mukherjee

#### Correct Code is-

- A. Only 3
- B. Only 1 and 2
- C. 1,2 and 3
- D. Only 2 and 3
- 37. Who has been appointed Director of Central Bureau of Investigation?
  - A. Javed Ahmad
  - B. Rishi Kumar Shukla
  - C. M.Nageswara Rao
  - D. O.P. Singh
- 38. Which of the following statements is/are correct about 'Raisins Dialogue'?



- **A.** It is an annual conference to discuss geopolitical and geo-economic issues
- **B.** It is organized jointly by the Ministry of External Affairs and Observer Research Foundation
- C. It is a multi-stakeholders, cross- sectoral meeting
- **D.** It gives a definite shape to India's foreign policy

### 39. The theme for International Women's Day (March 8, 2019) is-

- A. Think equal, build smart, innovate for change
- B. Be bold and Ready to fight Gender Discrimination
- C. Empower Yourself
- D. Be a Role Model for others

### 40. Who has been appointed India's first Lokpal?

- A. Justice Dilip Babasaheb Bhosale
- B. Justice Pradip Kumar Mohanty
- C. Justice Ajay Kumar Tripathi
- D. Justice Pinaki Chandra Ghose

### 41. The cut-off date for eligibility consideration under PM-KISAN yojana is-

- A. December 1, 2018
- B. January 1,2019
- C. February 1, 2019
- D. April 1,2019

#### 42. Blue Flame Revolution' is related to-

- A. Discovery and exploration of new fields of natural gas
- B. Pradhan Mantri Ujjwala Yojana
- C. Development of Biogas production and distribution on commercial basis
- D. All of the above

## 43. Sushil Chandra has been appointed new Election Commissioner in February 2019. He is from-

A. Indian Administrative Services cadre

- B. Indian Police Services Cadre
- C. Indian Revenue Services cadre
- D. Indian Forest Services Cadre

### 44. Who has been honoured with Seoul Peace Prize 2018?

- A. Indian Prime Minister Narendra Modi
- B. President of World Bank Jim Yong Kim
- C. Prime Monister of New Zealand Jacinda Ardern
- D. Australian Prime Minister Scott Morrision

### 45. Which of the following towns is termed as the automobile hub in India?

- A. Tirupur (Tamil Nadu)
- B. Sanand (Gujarat)
- C. Vadodara (Guarat)
- D. Indore (Madhya Pradesh)

### 46. Which of the following is regarding as the 'Architect of the Poor'?

- A. Wdwin Lutyens
- B. Le Corbusier
- C. Laurie Baker
- D. Herbert Baker

# 47. Simultaneous elections to the state legislatures of.......were held with the general election to the seventeenth Lok Sabha in 2019.

- 1. Andhra Pradesh
- 2. Telangana
- 3. Odisha
- 4. Arunachal Pradesh
- **5**. Sikkim

#### Correct code is-

- A. Only 1,3,4 and 5
- B. 1,2,3,4, and 5 all
- C. Only 1, and 3
- D. Only 1

### 48. Which company facilitated the US' first revenue earning drone delivery in 2019?

- A. Blue Dart
- B. Amazon



- C. UPS
- D. fedEX
- 49. A 'Poison Pill' is a term used in-
  - A. Industrial Action
  - B. Takeover defence
  - C. Buyback scheme
  - D. Insider Trading
- 50. 'Mission Shakti' is related to -
  - A. Successful testing of anti-satellite missiles
  - B. Power projects development on PPP mode
  - C. Empowerment of tribal adolescent girls
  - D. Protecting the transgender' rights
- 51. Which of the following statements is incorrect election bond?
  - 1. Anybody can donate, through these bonds, to political parties without disclosing his identity.
  - 2. The Election Commission fears that the foreign companies having majority stake in an Indian company would allow unchecked foreign funding of political parties in India, which could lead to Indian policies being influenced by foreign companies.

#### Correct code is-

- A. Only 1 is correct
- B. Only 2 is correct
- C. Both 1 and 2 are correct
- D. Neither 1 nor 2 is correct
- 52. The waves used in common TV remote control are-
  - A. Infra Red Rays
  - B. X-Rays
  - C. Gamma Rays
  - D. Ultra- violet Rays
- 53. Which metal is generally used for coating of brass utensils to prevent copper contamination?
  - A. Aluminium
  - B. Tin
  - C. Lead

