

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

[1st Week] Aug 2024

10 PM Compilation August [First Week] 2024

INDEX

Art & Culture	2
Modern Indian History	2
Geography	2
Polity	3
Acts & Policies.....	5
Index & Reports.....	7
International Relations/Organizations	8
Economy	9
Environment.....	11
Science & Technology	13
Answer Key	15
Answers & Explanations	16

Art & Culture

Q.1) In the context of epigraphy, the term estampage refers to:

- A digital scanning technique used to create 3D models of inscriptions.
- The process of chemically treating stone surfaces to enhance the visibility of inscriptions.
- A method of copying inscriptions by making an exact imitation on inked paper.
- The act of translating ancient scripts into modern languages for easier interpretation.

Q.2) Consider the following statements:

- The Tarangam is a unique aspect of Kuchipudi where the dancer wears a costume that is colourful and elaborate, often featuring traditional attire.
- The basic rhythmic unit in Bharatanatyam is tala.

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

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

Q.3) Consider the following statements:

- The World Crafts Council (WCC) aims to empower artisans and safeguard the heritage of traditional crafts.
- Cities recognized by the UNESCO Creative Cities Network (UCCN) for crafts and folk arts are also recognized as World Craft Cities.
- One of the criteria for a city to be recognized as a World Craft City is that it must host an annual international craft fair.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Modern Indian History

Q.4) Consider the following statements:

- Rabindranath Tagore is often referred to as the Poet of the East.
- Visva Bharati University was founded by Rabindranath Tagore.
- Kapalkundala is a famous book written by Rabindranath Tagore.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Geography

Q.5) Which one of the following statements is correct about the South China Sea?

- It is bordered by South Korea.
- It has significant oil and natural gas reserves.
- It is deeper than the East China Sea.
- It is connected to the Sea of Japan.

Q.6) Consider the following statements:

1. Currently, only genetically modified cotton is approved for cultivation in India.
2. Wheat is a common crop that is genetically modified for cultivation globally.
3. GM crops are modified to introduce traits like pest resistance, higher yields, improved nutritional value, and resistance to environmental challenges.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.7) Which one of the following is Sudan's primary natural resources?

- a) Diamonds
- b) Petroleum
- c) Timber
- d) Uranium

Q.8) In which one of the following oceans is Fiji located?

- a) Atlantic Ocean
- b) Indian Ocean
- c) Pacific Ocean
- d) Arctic Ocean

Q.9) Consider the following pairs:

Geographical Terms-----Definitions

1. Avulsion----- A significant length of a river or stream channel which no longer conveys fluvial discharge as part of an active fluvial system.
2. Sand dikes ----- A seam of sedimentary material that fills an open fracture in and cuts across sedimentary rock strata or layering in other rock types.
3. Paleochannel----- The process in which river flows are diverted out of an established channel into a new course at a lower elevation on the adjacent surface.

How many of the above pairs are correctly matched?

- a) Only one pair
- b) Only two pairs
- c) All three pairs
- d) None of the pairs

Polity

Q.10) With reference to the Union Public Service Commission (UPSC), consider the following statements:

1. The President of India appoints the Chairman of the Union Public Service Commission (UPSC).
2. The maximum tenure of the UPSC Chairman is six years or until the age of 65 years.
3. A candidate for the UPSC Chairman position must possess at least 15 years of service in either Central or State government roles.

Which of the statements given above are correct?

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

Q.11) Consider the following:

1. A bill imposing income tax
2. A bill regulating government borrowing
3. A bill imposing fines for traffic violations
4. A bill establishing a National Health Insurance Scheme

How many of the above can be considered as a Money Bill?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.12) Consider the following statements:

1. NITI Aayog aims to foster competitive federalism by creating indices and ranking states.
2. NITI Aayog possess financial authority or enforcement powers for fiscal transfer to states.

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

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

Q.13) In the context of the Indian Polity, which one of the following is NOT a core element of a 'Privilege Motion'?

- a) Breach of privilege
- b) Notice given to the Speaker
- c) Immediate discussion
- d) Motion moved by a member

Q.4) Which one of the following writs cannot be issued against the President of India or the Governor of a State?

- a) Habeas Corpus
- b) Mandamus
- c) Certiorari
- d) Quo Warranto

Q.15) With reference to the Indian National Flag, consider the following statements:

1. Pingali Venkayya designed the original flag.
2. The flag was first presented in the Lahore Session, 1929 of the Indian National Congress.
3. The ratio of the width (height) to the length of the flag is 2:3.
4. The diameter of the Ashoka Chakra is specified to be one-fourths of the height of the white band.

Which of the statements given above are correct?

- a) 1 and 3 only
- b) 2, 3 and 4 only
- c) 2 and 3 only
- d) 1, 3 and 4 only

Q.16) With reference to the Competition Commission of India (CCI), consider the following statements:

1. CCI is empowered to promote competition advocacy and awareness.
2. It can emphasize sustainability policies and encourage enterprises collaboration for green innovations.

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

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

Q.17) Consider the following statements:

1. Demands for Grants are the proposals made by the government for the allocation of funds to various ministries and departments.
2. Estimates Committee in the Parliament scrutinizes the Demands for Grants for each ministry.
3. If a Demand for Grant is not approved by the Parliament, the Finance Minister can reallocate funds from other grants.
4. The Appropriation Bill seeks to withdraw money from the Consolidated Fund of India to meet the approved demands.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.18) Which one of the following is a key feature of Zero Hour in the Parliament?

- a) Ministers are required to provide written answers.
- b) It is a formal procedure listed in the parliamentary rules.
- c) It allows Members of Parliament MPs to raise matters with or without prior permission from the Chair.
- d) It is used for the introduction of new bills.

Q.19) Consider the following statements:

1. The Lieutenant Governor (L-G) of Delhi has the authority to nominate aldermen to the Municipal Corporation of Delhi (MCD) without requiring the aid and advice of the Delhi Government.
2. The power of the Lieutenant Governor to nominate aldermen to the Municipal Corporation of Delhi is established by the Constitution of India.

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

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

Q.20) Consider the following statements:

Statement-I: In India, killing of stray dogs by municipal authorities is prohibited.

Statement-II: Showing compassion for animals is a fundamental duty of every citizen, as enshrined in the Constitution.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Acts & Policies

Q.21) With reference to the Bharatiya Vayuyan Vidheyak Bill 2024, consider the following statements:

1. It empowers the central government to make rules for the investigation of any air accident or incident.
2. The Bill introduces new taxes on aviation fuel.
3. The Bill, through its provisions, aims to support Make in India initiative.

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

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

Q.22) Which one of the following statements best describes the concept of 'One Health'?

- a) It is a framework that deals with environmental health issues separately from human and animal health.
- b) It is an environmental program aimed at preserving biodiversity and preventing climate change.
- c) It is a veterinary initiative that primarily deals with the welfare and treatment of domestic animals.
- d) It is an approach that integrates the health of humans, animals, and the environment to achieve optimal health outcomes.

Q.23) With reference to the Disaster Management (Amendment) Bill, 2024, consider the following statements:

- 1. The Bill proposes the establishment of a comprehensive disaster database at both the national and state levels.
- 2. The Bill proposes the establishment of a National Crisis Management Committee for better disaster management in urban areas.
- 3. It aims to strengthen the working of National Disaster Management Authority (NDMA).

Which of the statements given above are correct?