- D. Zinc
- 54. Waves of the Ultra High Frequency (UHF) range normally propagate by Means of-
  - A. Space Waves
  - B. Ground Waves
  - C. Surface waves
  - D. Sky waves
- 55. A particle having at least one dimension less than 10-7 metre. Is known as-
  - A. Nano particle
  - B. Micro particle
  - C. Macro particle
  - D. Milli particle
- 56. In humans trisomy of chromosome number 21 is responsible for---
  - A. Down Syndrome
  - B. Haemophilia
  - C. Turner Syndrome
  - D. Klinefelter Syndrome
- 57. The total amount of green-house gases produced, to directly and indirectly support human activities, is referred to as-
  - A. Carbon sequestration
  - B. Carbon dioxide index
  - C. Carbon capture
  - D. Carbon footprint
- 58. India's first Beyond- Visual Range (BVR) airto-air missile indigenously designed & developed by Defence Research and Development organization (DRDO) is-
  - A. Astra
  - B. Prithvi
  - C. Akash
  - D. Agni
- 59. Which of the following plant, grown in nonforest area has been omitted from the definition of trees in the India Forest (Amendment) Act 2017?
  - A. Bamboo



- B. Palm
- C. Banana
- D. Canes
- 60. The basis of DNA finger printing is-
  - A. DNA replication
  - B. The double helix
  - C. DNA Polymorphism
  - D. Errors in base sequence
- 61. National Research Centre on seed spices is located at-
  - A. Beechwal, Bikaner
  - B. Doomara, Ajmer
  - C. Durgapura, Jaipur
  - D. Mandore, Jodhpur
- 62. Which among the following environmental pollutants are responsible for 'acid rain'?
  - A. Nitrous oxide and sulphur dioxide
  - B. Carbon dioxide and Nitrogen
  - C. Ozone and Carbon dioxide
  - D. Carbon monoxide and Carbon dioxide
- 63. Rinderpest, a common disease of animals, is caused by-
  - A. Bacteria
  - B. Virus
  - C. Protozoa
  - D. Helminthes
- 64. Largest Blood cells are-
  - A. Neutrophils
  - B. Monocytes
  - C. Lymphocytes
  - D. Basophiles
- 65. The revolutionary, who was not involved in Hardinge Bomb incident?
  - A. Bhai Balmukund
  - B. Master Amir Chand
  - C. Avadh Bihari
  - D. Bhagwati Charan Vohara

- 66. Who played the role of mediator in Gandhi-Irwin Pact?
  - A. Annie Besant
  - B. Motilal Nehru
  - C. Chintamani
  - D. Tej Bahadur Sapru
- 67. Sixteen coins of king Menander have been found from which of the following sites-
  - A. Rairh
  - B. Bairat
  - C. Nagur
  - D. Nagari
- 68. Which of the following statements is /are true?
  - After the Nagpur Session (1920) of Congress, the provincial Congress Committees were constituted on linguistic basis.
  - **2.** In 1948, Congress rejected the demand of formation of provinces on linguistic basis.

### Select the correct answer from the code below-

- A. Neither (1) nor (2)
- B. Only (1)
- C. Both (1) and (2)
- D. Only (2)
- 69. Who has authored "Gandhian Constitution for Free India"?
  - A. Shriman Narayan Agarwal
  - B. Aruna Asaf Ali
  - C. Humayun Kabir
  - D. Achyut pat Wardhan
- 70. Arrange the following events in their chronological order and select the correct answer from the codes given below:
  - 1. Hunter Commission 1882
  - 2. Sadlar Commission 1917
  - 3. Wood's Despatch 1854
  - 4. Sargeant plant 1944

#### Codes:

A. 1,2,4,3



- B. 3,2,1,4
- C. 1,2,3,4
- D. 3,1,2,4
- 71. Who among the following leaders founded the revolutionary organization- 'Abhinav Bharat Society'?
  - A. Bhagat Singh
  - B. Vinayak Damodar Savarkar
  - C. Barindra Kumar Ghosh
  - D. Pulin Bihari

### 72. Consider the following statements about the European travelers to India:

- I. Sir Thomas Roe, The representative of the East India Company, was granted the permission by Jahangir to open a factory at Surat.
- II. Captain Hawking was driven out from Agra by the Mughals at the instigation of Portuguese.
- III. Father Monserrate travelled with Akbar on his journey to Kashmir.

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

- A. II and III
- B. II only
- C. I and II
- D. I and III

#### 73. Consider the following statements:

- **1.** The All India Khilafat Conference was held in Delhi in 1919
- 2. The Khilafat Conference was held at Sindh in 1920 was attended by Gandhiji
- 3. The Central Khilafat Committee organized an all India Hartal in 1920 under the guidance of Gandhiji

### Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 only
- D. 1,2 and 3

#### 74. Consider the following statements:

- **1.** The Lucknow Session of the Congress (1916) presided by Ambika Charan Majumdar
- 2. The Lucknow Congress (1916) was significant for the famous Congress League Pact, Known as the Lucknow pack
- **3.** The Lucknow Pact accepted separate electorates
- **4.** The Lucknow Pact also accepted reservation of seats for the minorities in the legislatures

### Which of the statements given above are correct?

- A. 1 and 2 only
- B. 3 and 4 only
- C. 2,3 and 4 only
- D. 1,2,3 and 4

### 75. Who came to be known as the Father of Communal Electorate in India?

- A. Montague
- B. Minto
- C. Cornwallis
- D. Wellesely

### 76. In the context of Indian history, the principle of `Dyarchy (diarchy)' refers to

- A. Division of the central legislature into two houses.
- B. Introduction of double government i.e., Central and State governments.
- C. Having two sets of rulers; one in London and another in Delhi.
- D. Division of the subjects delegated to the provinces into two categories.

### 77. Consider the following statements about major events/occurrences in 1930-1940s.

- 1. Poona Pact gave away the Hindu joint electorate and reserves special electorates to the depressed classes.
- **2.** Rajagopalachari became the first governor-general of the Dominion of India.



3. The members of the interim government were members of the Viceroy's Executive Council, and the council came to be vice-chaired by Jawaharlal Nehru.

Select the correct answer using the codes below.

- A. 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. 2 only

### 78. Which one among the following statements is true about Lord Curzon?

- A. He had full sympathy for the Congress
- B. He introduced the Subsidiary Alliance
- C. He succeeded Lord Canning as the Viceroy of India
- D. He separated the divisions of Dacca, Chittagong and Rajshahi from the province of Bengal and annexed them to Asom
- 79. The national leadership got divided into nochangers and pro- changers after the withdrawal of the non-cooperation movement. Who among the following was a no- changer?
  - A. C.R. Das
  - B. Sardar Patel
  - C. Motilal Nehru
  - D. Both (a) and (C)
- 80. Which of the following is the highest waterfall in India?
  - A. Jog fall
  - B. Kunchikal Fall
  - C. Rakim Kund Fall
  - D. Kevti Fall
- 81. MacMohan line forms the boundary between-
  - A. India and China
  - B. India and Pakistan
  - C. India and Myanmar
  - D. India and Nepal

- 82. At the mouth of which of the following rivers the 'bird's foot' type delta is formed?
  - A. Huang Ho
  - B. Nile
  - C. Danube
  - D. Mississippi
- 83. Natural growth of population is the outcome of which of the following?
  - 1. Crude Birth Rate
  - 2. Crude Death Rate
  - 3. Migration
  - 4. Marriages

Select the correct answer from the codes given below:

#### Codes:

- A. Only 1
- B. Only 3
- C. 2 and 4
- D. 1 and 2
- 84. Which of the following is concerned with soil?
  - A. Edaphic
  - B. Climatic
  - C. Biotic
  - D. Topography
- 85. The maximum concentration of ozone is found in which of the following?
  - A. Troposhere
  - B. Mesosphere
  - C. Stratosphere
  - D. Exosphere
- 86. Chemical weathering is most pronounced in:
  - A. Hot and dry climates
  - B. Hot and humid climates
  - C. Cold and dry climates
  - D. Cold and wet climates
- 87. Winter rainfall in North-West India is caused by
  - A. South-West Monsoon



- B. Retreating Monsoon
- C. Tropical Cyclones
- D. Western Disturbances
- 88. Which of the following major cities of India is most eastward located?
  - A. Hyderabad
  - B. Bhopal
  - C. Luck now
  - D. Bengaluru
- 89. Point out the correct sequence of mountain ranges from north to south.
  - A. Great Himalaya, Middle Himalaya, Outer Himalaya, Trans Himalaya
  - B. Trans Himalaya, Great Himalaya, Middle Himalaya, Outer Himalaya
  - C. Middle Himalaya, Great Himalaya, Trans Himalaya, Outer Himalaya
  - D. Outer Himalaya, middle Himalaya, Great Himalaya, Trans Himalaya
- 90. The northernmost point of India is
  - A. Ladakh range
  - B. Karakoram Range
  - C. Indira col
  - D. Aksai Chin
- 91. Prime Meridian passes through which of the following countries?
  - A. France, Spain, Algeria and Mali
  - B. U.K., Morocco, Niger and Nigeria
  - C. Cameroon, Gabon, Congo and Angola
  - D. Namibia, Portugal, Denmark and Belgium
- 92. A river flowing over an area with rock beds dip gently downstream will form:
  - A. Meanders and oxbow lakes
  - B. Levees and flood plains
  - C. Rapids and cascades
  - D. Alluvial fans and alluvial cones
- 93. The most Volatile part the Organized money marked in India is-
  - A. Call Money Market

- B. Government Security Market
- C. Certificate of Deposit Market
- D. Commercial Bill Market
- 94. Which of the following is an example of anthropogenic biome?
  - A. Fresh water
  - B. Grassland
  - C. Rain forest
  - D. Cropland
- 95. India's first national Centre for Marine Biodiversity (NCMB) is located in which city?
  - A. Bhavnagar
  - B. Jamnagar
  - C. Mumbai
  - D. Puducherry
- 96. Dachigam National Park is associated with which of the following?
  - A. Musk Deer
  - B. Golden Oriole
  - C. Yellow- throated Marten
  - D. Hangul or Kashmir Stag
- 97. When the World Biodiversity Day is observed?
  - A. March 22
  - B. May 22
  - C. June 23
  - D. April 16
- 98. Which of the following is concerned with soil?
  - A. Edaphic
  - B. Climatic
  - C. Biotic
  - D. Topography
- 99. As a result of global warming the frequency and serverety of which of the following are increasing due to global warming?
  - A. Cyclones only
  - B. Storms only