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

Q.24) With reference to the Right of Children to Free and Compulsory Education (RTE) Act, 2009, consider the following statements:

- 1. This Act made education a fundamental right in India for children between the ages of 6 and 14.
- 2. The primary objective of the Act is to ensure education from pre-school to eighth standard.
- 3. The Act mandates that all private schools must reserve 15% of their seats for children from socially disadvantaged and economically weaker sections.
- 4. The Act prohibits any screening procedure for admission to ensure non-discrimination and equal access to education.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.25) Consider the following statements:

- 1. The aim of the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) is to ensure that no one goes hungry by providing free food grains to the most vulnerable sections of society.
- 2. The primary objective of the Price Monitoring System (PMS) mobile app is to facilitate online shopping for the underprivileged communities.

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

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

Q.26) With reference to the Employment Linked Incentive (ELI) scheme, consider the following statements:

- 1. Manufacturing and service sectors are primarily targeted by the ELI scheme.
- 2. Ministry of Labour and Employment is responsible for implementing the scheme.
- 3. Low-interest loans are provided under the scheme to the employer as incentives.

Which of the statements given above are correct?

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

Q.27) With reference to the Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) scheme, consider the following statements:

1. It aims to offer health insurance to unorganized sector workers.
2. The spouse can continue the scheme by paying regular contributions if the subscriber of the scheme dies before attaining the age of 60 years.
3. Under the scheme, family pension is applicable only to the spouse.

Which of the statements given above are correct?

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

Q.28) With reference to the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), consider the following statements:

1. The scheme aims to promote medical research and increase the number of doctors in rural areas.
2. The Ministry of Health and Family Welfare is the nodal ministry for the implementation of the scheme.

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

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

Index & Reports

Q.29) With reference to Travel and Tourism Development Index 2024, consider the following statements:

1. India is the topmost-ranked country in South Asia.
2. The index is released by the World Economic Forum (WEF).

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

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

Q.30) Gadgil Committee Report, seen in the news recently, is used in the context of:

- a) Protection of Western Ghats
- b) Constitutional Reforms
- c) Urban development planning
- d) Ganga Action Plan

Q.31) With reference to the India's National Multidimensional Poverty Index (MPI), consider the following statements:

1. It measures income inequality across different states.
2. Alkire-Foster methodology is used for calculating the National Multidimensional Poverty Index (MPI) in India.
3. Twelve indicators are included in India's National Multidimensional Poverty Index.
4. Maternal health and bank accounts are included in India's National MPI but they are not part of the Global MPI.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

International Relations/Organizations

Q.32) In the context of the Indo-Pacific Economic Framework, which one of the following best describes the concept of "supply chain resilience"?

- a) Diversifying sources of critical goods and materials to prevent disruptions.
- b) Eliminating all trade barriers to ensure smooth logistics operations.
- c) Creating a unified digital platform for real-time supply chain management.
- d) Establishing a centralized supply chain authority for the Indo-Pacific region.

Q.33) The term 'Five Mutuals,' recently mentioned in the news, is associated with:

- a) The economic cooperation framework between the United States and the European Union.
- b) The environmental conservation agreement among BRICS nations.
- c) The principles guiding China-India bilateral relations.
- d) The trade agreement between ASEAN countries.

Q.34) Consider the following pairs:

Initiatives/Projects-----Features

- 1. India-Middle East Europe Economic Corridor (IMEEC)---- Enhance connectivity and trade between India, the Middle East, and Europe
- 2. Chabahar Port----- Provide India with a strategic maritime route to Afghanistan and Central Asia
- 3. I2U2 Initiative ----- Promote economic cooperation and development among India, Israel, the UAE, and the USA

Which of the above pair(s) is/are correctly matched?

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

Q.35) With reference to the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation – BIMSTEC, how many of the following statements are correct?

- 1. BIMSTEC Ministerial Meeting is the highest decision-making body of BIMSTEC.
- 2. Dhaka Declaration led to the establishment of BIMSTEC.
- 3. Thailand is the permanent secretariat of BIMSTEC.
- 4. BIMSTEC Business Summit aims to facilitate economic collaboration and explore ways for regional connectivity, energy security, inclusive growth, and sustainable development.

Select the correct answer using the codes given below:

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.36) Which one of the following is the primary significance of the Agartala-Akhaura railway project?

- a) It is the first railway project between India and Nepal.
- b) It is the first railway project between the North Eastern States of India and Bangladesh.
- c) It connects India with Bhutan.
- d) It is the longest railway project in India.

Economy

Q.37) Which one of the following is a likely consequence of sustained decline in core industries on India's foreign direct investment (FDI) inflows?

- a) There will be an increase in FDI due to cheaper acquisition opportunities.
- b) There will be a decrease in FDI due to reduced investor confidence.
- c) There will be a complete shift of FDI to the service sector.
- d) There will be no impact on FDI inflows.

Q.38) Which one of the following statements describes the term 'Indexation'?

- a) It refers to the practice of adjusting the interest rates on loans based on the credit score of the borrower.
- b) It is the process of linking the value of a financial asset to the performance of a specific stock market index.
- c) It refers to adjusting the nominal value of wages, benefits, or financial instruments to account for changes in the cost of living or inflation.
- d) It is a method used by companies to increase the prices of their products based on market demand and competition.

Q.39) Consider the following pairs:

Corridors ----- Key Features

- 1. Ayodhya Ring Road----- Four-lane access-controlled ring road for pilgrims
- 2. Tharad-Ahmedabad Corridor ----- National high-speed corridor improving connectivity between two cities
- 3. Agra-Gwalior Corridor----- Six-lane high-speed corridor connecting two key national highways

How many of the above pairs are correctly matched?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.40) Consider the following:

- 1. Coffee
- 2. Rubber
- 3. Cotton
- 4. Maize

For how many of the above crops is the Minimum Support Price (MSP) provided?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q41) In which one of the following ways does a US Federal Reserve rate cut impact foreign investment in India?

- a) It will decrease foreign investment in India
- b) It will have no impact on foreign investment in India
- c) It will increase foreign investment in India
- d) It will lead to the withdrawal of foreign investment from India

Q.42) Zero-based budgeting (ZBB) refers to:

- a) A budgeting method where expenses are based on historical spending patterns and adjusted for inflation.
- b) A financial strategy that involves cutting all non-essential expenses to zero each year.
- c) A budgeting method where each expense item is justified for the current period, regardless of the spending levels of the past year.
- d) A budgeting approach that only applies to capital expenditures and ignores operational costs.

Q.43) Consider the following statements:

Statement-I: The Union Budget 2024-25 has lowered the Basic Customs Duty (BCD) on imported chemicals.
Statement-II: India is a major pharmaceutical and chemicals manufacturer and also an exporter of complex chemicals.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Q.44) The Modified Interest Subvention Scheme (MISS) aims to:

- a) Provide financial assistance to large-scale industries.
- b) Encourage banks to lend more to priority sectors.
- c) Provide concessional credit to farmers.
- d) Reduce the overall fiscal deficit of the country.

Q.45) Consider the following statements:

- 1. In India, a significant portion of the population is employed in agriculture, but productivity remains low.
- 2. The Liberalization, Privatization, and Globalization (LPG) reforms have not resulted in a substantial reduction in poverty levels in India.
- 3. India has not been able to effectively utilize its surplus labour to expand its manufacturing sectors.

Which of the statements given above are correct?

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

Q.46) Consider the following pairs:

Committees----- Definition of Poverty Line (PL)

- 1. Lakdawala ----- Suggested using state-specific poverty lines updated with Consumer Price Index Number for Industrial Workers (CPI-IW) and Consumer Price Index for Agricultural Labourers (CPI-AL), based on calorie consumption.
- 2. Tendulkar----- Recommended a uniform poverty line for both rural and urban India.
- 3. Rangarajan----- Reverted to separate poverty line baskets for rural and urban areas and included normative levels of nourishment, clothing, and other non-food expenses.

Which of the above pairs are correctly matched?

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

Q.47) Which one of the following statements is correct?