- C. Hurricanes only
- D. All of the above
- 100. Which of the following is not an example of in-situ conservation strategy?
  - A. Biosphere reserve
  - B. Botenical garden
  - C. National Park
  - D. Sacred groves
- 101. Collective consumption means
  - A. Household consumption
  - B. Individual consumption
  - C. Self-consumption
  - D. Consumption by the citizens of the country
- 102. Who estimated the National Income for the first time in India?
  - A. Mahalanobis
  - B. Dadabhai Naoroji
  - C. VKRV Rao
  - D. Sardar Pat
- 103. Taxation is a tool of
  - A. Monetary policy
  - B. Fiscal policy
  - C. Price policy
  - D. Wage policy
- 104. Which one of the following is an example of optional money?
  - A. Currency note
  - B. Coins
  - C. Cheque
  - D. Bond
- 105. What is known as the open market operation of the RBI?
  - A. Buying and selling of stocks
  - B. Auctioning of foreign exchange
  - C. Trading in securities
  - D. Transactions in gold
- 106. Where is the headquarters of INTERPOL?
  - A. Paris

- B. London
- C. Lyons
- D. Geneva
- 107. Minorities Rights Day is observed in India on
  - A. 23rd December
  - B. 5th September
  - C. 1st December
  - D. 18th December
- 108. Which section of Gaddis of H.P claim that their ancestors fled from Lahore to escape persecution during the early Mohammedan invasion?
  - A. Rajput Gaddis
  - B. Braham in Gaddis
  - C. Khatri Gaddis
  - D. None of these
- 109. Who is the author of catalogue of the Bhuri Singh Museum, Chamba?
  - A. J. Ph. Vogel
  - B. G.T. Vigne
  - C. C.F. Massy
  - D. J.B. Lyall
- 110. In which districts of H.P. is the average Size of operational holding smallest in state?
  - A. Bilaspur
  - B. Mandi
  - C. Kullu
  - D. Chamba
- 111. In which Vidhan Sabha Election Shanta Kumar and Vir Bhadra Singh contested two Constituencies each?
  - A. 1985
  - B. 1990
  - C. 1993
  - D. 1998
- 112. Soil Health Card Scheme was launched in H.P.?
  - A. 19<sup>TH</sup> Feb, 2015



- B. 24th Feb. 2015
- C. 19th Feb, 2016
- D. None of the above
- 113. When did H.P Abolition of Big Landed Estate Act receive Presidential assent?
  - A. 1952
  - B. 1953
  - C. 1954
  - D. 1955
- 114. The only major irrigation project in the State is Shahnehar Project is in
  - A. Kullu District
  - B. Mandi District
  - C. Kangra District
  - D. Una District
- 115. Who led the Famous Mandi Conspiracy of 1914-1915?
  - A. Swami Krishna Nand
  - B. Pandit Gauri Prasad
  - C. Shobha Ram
  - D. Mian Jawahar Singh
- 116. Who among the following rajas of Bushahr was Ajanbahu (one who can touch his knees with his, hands, while standing straight)?
  - A. Tikka Ram Singh
  - B. Raghunath Singh
  - C. Raja Kehri Singh
  - D. Jagat Singh
- 117. On which river is Harsipattan bridges in Kangra District of H.P.?
  - A. Beas
  - B. Swan
  - C. Binwa
  - D. Neogal
- 118. Uruswati Himalyan Folk Art Museum established by Madam Nicholas Roerich Situated at?
  - A. Dhramshala
  - B. Kullu

- C. Mandi
- D. Shimla
- 119. Which of the following Morarian are situated at keylong, the headquarter of Lahul-Spiti districts of H.P.?
  - A. Khardong
  - B. Shashpur
  - C. tayul
  - D. All of these
- 120. Chamba princely state possessed more than 150 Copper plate title deads approximately how many of them belong to pre-Mohammedan period?
  - A. Zero
  - B. Two
  - C. five
  - D. seven
- 121. Approximately what percentage of total geographical are of H.P. is occupied by the tribes?
  - A. 10 percent
  - B. 20 percent
  - C. 30 percent
  - D. 40 percent
- 122. When did the union parliament pass the state of Himachal Pradesh Act to elevate the status of H.P from U.T. to a full-fledged state?
  - A. July 1970
  - B. October 1970
  - C. December 1970
  - D. January 1971
- 123. According to 2008 AD notification which of the following is not included in the list of difficult and inaccessible area in H.P.?
  - A. Sangrab (Sirmaur)
  - B. Dodra Kawar (Shimla)
  - C. Chhota Banghaql (Kangra)
  - D. Nirmand (Kullu)