- a) A lower fiscal deficit always results in a credit rating upgrade.
- b) A lower fiscal deficit can reduce the perceived risk of lending to the government.
- c) A lower fiscal deficit leads to an increase in per capita income.
- d) A lower fiscal deficit decreases investor confidence.

Q.48) If indexation benefits are removed from Long-Term Capital Gains (LTCG) taxation, which one of the following strategies would likely become less attractive to investors?

- a) Holding investments for longer periods.
- b) Investing in tax-exempt securities.
- c) Using capital losses to offset gains.
- d) Making use of tax-saving instruments.

Environment

Q.49) Consider the following statements:

- 1. Pumped Storage Hydropower (PSH) can store excess energy generated during peak production times and release it when needed.
- 2. At present, India does not have installed pumped storage capacity.
- 3. PSH can operate independently of the grid.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.50) Consider the following statements:

- 1. Environment (Protection) Act, 1986 empowers the Central Government to declare Eco-Sensitive Zones (ESZs) in India.
- 2. Agriculture is generally prohibited in Eco-Sensitive Zones (ESZs).
- 3. The United Nations Framework Convention on Climate Change (UNFCCC) supports the protection of Ecologically Sensitive Areas (ESAs) by focusing on biodiversity conservation.
- 4. Proximity to urban centers, availability of natural resources, and potential for tourism development are the key criteria used by the government in India to designate an area as ecologically sensitive.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.51) Which one of the following practices is more likely to be found in organic farming but not in natural farming?

- a) Use of compost
- b) No-till farming
- c) Polyculture
- d) Natural pest control

Q.52) Consider the following:

1. Saltwater flooding
2. Microplastics
3. Sea waves

How many of the factors mentioned above would affect coastal plants?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.53) With reference to the sloth bear, consider the following statements:

1. They are mostly nocturnal.
2. They are found in India.
3. They are listed Critically Endangered on the IUCN Red List.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.54) Consider the following:

1. Nitrogen fixation
2. Carbon sequestration
3. Soil erosion prevention

Which of the above ecological roles are performed the Indian Siris tree (*Albizia lebbek*)?

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

Q.55) Consider the following statements:

1. Desertification is a cause of deforestation.
2. Crop rotation is a major contributor to deforestation in tropical regions.
3. A significant environmental consequence of deforestation is increased carbon dioxide in the atmosphere.
4. Selective logging and wildfires sometimes harm the climate more than deforestation.

Which of the statements given above are correct?

- a) 1, 3 and 4 only
- b) 3 and 4 only
- c) 2, 3 and 4 only
- d) 1, 2 and 3 only

Q.56) Consider the following statements:

1. The Great Barrier Reef is the largest living ecosystem in the world.
2. Ocean acidification contributes to coral bleaching by reducing the amount of oxygen in the water.
3. The most significant impact of coral bleaching is the increased fish populations due to reduced coral predation.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Science & Technology

Q.57) Consider the following statements regarding the military exercise 'Tarang Shakti 2024':

1. It aims to showcase India's defence capabilities and enhance cooperation among the participating militaries.
2. The exercise will be conducted in two phases.
3. Australia, Bangladesh, Greece, and Singapore will participate in phase one of Tarang Shakti 2024.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.58) Consider the following:

1. Enhancing security
2. Increasing transaction speed
3. Reducing operational costs
4. Strengthening privacy

How many of the above are benefits of Alternative Factor Authentication (AFA)?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Q.59) Consider the following statements:

1. India has the fourth highest lung cancer cases in the world.
2. Smoking tobacco is the main risk factor for lung cancer.
3. India lacks a proper screening mechanism for lung cancer.

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

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

Q.60) Which one of the following is a common cause of 'Encephalitis'?

- a) Bacterial infection
- b) Viral infection
- c) Fungal infection
- d) Parasitic infection

Q.61) Consider the following statements:

Statement-I: India faces double burden of malnutrition.

Statement-II: Urban areas in India have poor dietary habits and lifestyle routine.

Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct but Statement-II is incorrect
- d) Statement-I is incorrect but Statement-II is correct

Q.62) With reference to the Axiom-4 mission, consider the following statements:

1. It will be India's first mission to Mars.
2. It will be a purely robotic mission.
3. It is a joint mission by Indian Space Research Organisation (ISRO) and European Space Agency (ESA).

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.63) Consider the following statements:

1. The primary goal of the National Research Foundation (NRF) is to generate profit from funded research projects.
2. The Union Budget 2024-25 has increased the budget allocation to scientific Research & Development.

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

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

Q.64) Consider the following statements:

1. Lithium-ion batteries are widely used in electric vehicles, mobile devices, and energy storage systems.
2. Chile is the largest lithium producer in the world.
3. In India, lithium reserves have been discovered, but extraction has not yet begun.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Q.65) A quartz clock is different from an atomic clock in terms of:

- a) The type of power source used.
- b) The accuracy and precision of timekeeping.
- c) The size and weight of the device.
- d) The ability to display different time zones.

Q.66) Sucralose is considered a non-caloric sweetener because:

- a) It is metabolized very slowly by the body.
- b) It is not metabolized by the body and is excreted unchanged.
- c) It is broken down into glucose and fructose.
- d) It contains fewer carbohydrates than sucrose.

Q.67) With reference to the Rashtriya Vigyan Puraskar award, consider the following statements:

1. It recognizes and honour outstanding and inspiring scientific, technological, and innovation contributions by researchers, technologists, and innovators.
2. Medicine, Agriculture, Environmental Science, and Technology are some of the categories available for the award.
3. Both Indian citizens and foreign nationals are eligible for the award.

How many of the statements given above are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

10 PM Compilation August [First Week] 2024

Q.68) Consider the following statements:

1. National Disaster Management Authority (NDMA) has the authority to declare a disaster as a national calamity in India.
2. Sendai Framework for Disaster Risk Reduction (SFDRR) is followed by India for disaster risk reduction.

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

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

Q.69) Which one of the following statements is correct regarding the Kavach system used in Railways?

- a) It has been developed by the Defence Research and Development Organisation (DRDO).
- b) Kavach system communicates with trains through satellite communication.
- c) Kavach is designed only for high-speed trains and cannot be used on regular passenger trains.
- d) It regulates the train's speed according to permissible limits.

Q.70) The primary objective of 'Operation Dudhi' was to:

- a) Prevent smuggling of wildlife and forest products
- b) Conduct a counter-insurgency operation against militants
- c) Evacuate Indian citizens from a conflict zone
- d) Incorporate Portuguese territories into India

Answer Key

1 - (c)	2 - (b)	3 - (a)	4 - (b)	5 - (b)	6 - (b)	7 - (b)	8 - (c)	9 - (a)	10 - (a)
11 - (b)	12 - (a)	13 - (c)	14 - (b)	15 - (a)	16 - (c)	17 - (b)	18 - (c)	19 - (a)	20 - (b)
21 - (d)	22 - (d)	23 - (c)	24 - (c)	25 - (a)	26 - (a)	27 - (b)	28 - (b)	29 - (c)	30 - (a)
31 - (c)	32 - (a)	33 - (c)	34 - (d)	35 - (a)	36 - (b)	37 - (b)	38 - (c)	39 - (a)	40 - (b)
41 - (c)	42 - (c)	43 - (d)	44 - (c)	45 - (c)	46 - (d)	47 - (b)	48 - (a)	49 - (a)	50 - (a)
51 - (a)	52 - (c)	53 - (b)	54 - (d)	55 - (b)	56 - (a)	57 - (b)	58 - (b)	59 - (d)	60 - (b)
61 - (b)	62 - (d)	63 - (b)	64 - (b)	65 - (b)	66 - (b)	67 - (b)	68 - (b)	69 - (d)	70 - (b)

Answers & Explanations

Art & Culture

1. Correct Answer is (C)

- Estampage is a traditional method used in epigraphy to create accurate copies of inscriptions. It involves placing a special paper over the inscription, applying ink, and then pressing the paper to capture the details of the engraving. This technique allows epigraphists to study and analyze inscriptions without damaging the original stone or metal surface. Recently, the ASI has taken an initiative to copy significant stone inscriptions found at the Thalishwarar temple.