- 124. With ruler of which Shimla Hill State did Raja Ranbir Chand, Son of Raja Anirudh Chand of Kangra, take refuse after his selfimposed exile?
  - A. Baghat
  - B. Mangal
  - C. Bhagal
  - D. Keonthal
- 125. In which year did the activists of the Praja Mandal Movement march toward Dhami which culminated in the death of two satyagrahis?
  - A. 1939
  - B. 1941
  - C. 1942
  - D. 1945
- 126. Where does (district) Pajiaras or Pajera, a traditional community worshippers mainly resides?
  - A. Sirmauir Shimla
  - B. Solan Mandi
  - C. Chamba Una
  - D. Kullu Mndi
- 127. According the 2011 census District wise Density of population in
  - A. Hamirpur, Una, Bilaspur
  - B. Una, Hamirpur, Bilaspur
  - C. Una, Hamirpur, Mandi
  - D. None of these
- 128. The average Size of Holding in the H.P. is
  - A. 4 hectare
  - **B**. 2 hectare
  - C. 3 hectare
  - **D**. 1 hectare
- 129. Skill Development Policy of H.P. also know "Him Kaushal" was launched in the year
  - A. 2010
  - B. 2012
  - C. 2014
  - D. 2016

- 130. Recently which of the following community demanded representation in Vidhan Sabha election?
  - A. Sindhi
  - B. Gorkhas
  - C. Gaddi
  - D. Gujjars
- 131. With which Region of H.P. is Sih Dance associated?
  - A. Sirmaur
  - B. Rohru-Jubbal
  - C. Pangi
  - D. Handoor
- 132. Which ruler of Chamba was the contemporary of Akbar?
  - A. Pratap Varma
  - B. Asth Varman
  - C. Sahil Verman
  - D. Yugankar Varman
- 133. 'Chohara' dance belongs to which area?
  - A. Rohru
  - B. Mandi
  - C. Kullu
  - D. Manali
- 134. Which is the most ancient style of temples in the state?
  - A. Pyramidical style
  - B. Tri Anki Style
  - C. Pent-roof Style
  - D. Plan-roof style
- 135. Where in Shimla the All Party conference of the National Leader along with Wavell was held?
  - A. Peterhoff
  - B. Vice Regal Lodge
  - C. Banres Court
  - D. Bentic Castle



- 136. During the invasion of Tughlak in 1338 AD. Who was the ruler of Kangra?
  - A. Sansar Chand
  - B. Parb Chand
  - C. Prithvi Chand
  - D. Megh Chand
- 137. Which mountain range separated kullu from Lahaul Valley?
  - A. Pir Panjal Range
  - B. Rohtang Range
  - C. Bhubhu Range
  - D. None
- 138. Which of the following cantonment provided safety to the panic stricken Britisher during the 1857 uprising?
  - A. Dagshai
  - B. Sabathu
  - C. Kasauli
  - D. All ofthese
- 139. In which district of H.P. IS Col. Sher Jung National Park?
  - A. Kullu
  - B. Sirmaur
  - C. Kangra
  - D. Hamirpur
- 140. According to VikramiSambat when was a treaty concluded between Maharaja Ranjit Singh of Lahore and Raja Sansar Chand of Kangra by which the Kangra fort and District Sandhata were transferred to the Government of Lahore?
  - A. 1853 A.D., Jeshtha5
  - B. 1861 A.D., Asad5
  - C. 1866 A.D., Sawan5
  - D. 1867 A.D., Bhadon5
- 141. Who among the following compiled the Settlement Report of Kangra princely state around 1889 A.D.?
  - A. BernierFrancois
  - B. AlexanderCunningham

- C. Ferishta
- D. G.C.Barnes
- 142. Who co-authored William Moorcraft's account of his travels in Shimla and Panjal Hill States?
  - A. W.G. Archer
  - B. G. Campbell
  - C. Trebeck George
  - D. H. Collct
- 143. During about the reign of which raja of Bilaspur princely state his state (and all other Shimla Hill States) became subject and Tributary to the Mughal Empire?
  - A. Gyan Chand
  - B. Fateh Chand
  - C. Megh Chand
  - D. Rattan Chand
- 144. Who reedited the Pathyar and Kanhiyara inscriptions?
  - A. William Moorcraft
  - B. Thomas Coryat
  - C. Francios Bernier
  - D. StenKonow
- 145. Who vacated his H.P. Vidhan Sabha seat in 1963 to enable Dr. Y.S. Parmar to contest election to the Vidhan Sabha?
  - A. MohanlalAukta
  - B. Hitender Singh Thakur
  - C. Tapinder Singh
  - D. Kalyan Singh
- 146. When was Bonded Labour System (abolition) Act passed in H.P.?
  - A. 1976
  - B. 1981
  - C. 1987
  - D. 1993
- 147. Which of the following positions proximate the status of Raja of Kullu princely state?
  - A. Raja is god's regent