Source: [The Hindu](#)

2. Correct Answer is (B)

- Statement 1 is incorrect. The Tarangam is a unique and notable aspect of Kuchipudi, where the dancer performs intricate rhythmic patterns on the edge of a brass plate, often balancing a pot on their head.
- Statement 2 is correct. In Bharatanatyam, the basic rhythmic unit is known as tala. Tala forms the foundation for the rhythmic patterns and timing of the dance movements.

Source: [AIR](#)

3. Correct Answer is (A)

- Statement 1 is correct. The WCC is a non-profit, non-governmental organization affiliated with UNESCO, established to promote the preservation, protection, and development of traditional crafts and foster economic development through crafts.
- Statements 2 and 3 are incorrect. While some cities may be recognized by both the UCCN and WCC, these recognitions are independent of each other. For example, Srinagar was recognized by the UCCN in 2021 and later by the WCC in 2024, but not all UCCN cities are automatically recognized as World Craft Cities. The criteria for being recognized as a World Craft City include having a rich tradition of crafts, a significant population of skilled artisans, active promotion and development of craft traditions, commitment to preserving cultural heritage, evidence of innovation and creativity in craft practices, and strong community involvement and support for the craft sector.

Source: [The Hindu](#)

Modern Indian History

4. Correct Answer is (B)

- Statements 1 and 2 are correct. Rabindranath Tagore is often referred to as the "Poet of the East" because of his profound contributions to literature and his international acclaim. He played a pivotal role in introducing Indian culture to the West and was the first non-European to win the Nobel Prize in Literature in 1913 for his work Gitanjali. Rabindranath Tagore founded Visva-Bharati University in 1921. The university aimed to blend the best of Eastern and Western educational traditions and promote holistic learning.
- Statement 3 is incorrect. Kapalkundala is a famous novel written by Bankim Chandra Chattopadhyay. Some of the famous books written by Tagore are: Gitanjali, Manasi, Gora, Ghare-Baire, Chitrangada, Sonar Tari, The Post Office, etc.

Source: [AIR](#)

Geography

5. Correct Answer is (B)

- The South China Sea is known to contain large reserves of oil and natural gas. The U.S. Energy Information Agency estimates that the South China Sea holds about 190 trillion cubic feet of natural gas and 11 billion barrels of oil in proved and probable reserves. The South China Sea is bordered by several countries, including China, Taiwan, the Philippines, Malaysia, Brunei,

10 PM Compilation August [First Week] 2024

Indonesia, and Vietnam, but not South Korea. The South China Sea is connected to the East China Sea via the Taiwan Strait and to the Pacific Ocean via the Luzon Strait, but it is not directly connected to the Sea of Japan.

Source: [The Hindu](#)

6. Correct Answer is (B)

- Statements 1 and 3 are correct. Bt cotton is the only genetically modified crop that is commercially cultivated in India. GM crops are modified for various traits such as pest resistance, higher yields, improved nutritional value, and resistance to environmental challenges.
- Statement 2 is incorrect. While there have been field trials and some regulatory approvals (e.g., in Argentina), genetically modified wheat is not commonly grown commercially on a global scale.

Source: [The Hindu](#)

7. Correct Answer is (B)

- Petroleum is Sudan's primary natural resource, significantly contributing to the country's GDP and export revenues. Petroleum accounts for a substantial portion of Sudan's total exports, making it a crucial natural resource for the country's economy.

Source: [The Indian Express](#)

8. Correct Answer is (C)

- Fiji, officially known as the Republic of Fiji, is an island country located in Melanesia, part of Oceania in the South Pacific Ocean. Fiji is an archipelago consisting of more than 330 islands, of which about 110 are permanently inhabited, and over 500 smaller islets. Fiji is situated about 2,000 km north-northeast of New Zealand and approximately 3,150 km from Sydney, Australia.

Source: [AIR](#)

9. Correct Answer is (A)

- Avulsion is the rapid abandonment of a river channel and the formation of a new river channel. This process occurs when a river changes its course abruptly, often during large floods or due to the buildup of sediment that elevates the riverbed above the surrounding floodplain.
- A sand dike, also known as a clastic dike, is a seam of sedimentary material that fills an open fracture and cuts across sedimentary rock strata or other rock types. These dikes form when sediment is injected into cracks due to fluid pressure or when sediment falls into open cracks from above.
- A paleochannel is a significant length of a river or stream channel that no longer conveys fluvial discharge as part of an active fluvial system. These channels are remnants of ancient rivers and can be preserved as surface features or buried by younger sediments.

Source: [The Hindu](#)

Polity

10. Correct Answer is (A)

- Statements 1 and 2 are correct. The Chairman and other members of the UPSC are appointed by the President of India. The Chairman of the UPSC serves a term of six years or until reaching the age of 65, whichever comes first.
- Statement 3 is incorrect. There is no specific qualification mentioned in the Constitution of India for the Chairman of the UPSC. However, it is mandated that 50% of the members should have held government office for at least 10 years. Rose Millian Bathew Kharbuli was the first Indian woman to serve as the UPSC chairman from September 23, 1992 to August 23, 1996. Preeti Sudan is the second woman to head the UPSC.

Source: [The Hindu](#)

11. Correct Answer is (B)

- According to Article 110, a Money Bill is one that contains only provisions dealing with all or any of the following matters: the imposition, abolition, remission, alteration, or regulation of any tax, the regulation of the borrowing of money by the Union government, the custody of the Consolidated Fund of India or the Contingency Fund of India, the payment of money into or the withdrawal of money from any such fund, etc. A bill imposing fines for traffic violations and a bill establishing a National Health Insurance Scheme cannot be considered a Money Bill.

Source: [The Hindu](#)

12. Correct Answer is (A)

- Statement 1 is correct. NITI Aayog promotes competitive federalism by encouraging healthy competition among states through transparent rankings in various sectors. This includes indices such as the School Education Quality Index, State Health Index, Composite Water Management Index, Sustainable Development Goals Index, India Innovation Index, and Export Competitiveness Index.
- Statement 2 is incorrect. NITI Aayog does not have financial authority or enforcement powers for fiscal transfers to states. Its role is primarily that of a think tank and policy advisor without the power to enforce financial decisions. The financial powers and decisions on transfers are handled by the Ministry of Finance.

Source: [The Hindu](#)

13. Correct Answer is (C)

- "Immediate discussion" is NOT a core element of a privilege motion. While the privilege motion may lead to a discussion if admitted, the immediate discussion is not a guaranteed or intrinsic part of the privilege motion process. The Speaker or Chairperson first scrutinizes the motion, and only if it is deemed valid, it may be referred to the Privileges Committee or lead to further discussion.

Source: [The Hindu](#)

14. Correct Answer is (B)

- Mandamus is issued to compel a public official or body to perform a duty they are legally obligated to complete. However, it cannot be issued against the President of India or the Governor of a State to compel them to perform their duties. This prohibition is outlined in Article 361, which provides immunity to the President and Governors from being answerable to any court for the exercise and performance of the powers and duties of their office.