- B. Raja renounces his sovereignty in favour of god
- C. Raja is identified as deity
- D. All of the above
- 148. Who attended Imperial Darbar took place in Delhi in 1857 from Chamba?
  - A. Autar Singh
  - B. Suchet Singh
  - C. Sham Singh
  - D. Henry Davies
- 149. Anglo Gurkha war how many principalities of Shimla Hills came under influence of British?
  - A. 15
  - B. 20
  - C. 14
  - D. 10
- 150. Govind Pal the founder of Dhami state was descendants of which Delhi ruler?
  - A. Prithviraj Chauhan
  - B. Aurangzeb
  - C. Akbar
  - D. Babur
- 151. Where is Nagru wildlife sanctuary located?
  - A. Kinnaur
  - B. Kullu
  - C. LahaulSpiti
  - D. Mandi
- 152. Who was the first British officer appointed to render services to Chamba state in 1863?
  - A. Cunnighan
  - B. Barnes
  - C. Lawerance
  - D. Blai Reid
- 153. Initial meeting between India and Pakistan before Shimla agreement was held at?
  - A. Barne's Court
  - B. Peterhoff

- C. Ellerslie
- D. Gorton castle
- 154. Dakaut who are also known as Bujhroos are said to be progeny of :
  - A. Garg Rishi
  - B. Vashisht Rishi
  - C. Dronancharya
  - D. Brahamacharya
- 155. Jallandhara was son of Sagara (ocean) and Ganga according to:
  - A. Mahabharata
  - B. Padma Purana
  - C. Ramayana
  - D. Kiratarjuniya
- 156. Which of the following is incorrect about
  - A. Dasa, Panies, Asuras and Bratayas are supposed to live during Indus civilization.
  - B. Chamuri, Dhuni, Pipru and Divodas were their powerful chiefs.
  - C. Due to constant effort of Rishi Vishwamitra and Vashista they were accepted to Aryan fold.
  - D. They have been living in Shivalik hills.
- 157. The community Which originated form Panch Gaur and Panch Dravids Brahmins who accepted polluted Dan:
  - A. Bhat
  - B. Acharaj
  - C. Khatik
  - D. Saini
- 158. Arrange the following in increasing order according to their population in Himachal:
  - A. Jains, Christians, Sikhs, Budhists, Muslims, Hindus
  - B. Jains, Sikhs, Christians, Buddists, Muslims, Hindus
  - C. Jains, Christians, Budhists, Sikhs, Muslims, Hindus



- D. Christians, Jains, Budhists, Sikhs, Muslims, Hindus
- 159. During which one of the following marked the beginning of a struggle for power between the monarchy and the Turkish chiefs (chahalgani)?
  - A. Balban
  - B. Raziya
  - C. Naseeruddin Mahmud
  - D. Changez khan
- 160. Name the bill passed by parliament that allowed trusts to establish units in special Economic Zone (SEZs)?
  - A. Special economic zones Bill, 2019
  - B. Special Economic Zones for trusts Bill, 2019
  - C. Special Economic Zones (Amendment) Bill, 2019
  - D. Special Economic Zones (Updated) Bill, 2019
- 161. By which year the scheme, "One Nation One Ration Card" will be available to users in India?
  - A. 1 June 2020
  - B. 1 July 2020
  - C. 1 December 2019
  - D. 1 April 2020
- 162. What is the full form of NIIF?
  - A. NIIF- National Interest on Infrastructure Fund
  - B. NIIF- National Infrastructure and Investment Fund
  - C. NIIF- National Interest on Investment Fund
  - D. NIIF- National Investment and Infrastructure Fund
- 163. Gaganjeet Bhullar is associated with which sport?
  - A. Badminton
  - B. Cricket
  - C. Football

- D. Golf
- 164. Name the chief economic advisor of India, who prepared Economic survey 2018-19?
  - A. Amit Mitra
  - B. Krishnamurthy Subramanian
  - C. Arvind Subramanian
  - D. Amartya Sen
- 165. Who won the gold medal in women's 200 metre in Poznan athletics grand prix 2019 held in golecin stadium, Poznan, Poland?
  - A. Hima Das
  - B. V.K. Vismaya
  - C. Dutee Chand
  - D. M.R. Poovamma
- 166. Name the scheme, which is extended to fisheries and animal husbandry farmers in order to assist them to meet their working capital needs?
  - A. Deen Dayal Upadhyaya Grameen Kaushalaya Yojana (DDUGKY)
  - B. Kisan Credit CARD (KCC)
  - C. Pradhan Mantri Gram Sadak Yojana (PMGSY)
  - D. Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
- 167. What is the rank of India in Henley passport Index 2019, based on their Visa-Free Scores?
  - A. 85
  - B. 70
  - C. 86
  - D. 90
- 168. Name the operation launched by the border security forces (BSF) to fortify Anti-Infiltration grid along the Pakistan border in Punjab and Jammu?
  - A. Operation steeplechase
  - B. Operation Vijay
  - C. Operation Sudarshan
  - D. Operation polo