Source: [The Hindu](#)

15. Correct Answer is (A)

- Statements 1 and 3 are correct. Pingali Venkayya is credited with designing the flag that eventually evolved into the current Indian National Flag. The official ratio of the width to the length of the Indian National Flag is 2:3.
- Statements 2 and 4 are incorrect. The flag designed by Pingali Venkayya was first presented at the Indian National Congress session in 1921 in Bezwada (now Vijayawada). The diameter of the Ashoka Chakra is specified to be three-fourths of the height of the white band.

Source: [AIR](#)

16. Correct Answer is (C)

- Statements 1 and 2 are correct. Under Section 49(3) of the Competition Act, 2002, the Competition Commission of India (CCI) is empowered to take measures to promote competition advocacy and awareness. The CCI can emphasize sustainability policies and encourage enterprises to collaborate for green innovations. It can release guidance notes on sustainability agreements and exemption methods under the Competition Act, 2002, to support these initiatives.

Source: [The Hindu](#)

17. Correct Answer is (B)

- Statements 1 and 4 are correct. Demands for Grants are formal requests for funds made by various ministries or departments of the government as part of the annual budgetary process. The Appropriation Bill authorizes the government to withdraw funds from the Consolidated Fund of India to meet the expenditures approved by Parliament through the Demands for Grants.
- Statements 2 and 3 are incorrect. It is the Departmental Standing Committees that scrutinize the Demands for Grants for each ministry. If a Demand for Grant is not approved by the Parliament, the Finance Minister cannot unilaterally reallocate funds from other grants. If a Demand for Grant is not approved by the Parliament, the concerned ministry or department will not receive funds for that fiscal year. Any reallocation or additional expenditure requires approval through supplementary grants or re-appropriation approved by Parliament.

Source: [AIR](#)

18. Correct Answer is (C)

- Zero Hour is a unique parliamentary innovation in India that allows Members of Parliament (MPs) to raise issues of urgent public importance without the need for prior notice. It is an informal device, not mentioned in the parliamentary rules, and takes place immediately after the Question Hour, starting at 12 noon. MPs must give notice to the Speaker/Chairman before 10 am on the day of the sitting, but the Speaker/Chairman has the discretion to allow or decline the matter to be raised.

Source: [The Hindu](#)

19. Correct Answer is (A)

- Statement 1 is correct. The Supreme Court ruled that the L-G has the power to nominate aldermen to the MCD without the aid and advice of the Delhi Government. This power is derived from the Delhi Municipal Corporation Act, 1957, and is considered a statutory duty rather than an executive power of the state government.
- Statement 2 is incorrect. The power of the L-G to nominate aldermen is established by the Delhi Municipal Corporation Act, 1957, which is a statutory law enacted by Parliament, not directly by the Constitution of India.

Source: [The Hindu](#)

20. Correct Answer is (B)

- Statement I is correct. The killing of stray dogs by municipal authorities is prohibited under the Animal Birth Control (Dogs) Rules, 2001, and the Prevention of Cruelty to Animals Act, 1960. These laws mandate humane methods such as sterilization and vaccination for managing stray dog populations.
- Statement II is correct. Article 51A(g) of the Indian Constitution states that it is the fundamental duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife, and to have compassion for living creatures.
- However, the prevention of killing stray dogs is not primarily due to the fundamental duty of compassion, but rather because it is governed by specific laws. The prohibition on killing stray dogs is specifically governed by the Animal Birth Control Rules and related laws, rather than the constitutional duty of compassion. Hence, Statement-II is not the direct explanation for Statement-I.

Source: [The Hindu](#)

Acts & Policies

21. Correct Answer is (D)

- Statements 1 and 3 are correct. Bharatiya Vayuyan Vidheyak, 2024 aims to replace the Aircraft Act, 1934. It empowers the Central Government to make rules regulating the design, manufacture,

10 PM Compilation August [First Week] 2024

maintenance, possession, use, operation, sale, export or import of any aircraft or class of aircraft and for securing the safety of aircraft operations. The Bill empowers the Central Government to make rules for various aspects of aviation, including the investigation of air accidents and incidents. The Bill includes provisions to regulate the design, manufacture, and maintenance of aircraft, which aligns with the objectives of the Make in India initiative by promoting domestic manufacturing and maintenance in the aviation sector.

- Statement 2 is incorrect. The focus of the Bill is on regulatory aspects, ease of doing business, and supporting the aviation sector, but not on taxation.

Source: [The Hindu](#)

22. Correct Answer is (D)

- One Health is a collaborative, multisectoral, and transdisciplinary approach that recognizes the interconnection between people, animals, plants, and their shared environment. It aims to achieve optimal health outcomes by recognizing the interconnections between human health, animal health, and environmental health. It's recognized by major international organizations like the World Health Organization (WHO), Food and Agriculture Organization (FAO), and World Organisation for Animal Health (OIE) as a crucial framework for addressing complex health challenges.

Source: [The Hindu](#)

23. Correct Answer is (C)

- Statements 1 and 3 are correct. The Bill seeks to create a disaster database at both the national and state levels, which will include various details such as disaster assessment, fund allocation, expenditure, preparedness and mitigation plans, risk registers, and other relevant matters. The Bill empowers the National Disaster Management Authority (NDMA) to prepare disaster plans at the national level and allows the NDMA to appoint experts and consultants as necessary to perform its functions, which can be seen as measures to strengthen its working.
- Statement 2 is incorrect. The bill proposes the establishment of an "Urban Disaster Management Authority" for state capitals and large cities with municipal corporations for better disaster management in urban areas.

Source: [The Hindu](#)

24. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. The 86th Amendment to the Constitution inserted Article 21A, which made education a fundamental right for all children between the ages of 6 and 14. Although the RTE Act, 2009, explicitly applies to children aged between six and 14, the Madras High Court ruled that this does not preclude younger children from being admitted to kindergarten under the Act. The Court emphasized that the primary objective of the RTE Act is to ensure education from pre-school to eighth standard. The RTE Act prohibits any screening procedure for admission to ensure non-discrimination and equal access to education.
- Statement 3 is incorrect. The RTE Act mandates that private unaided schools reserve 25% of their seats for children from socially disadvantaged and economically weaker sections.

Source: [The Hindu](#)

25. Correct Answer is (A)

- Statement 1 is correct. The PMGKAY was launched to provide free food grains to the poor and vulnerable sections of society during crises, such as the COVID-19 pandemic, to ensure that no one goes hungry.
- Statement 2 is incorrect. The primary objective of the PMS mobile app is to monitor and track the prices of essential commodities to ensure price stability and prevent inflation.

Source: [The Hindu](#)

26. Correct Answer is (A)

- Statements 1 and 2 are correct. The primary objective of the ELI scheme is to incentivize companies to create new employment opportunities by offering financial incentives for each new hire. This is designed to boost job creation and reduce unemployment. The ELI scheme primarily targets the manufacturing and service sectors. These sectors are crucial for economic growth and have significant potential for job creation, which aligns with the scheme's objectives. The Ministry of Labour and Employment is the government body responsible for implementing the ELI scheme. This ministry oversees labor policies and employment-related initiatives, making it the appropriate authority for this scheme.
- Statement 3 is incorrect. The ELI scheme provides financial incentives primarily in the form of tax rebates and financial grants, not low-interest loans. The focus is on direct financial support to encourage hiring rather than providing loans.

Source: [The Hindu](#)

27. Correct Answer is (B)

- Statement 1 is incorrect. The PM-SYM scheme is a pension scheme designed to provide old age protection and social security to unorganized sector workers.
- Statements 2 and 3 are correct. If a beneficiary dies before reaching the age of 60, the spouse can continue the scheme by making regular contributions or choose to exit the scheme and receive the beneficiary's contribution with interest. The family pension under the PM-SYM scheme is applicable only to the spouse, who will receive 50% of the pension received by the beneficiary.

Source: [AIR](#)

28. Correct Answer is (B)

- Statement 1 is incorrect. The primary objectives of PMSSY are to correct regional imbalances in the availability of affordable and reliable tertiary healthcare services and to augment facilities for quality medical education in the country. PMSSY has two components: - Setting up of AIIMS and Upgradation of Government Medical College (GMC)/ Institutions.
- Statement 2 is correct. The Ministry of Health and Family Welfare is the nodal ministry responsible for the implementation of the Pradhan Mantri Swasthya Suraksha Yojana.

Source: [AIR](#)

Index & Reports

29. Correct Answer is (C)

- Statements 1 and 2 are correct. India has been recognized as the topmost-ranked country in South Asia in the Travel and Tourism Development Index 2024. India is ranked 39th among 119 countries, according to the Travel and Tourism Development Index 2024 report published by the World Economic Forum.

Source: [AIR](#)

30. Correct Answer is (A)

- The Gadgil Committee Report, also known as the Western Ghats Ecology Expert Panel (WGEEP) Report, is specifically related to the conservation and protection of the Western Ghats. The report was commissioned by the Ministry of Environment and Forests of India and submitted in 2011. It provided recommendations for the sustainable development and ecological preservation of the Western Ghats, an area recognized for its rich biodiversity and ecological significance.

Source: [DD News](#)

31. Correct Answer is (C)

10 PM Compilation August [First Week] 2024

- Statement 1 is incorrect. The National Multidimensional Poverty Index (MPI) measures multiple deprivations across health, education, and standard of living.
- Statements 2, 3 and 4 are correct. The Alkire-Foster Methodology is used for calculating India's National MPI. India's National MPI includes twelve indicators across three dimensions: health, education, and standard of living. India's National MPI includes maternal health and bank accounts, which are not part of the Global MPI.

Source: [AIR](#)

International Relations/Organizations

32. Correct Answer is (A)

- The concept of supply chain resilience involves strategies to ensure that supply chains can withstand and quickly recover from disruptions, such as natural disasters, geopolitical tensions, or pandemics. Diversifying sources of critical goods and materials is a key strategy to enhance resilience, as it reduces dependency on a single source or region, thereby mitigating the risk of supply chain interruptions.

Source: [AIR](#)

33. Correct Answer is (C)

- The term "Five Mutuals" refers to a set of principles recently highlighted in the context of China-India relations. The "Five Mutuals" are intended to serve as guiding principles to enhance and stabilize the bilateral relationship between China and India. The five mutual include: mutual respect, mutual understanding, mutual trust, mutual accommodation and mutual accomplishment.

Source: [The Hindu](#)

34. Correct Answer is (D)

- The IMEEC aims to enhance connectivity and trade between India, the Middle East, and Europe by creating a new economic corridor that facilitates the movement of goods and services.
- The Chabahar Port in Iran provides India with a strategic maritime route to Afghanistan and Central Asia, bypassing Pakistan. This port is crucial for India's trade and strategic interests in the region.
- The I2U2 initiative aims to promote economic cooperation and development among India, Israel, the UAE, and the USA. It focuses on leveraging the strengths of these countries to foster collaborative projects and economic growth.

Source: [The Hindu](#)

35. Correct Answer is (A)

- Statements 1, 2 and 3 are incorrect. The highest decision-making body of BIMSTEC is the BIMSTEC Summit, which is comprised of the heads of state or government of the member states. BIMSTEC was established through the Bangkok Declaration on June 6, 1997. The permanent secretariat of BIMSTEC is located in Dhaka, Bangladesh.
- Statement 4 is correct. The BIMSTEC Business Summit aims to facilitate economic collaboration and explore ways for regional connectivity, energy security, inclusive growth, and sustainable development.

Source: [AIR](#)

36. Correct Answer is (B)

- The Agartala-Akhaura railway project marks a significant milestone in enhancing connectivity, trade, and people-to-people contact between India and Bangladesh. It connects Agartala, the capital of Tripura in India's Northeast, with Akhaura in Bangladesh. The project is expected to

reduce travel time between Agartala and Kolkata from 31 hours to 10 hours and facilitate trade by providing a shorter route to the Port of Chattogram in Bangladesh.

Source: [The Hindu](#)

Economy

37. Correct Answer is (B)

- A sustained decline in core industries would indicate a broader economic slowdown. This would negatively impact investor confidence, as core industries are often seen as a barometer of a country's overall economic health. Consequently, FDI inflows would likely decrease as investors become more cautious about investing in a country with weakening core industries.

Source: [AIR](#)

38. Correct Answer is (C)

- Indexation is a financial concept and practice used to adjust the value of various economic elements to account for changes in the general price level, typically due to inflation. The goal is to neutralize the effect of inflation on the asset's value over time. By using indexation, you can adjust an investment's purchase price to reflect the impact of inflation more accurately. This carries over into tax liability because a higher purchase price leads to lower profits and lower taxes. Adjusting for inflation using indexation allows an investor to reduce long-term capital gains, bringing down taxable income. Recently, the Finance Minister in the Budget proposed taxing all long-term gains at a flat rate of 12.5%, but without using indexation.

Source: [The Hindu](#)

39. Correct Answer is (A)

- Ayodhya Ring Road: A 68-kilometer, four-lane ring road will be constructed around Ayodhya. The project aims to facilitate seamless travel for pilgrims visiting the Ram Mandir. The road will improve connectivity for tourists arriving from airports in Lucknow and Ayodhya, as well as from major railway stations. The total cost for this project is ₹3,935 crore.
- Tharad to Ahmedabad Corridor: A 214-kilometer, six-lane high-speed corridor will be developed between Tharad and Ahmedabad in Gujarat. This corridor will connect two major national highways: the one from Amritsar to Jamnagar and the Delhi-Mumbai Expressway. It will provide efficient freight transport routes from industrial areas in Punjab, Haryana, and Rajasthan to major ports in Maharashtra. The project aims to improve logistics and economic activities in these regions.
- Agra to Gwalior Corridor: A national high-speed corridor will be built, connecting Agra to Gwalior. The corridor will be 88 kilometers long and will cost ₹4,613 crore. This project aims to improve transportation links and reduce travel time between these two cities.

Source: [The Hindu](#)

40. Correct Answer is (B)

- The Minimum Support Price (MSP) is a form of market intervention by the Government of India to ensure agricultural producers against any sharp fall in farm prices. The MSP is announced by the Government of India for certain crops at the beginning of each sowing season based on the recommendations of the Commission for Agricultural Costs and Prices (CACP). Out of the four crops listed, MSP is provided for two crops: cotton and maize.

Source: [The Hindu](#)

41. Correct Answer is (C)

- A US Federal Reserve rate cut typically makes US assets less attractive due to lower returns, prompting investors to seek higher returns in other markets. This often leads to an increase in

10 PM Compilation August [First Week] 2024

foreign investment in emerging markets like India, where the potential for higher returns is greater.

Source: [DD News](#)

42. Correct Answer is (C)

- Zero-based budgeting (ZBB) is a budgeting method where every expense must be justified for each new period, starting from a "zero base." This approach requires organizations to build their budgets from scratch, rather than simply adjusting previous budgets.

Source: [The Hindu](#)

43. Correct Answer is (D)

- Statement-I is incorrect: The Union Budget 2024-25 initially increased the Basic Customs Duty (BCD) on laboratory chemicals from 10% to 150%, but this was later rolled back to 10% for chemicals used in research and development purposes, excluding undenatured ethyl alcohol.
- Statement-II is correct: India is a major player in the global pharmaceuticals and chemicals industry, being a significant manufacturer and exporter of complex chemicals and pharmaceutical products.