- 169. Expand NCGG?
  - A. National Centre for Good Governance
  - B. Nominal Centre for Good Government
  - C. National Centre for Greenhouses Gases
  - **D.** National Centre for General Goods
- 170. Where was the FIFA Women's world cup 2019 or 8th edition of the FIFA Women's world cup held?
  - A. France
  - **B**. Russia
  - C. Japan
  - D. China
- 171. Where was the 34th edition of the national level sailing championship 2019 held?
  - A. Chennai club, Tamil Nadu
  - B. Kolkata Club, West Bengal
  - C. Mumbai Club, Maharashtra
  - D. Secunderabad Club, Telangana
- 172. The first Indian selected for Indian Civil Service was:
  - A. SatyendraNath Tagore
  - B. Sarojini Naidu
  - C. LalaLajpat Rai
  - D. C.R. Das
- 173. In 1939, for the first time, Gandhiji tried out his specific techniques of controlled mass struggle in a native state. He allowed a close associate of his to lead a Satyagraha. Who was he?
  - A. K. T. Bhashyam in Mysore
  - B. Jamnalal Bajaj in Jaipur
  - C. Vallabh Bhai Patel in Rajkot
  - D. NebakrushnaChaudhri in Dhenkanal
- 174. One t ime associate of Mahatma Gandhi broke off from him and launched a radical movement called 'self respect movement'. Who was he?
  - A. P. ThyagarajaShetti
  - B. ChhatrapatiMaharaj

- C. E.V. RamaswamyNaicker
- D. JyotiraoGovindraoPhule
- 175. Which one of the following libraries has the largest collection of man uscripts of historical value?
  - A. KhudaBaksh Oriental Public Library
  - B. Tanjavur Maharaja Serfoji Saraswati Mahal Library
  - C. Asiatic Society Library
  - D. Rampur Raza Library
- 176. Which British Governor General introduced Postage Stamp in India?
  - A. Lord Dalhousie
  - B. Lord Auckland
  - C. Lord Canning
  - D. Lord William Bentinck
- 177. Who was the first Indian to be elected to the British Parliament?
  - A. Dadabhai Naoroji
  - B. Gopala Krishna Gokhale
  - C. Bipin Chandra Pal
  - D. Lala Lajpat Rai
- 178. Which among the following regulations made English as a medium of education compulsory in government aided schools and colleges?
  - A. Pitts India Act, 1784
  - B. Educational Despatch, 1854
  - C. Macaulay Minute, 1835
  - D. Regulating Act, 1773
- 179. Who was the National leader who wrote History of India on the walls of the Andaman Cellular Jail?
  - A. Nandanial Bose
  - B. Ambedkar
  - C. VirSavarkar
  - D. JyotibaPhule



- 180. One of the following was not involved in the Chittagong Armoury Raid, 1934. Who was he?
  - A. KalpanaDutt
  - B. Surya Sen
  - C. PritialataWoddedar
  - D. Dinesh Gupta
- 181. Which Indian statesman used these magic words, "Long years ago we made a tryst with destiny, and now the time comes when we shall redeem our pledge ...."?
  - A. Mohandas Karamch and Gandhi
  - B. SardarVallabhbhai Patel
  - C. Netaji Subhas Chandra Bose
  - D. Jawaharlal Nehru
- 182. Who scripted Gandhiji's favorite song 'Vaishnav Jan To ....."?
  - A. Narsinh Mehta
  - B. Preman and
  - C. Chunilal
  - D. Dharmiklal
- 183. Who wrote "Sarfaroshi Ki Tamanna Ab HamaareDil Mein Hai"?
  - A. Mohammed Iqbal
  - B. RamprasadBismil
  - C. KaziNazrul Islam
  - D. FiragGorakhpuri
- 184. Who from the following leaders was not assassinated?
  - A. Mahatma Gandhi
  - B. Liaqat Ali Khan
  - C. Muhammed Ali Jinnah
  - D. Lord Louis Mountbatten
- 185. What is the history of Raja Jagat Singh of Kullu?
  - A. He was the ruler of Kullu
  - B. Sikh snatched his title of 'Raja'
  - C. He was deployed as the Wazir of Wazir of Wazirupi in 1840 AD. By Sikh
  - D. All are true