Source: [The Hindu](#)

44. Correct Answer is (C)

- The primary objective of the Modified Interest Subvention Scheme is to offer short-term agricultural loans to farmers at subsidized interest rates. This is done to support their working capital requirements and allied activities such as animal husbandry, dairy, fisheries, and beekeeping. The scheme provides an interest subvention to lending institutions so that farmers can avail loans at a concessional interest rate, thereby reducing their financial burden and promoting agricultural productivity.

Source: [AIR](#)

45. Correct Answer is (C)

- Statements 1 and 3 are correct. Nearly three-quarters of India's families depend on rural incomes, with a significant portion of the labour force engaged in agriculture. However, the productivity in this sector is relatively low due to factors like inadequate irrigation, lack of modern technology, and small fragmented land holdings. Despite having a large working-age population, India has struggled to shift its surplus labour from agriculture to manufacturing, which remains a challenge for economic growth. The manufacturing sector has not expanded sufficiently to absorb the excess labour from agriculture.
- Statement 2 is incorrect. The LPG reforms of 1991 significantly reduced poverty levels in India. Between 1991 and 2011, the poverty rate fell from approximately 50% to around 20%, pulling millions out of poverty.

Source: [The Hindu](#)

46. Correct Answer is (D)

- **Lakdawala Committee:** The Lakdawala Committee recommended state-specific poverty lines and updating them using CPI-IW and CPI-AL, based on calorie consumption.
- **Tendulkar Committee:** The Tendulkar Committee recommended a uniform poverty line basket (PLB) across rural and urban India, moving away from separate PLBs.
- **Rangarajan Committee:** The Rangarajan Committee reverted to separate poverty line baskets for rural and urban areas and included normative levels of nourishment, clothing, and other non-food expenses.

Source: [The Hindu](#)

47. Correct Answer is (B)

A lower fiscal deficit indicates better fiscal management and reduces the perceived risk of lending to the government, which can positively influence sovereign credit ratings.

Source: [The Hindu](#)

48. Correct Answer is (A)

- Indexation benefits allowed investors to adjust the purchase price of an asset for inflation, thereby reducing the taxable capital gains when the asset was sold after a long holding period. Without indexation, the tax liability on long-term holdings may increase, making this strategy less attractive.

Source: [The Hindu](#)

Environment

49. Correct Answer is (A)

- Statement 1 is correct. Pumped Storage Hydropower (PSH) works by pumping water to a higher elevation during times of excess energy production and releasing it to generate electricity when needed, effectively storing and releasing energy as required.
- Statements 2 and 3 are incorrect. India has installed pumped storage capacity. For example, the Tehri Dam in Uttarakhand includes a pumped storage component, and there are other such facilities in the country. PSH systems are typically integrated with the grid. They store energy when there is excess generation and release it during periods of high demand, thus supporting grid stability and reliability.

Source: [The Hindu](#)

50. Correct Answer is (A)

- Statement 1 is correct. The Environment (Protection) Act, 1986, empowers the Central Government to declare ESZs around protected areas to act as buffers and regulate certain activities to protect the environment.
- Statements 2, 3 and 4 are incorrect. Agriculture, along with horticultural practices, rainwater harvesting, and organic farming, is generally permitted in ESZs. The UNFCCC primarily focuses on climate change and its impacts rather than directly on biodiversity conservation or the protection of ESAs. The Convention on Biological Diversity (CBD) is more aligned with biodiversity conservation efforts. The criteria for designating ESAs focus on ecological significance, such as the presence of endemic species, unique landscapes, and critical habitats.

Source: [The Hindu](#)

51. Correct Answer is (A)

- In natural farming, the philosophy is to avoid any external inputs, including compost, and rely entirely on natural processes and local resources. Organic farming, on the other hand, allows and often encourages the use of organic fertilizers such as compost to enhance soil fertility.

Source: [AIR](#)

52. Correct Answer is (C)

- **Saltwater flooding:** This can cause significant tissue death in coastal plants, impacting their overall health and resilience.
- **Microplastics:** These primarily impact plant reproduction and can alter growth and photosynthetic efficiency, thereby affecting the plants' ability to capture water, nutrients, and sunlight.
- **Sea waves:** These contribute to coastal erosion and can affect the root systems and stability of coastal plants, thereby impacting their growth and survival.

Source: [DD News](#)

53. Correct Answer is (B)

- Statements 1 and 2 are correct. Sloth bears are one of the eight bear species found globally. These bears have long, shaggy dark brown or black fur and curved claws, which are the longest among bear species. Sloth bears are primarily nocturnal, meaning they are most active during the night. Sloth bears are found in India. They inhabit various forested areas and grasslands across the country. Daroji Sloth Bear Sanctuary in Karnataka and the Jessore Sloth Bear Sanctuary in Gujarat are dedicated sanctuaries for sloth bears.
- Statement 3 is incorrect. Sloth bears are listed as "Vulnerable" on the IUCN Red List.

Source: [Forum IAS](#)

54. Correct Answer is (D)

- **Nitrogen fixation:** Albizia lebeck is capable of fixing nitrogen from the atmosphere, which helps to enrich the soil and support other plant species.
- **Carbon sequestration:** Albizia lebeck plays a role in carbon sequestration, as it is a tree that absorbs carbon dioxide during photosynthesis and stores carbon in its biomass.
- **Soil erosion prevention:** Albizia lebeck helps in soil conservation and erosion control, particularly in areas prone to landslides.

Source: [The Hindu](#)

55. Correct Answer is (B)

- Statements 1 and 2 are incorrect. Desertification is the process by which fertile land becomes desert, often due to factors like drought, deforestation, and improper agricultural practices. While deforestation can contribute to desertification, desertification itself is not a cause of deforestation. Crop rotation is an agricultural practice that involves growing different types of crops in the same area in sequenced seasons to improve soil health and reduce pests and diseases. It is generally considered a sustainable practice and is not a major contributor to deforestation. However, slash-and-burn agriculture is a major contributor to deforestation in tropical regions.
- Statements 3 and 4 are correct. Deforestation leads to the release of stored carbon dioxide in trees back into the atmosphere, contributing to global warming and climate change. Recent studies suggest that selective logging and wildfires can have significant adverse impacts on the climate, sometimes even more than deforestation, due to the ongoing and widespread nature of these activities.

Source: [DD News](#)

56. Correct Answer is (A)

- Statement 1 is correct. The Great Barrier Reef is the world's largest coral reef system and the largest living structure on Earth, composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres.
- Statements 2 and 3 are incorrect. Ocean acidification affects corals by reducing the availability of calcium carbonate, which corals need to build their skeletons. It does not directly reduce the amount of oxygen in the water. Coral bleaching is primarily caused by increased sea temperatures, which stress the corals and cause them to expel the symbiotic algae living in their tissues. The most critical consequence of coral bleaching is the loss of coral health and biodiversity. Bleached corals are more susceptible to disease and death, which can lead to the collapse of the entire reef ecosystem. This negatively affects fish populations and other marine life that depend on healthy coral reefs for habitat and food.

Source: [DD News](#)

Science & Technology

57. Correct Answer is (B)

10 PM Compilation August [First Week] 2024

- Statements 1 and 2 are correct. India is set to host its first multinational air exercise, 'Tarang Shakti 2024', in two phases starting on August 6th in Sular, Tamil Nadu. The first phase is to be held in Sular, Tamil Nadu, from 6th to 14th August, and the second phase in Jodhpur, Rajasthan, from 29th August to 14th September. The exercise aims to showcase India's defence capabilities and enhance cooperation among the participating militaries.
- Statement 3 is incorrect. Phase one will see participation from France, Germany, Spain, and the United Kingdom, while phase two will include Australia, Bangladesh, Greece, Singapore, UAE, and the USA.

Source: [AIR](#)

58. Correct Answer is (B)

- **Enhancing security:** This is a primary benefit of AFA. By requiring an additional, dynamically created authentication factor, AFA significantly enhances the security of digital transactions.
- **Increasing transaction speed:** AFA typically involves additional steps for authentication, which might actually slow down the transaction process rather than speed it up. Therefore, increasing transaction speed is not a benefit of AFA.
- **Reducing operational costs:** Implementing AFA usually involves additional technology and processes, which might initially increase operational costs. While it could potentially reduce costs associated with fraud over time, this is not a direct or immediate benefit.
- **Strengthening privacy:** AFA can help strengthen privacy by ensuring that only authorized users can complete transactions, thereby protecting personal and financial information.

Source: [The Hindu](#)

59. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. Lung cancer is the most common type of cancer and the leading cause of cancer-related deaths worldwide. In India, lung cancer rates are increasing rapidly, contributing to 10% of cancer deaths. India is the fourth highest in the world for lung cancer cases. Smoking tobacco is the main risk factor for lung cancer. In India, lung cancer is usually detected only at advanced stages (Stage 3 or 4), when it's no longer curable, leading to poor survival rates. Many patients already have cancer spread to other parts of the body by the time it's diagnosed. This delay is often due to inadequate screening, lack of resources, and a high rate of tuberculosis (TB), which can make it harder for primary care doctors to identify lung cancer.

Source: [The Hindu](#)

60. Correct Answer is (B)

- Encephalitis is the inflammation of the active tissues of the brain, leading to swelling. This condition can be life-threatening and requires prompt medical attention. Viral infections are the most common cause of encephalitis. While bacterial, fungal, and parasitic infections can also cause encephalitis, they are less frequent compared to viral causes.

Source: [The Hindu](#)

61. Correct Answer is (B)

- Statement I is correct. India faces a double burden of malnutrition, characterized by the coexistence of undernutrition (such as stunting, wasting, and underweight) and overnutrition (such as overweight and obesity).
- Statement-II is correct. Urban areas in India are experiencing a shift towards poor dietary habits and lifestyle routines, including increased consumption of processed and high-calorie foods, sedentary lifestyles, and other factors contributing to the rise in overweight and obesity.
- However, poor dietary habits and lifestyle routines in urban areas do not explain the double burden of malnutrition across the entire country. The double burden includes issues in both urban and rural areas, with undernutrition more prevalent in rural areas and overnutrition more common in urban settings.

10 PM Compilation August [First Week] 2024

- Therefore, Statement-II is not the correct explanation for Statement-I.

Source: [The Hindu](#)

62. Correct Answer is (D)

- Statements 1, 2 and 3 are incorrect. The Axiom-4 mission is a mission to the International Space Station (ISS), involving Indian astronauts training for and participating in a space mission in collaboration with NASA and Axiom Space. The mission involves human astronauts, specifically Indian astronauts who will be trained and participate in the mission to the ISS. The Axiom-4 mission is a collaboration between ISRO and NASA. The Axiom-4 mission is the fourth private astronaut mission to the ISS.

Source: [The Hindu](#)

63. Correct Answer is (B)

- Statement 1 is incorrect. The primary goal of the NRF is to promote and support research and innovation for societal, scientific, and technological advancement, not to generate profit. The NRF aims to enhance research funding, promote interdisciplinary research, and address national development challenges.
- Statement 2 is correct. The Union Budget 2024-25 has increased the budget allocation to scientific Research & Development. For example, the budget for the Department of Scientific and Industrial Research (DSIR) has increased by 2% over the previous year. There has also been a 10% increase in the CSIR budget.

Source: [The Hindu](#)

64. Correct Answer is (B)

- Statements 1 and 3 are correct. Lithium-ion batteries are widely used in electric vehicles, mobile devices, and energy storage systems due to their high energy density and long lifespan. Lithium reserves have been discovered in India, particularly in Jammu & Kashmir, but extraction has not yet commenced.
- Statement 2 is incorrect. Australia is currently the largest producer of lithium in the world, followed by Chile. Chile is home to half of the viable lithium reserves globally and is the world's second-largest lithium producer. It accounts for about 36% of the global trade.

Source: [The Hindu](#)

65. Correct Answer is (B)

- Quartz clocks are accurate to within a few seconds per month, relying on the consistent oscillation of a quartz crystal. Atomic clocks, on the other hand, are far more accurate and precise, with deviations of only a few billionths of a second per day. Atomic clocks use the vibrations of atoms (such as cesium or hydrogen) to keep time, which provides a much higher level of accuracy and stability.

Source: [The Hindu](#)

66. Correct Answer is (B)

- Sucralose is a chemically modified form of sucrose, where three hydroxyl groups are replaced with chlorine atoms. This alteration makes sucralose much sweeter than sucrose (table sugar)—approximately 600 times sweeter—while also rendering it resistant to metabolism by the human body. When sucralose is consumed, it passes through the digestive system largely unchanged. The body does not break it down for energy, so it is not absorbed into the bloodstream to any significant extent. Instead, it is excreted unchanged in the urine. This lack of metabolism means that sucralose does not provide calories or contribute to blood glucose levels, making it an effective non-caloric sweetener for people looking to reduce their caloric intake or manage their blood sugar levels.

Source: [The Hindu](#)

67. Correct Answer is (B)

- Statements 1 and 2 are correct. The Rashtriya Vigyan Puraskar aims to recognize notable and inspiring contributions made by scientists, technologists, and innovators in various fields of science, technology, and technology-led innovation. Medicine, Agriculture, Environmental Science, and Technology are some of the categories available for the award. The award covers a broader range of 13 domains, including Physics, Chemistry, Biological Sciences, Mathematics & Computer Science, Earth Science, Engineering Sciences, Atomic Energy, Space Science and Technology, and others.
- Statement 3 is incorrect. The award is specifically designed for Indian citizens and persons of Indian origin residing abroad who have made exceptional contributions benefiting Indian communities or society. Foreign nationals are not eligible.

Source: [The Hindu](#)

68. Correct Answer is (B)

- Statement 1 is incorrect. The NDMA does not have the authority to declare a disaster as a national calamity. There is no legal or executive provision in India to declare a natural calamity as a national calamity. This authority lies with the central government, which takes such decisions based on various factors and inputs from the NDMA and other relevant agencies.
- Statement 2 is correct. India follows the Sendai Framework for Disaster Risk Reduction (SFDRR) for its disaster risk reduction strategies. The framework emphasizes understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction, and enhancing disaster preparedness for effective response and recovery.

Source: [AIR](#)

69. Correct Answer is (D)

- Kavach has been developed by the Research Designs & Standards Organisation (RDSO) in collaboration with Indian Railways. Kavach uses ultra-high frequency radio communication and Radio Frequency Identification (RFID) for communication. Kavach is designed to be used on both high-speed and regular passenger trains. Kavach automatically applies brakes if the train passes a signal at danger (red signal) or if it detects another train on the same track. It also regulates the train's speed according to permissible limits. The system adheres to SIL-4 standards, which is the highest level of safety integrity, ensuring an extremely low probability of failure. The system features centralized live monitoring of train movements through the Network Monitoring System (NMS). It is one of the least expensive automatic train collision prevention technologies, making it a cost-effective solution for Indian Railways. It is an indigenously developed Automatic Train Protection (ATP) system by Indian Railways.

Source: [AIR](#)

70. Correct Answer is (B)

- Operation Dudhi was a counter-insurgency operation carried out by the Assam Rifles in Jammu and Kashmir, where they successfully eliminated 72 militants, making it one of the most successful operations of its kind in India's history.

Source: [The Hindu](#)