- 186. Which valley in Kinnaur is considered as the most beautiful valley?
  - A. Hanrang Valley
  - B. Lippa Valley
  - C. Nichar Valley
  - D. Baspa Valley
- 187. Which viceroy of British- India pays a weeklong visit to Chamba in sep, 1900 AD. Along with his family?
  - A. Lord Lytton
  - B. Lord Mayo
  - C. Lord Curzon
  - D. Lord Dalhousie
- 188. Where C. S. I. R complex is located?
  - A. Nahan
  - B. Parwanoo
  - C. Palampur
  - D. Shamshi
- 189. Metamorphic rocks originate from
  - A. Igneous rocks
  - B. Sedimentary rocks
  - C. Both 'a' and 'b'
  - D. None of the above
- 190. Which one of the following is used in large quantities in Cement Industry?
  - A. Gypsum
  - B. Limestone
  - C. Coal
  - D. Clay
- 191. In 1948 'Dodra Kawar' became the part of
  - A. Chamba
  - B. Mandi
  - C. Sirmaur
  - D. Mahasu
- 192. Who made the 'Deepavali Declaration' and when?
  - A. Gandhiji in 1930
  - B. Subhash Chandra Bose in 1941



- C. Lord Irwin in 1929
- D. Jawaharlal Nehru in 1929
- 193. When was the first agriculture census of India conducted?
  - A. 1880
  - B. 1890
  - C. 1921
  - D. 1970
- 194. 'Subroto cup' is associated with which game/sports?
  - A. Hockey
  - B. Football
  - C. Basketball
  - D. Badminton
- 195. ISI Mark is not given to which of the following products?
  - A. Electric goods
  - B. Hosiery goods
  - C. Biscuits
  - D. Cloth
- 196. What are the main components of basic social infrastructure of an economy?
  - A. Education, Industry and Agriculture
  - B. Education, Health and Civil Amenities
  - C. Transport, Health and Banks

- D. Industry, Trade and Transport
- 197. Who was the first woman Chief Justice of a High Court of a state in India?
  - A. Sunanda Bhandare
  - B. Fathima Beevi
  - C. Leila Seth
  - D. Anna Chandy
- 198. Special Economic Zone (SEZ) concept was first introduced in
  - A. China
  - B. Japan
  - C. India
  - D. Pakistan
- 199. Regional Rural Banks are sponsored by
  - A. Nationalized Commercial Bank
  - B. Reserve Bank of India
  - C. State Bank of India
  - D. Government of India
- 200. Which of the following is not the source of the revenue of Central government?
  - A. Income Tax
  - B. Corporate Tax
  - C. Agricultural Income Tax
  - D. Excise Duty



**Answer Key** 

Allswei Rey									
Q.NO	ANSWERS	Q.NO	ANSWERS	Q.NO	ANSWERS	Q.NO	ANSWERS	Q.NO	ANSWER
1	D	47	Α	93	Α	139	В	185	D
2	Α	48	Α	94	D	140	С	186	D
3	Α	49	В	95	В	141	В	187	С
4	С	50	A	96	D	142	С	188	C
5	A	51	C	97	В	143	A	189	C
6	D	52	A	98	A	144	C	190	В
7		53		99	D		В		
	A		В			145		191	D
8	В	54	A	100	В	146	A	192	С
9	С	55	Α	101	Α	147	D	193	D
10	D	56	Α	102	В	148	В	194	В
11	Α	57	D	103	В	149	В	195	С
12	Α	58	Α	104	С	150	Α	196	В
13	В	59	Α	105	С	151	D	197	С
14	D	60	С	106	С	152	D	198	Α
15	С	61	В	107	D	153	С	199	Α
16	В	62	Α	108	С	154	Α	200	С
17	В	63	В	109	A	155	В		
18	D	64	В	110	A	156	В		
19	C	65	D	111	В	157	В		
20	В		D	112		157	С		
		66			A				
21	С	67	В	113	В	159	В		
22	С	68	С	114	С	160	С		
23	В	69	Α	115	С	161	В		
24	Α	70	D	116	С	162	D		
25	Α	71	В	117	Α	163	D		
26	Α	72	D	118	В	164	В		
27	D	73	D	119	D	165	Α		
28	С	74	D	120	В	166	В		
29	В	75	В	121	D	167	С		
30	С	76	D	122	С	168	С		
31	Α	77	Α	123	В	169	Α		
32	C	78	D	124	C	170	A		
33	В	79	В	125	A	171	D		
34	A	80	В	126	C	172	A		
35	A	81	A	127	A	172	C		
36	С	82	D	128	D	174	С		
37	В	83	D	129	D	175	Α		
38	В	84	Α	130	В	176	Α		
39	Α	85	С	131	В	177	Α		
40	D	86	В	132	Α	178	С		
41	В	87	С	133	Α	179	С		
42	В	88	С	134	С	180	D		
43	В	89	В	135	В	181	D		
44	Α	90	С	136	С	182	Α		
45	В	91	A	137	A	183	В		
46	C	92	C	138	A	184	C		
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NIMBUS
ACADEMY
BEING
AWARDED
AS BEST
INSTITUTE OF
CHANDIGARH
AND SHIMLA BY
STATE
PRESIDENT
INTUC (HP ) AND
NATIONAL
SECRETARY
INTUC





























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