

WE PROVED IT AGAIN !!



TGPSC G 1 | UPSC - CSE | APPSC G 1

# TSPSC GROUP 1 PRELIMS EXAMINATION 2024

85/  
150

85 QUESTIONS OUT OF 150 QUESTIONS  
ARE DIRECTLY OR INDIRECTLY FROM

- TSPSC GROUP 1 PRELIMS CUM MAINS & NOTES
- PRELIMS TEST SERIES
- RAPID REVISION PROGRAM (**PRELIMS**)
- CURRENT AFFAIRS PROGRAM

## KUDOS 'TEAM VIAS'

Website



Youtube



Telegram



Whatsapp



www.vishnuias.com

8977640939,9000400939

# TGPSC GROUP-1

## MAINS TEST SERIES

1ST WEEK COMPLETELY FREE TEST SERIES FOR ALL

100 DAYS

32 TOTAL TESTS

12 FULL LENGTH TESTS

15 SECTIONAL TESTS

75 DAILY TESTS

5 ESSAY TESTS

DATE	SUBJECT	TOPIC
June 17th	Society	Unit-I Indian Society
June 18th	Polity	Unit-I Indian Constitution
June 19th	Governance	Unit-I Good Governance
June 20th	Economy	Unit-I National Income
June 21st	S & T	Unit-I Emerging Areas of S & T
June 22nd	Telangana Movement	Unit-I Telangana Culture + Nizam

BATCH  
STARTS FROM

JUNE 17<sup>th</sup>

MODE

ONLINE & OFFLINE

MEDIUM

ENGLISH & TELUGU

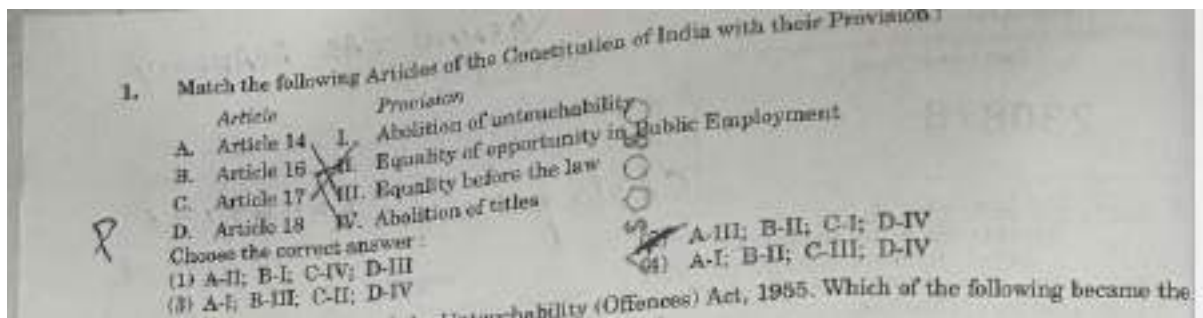


SCAN TO REGISTER

FEATURES

- Daily live answer writing Sessions & Mentorship
- 3 Questions in a day in the presence of faculty.
- One-to-One Interaction
- Explanation & Model answer for each question.
- Every weekend sectional test with Evaluation Providing Model answers and explanation classes with experienced faculty.
- Everyday content will be provided
- Model Answers Hard copies for Offline Students

1.



1. The value of secularism can be found in which of the following parts of the constitution?

1. Preamble
2. Directive Principles of State Policy
3. Fundamental Duties
4. Fundamental Rights

Select the correct answer using the codes below.

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

**Answer: D**

**Justification:** Statement 1: The Preamble secures to all citizens of India the liberty of belief, faith, and worship.

Statement 2: The State shall endeavour to secure for all the citizens a Uniform Civil Code (Article 44 of DPSP).

Statement 3: Article 51A mentions this as one of the fundamental duties: "to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women."

Statement 4: The State shall not deny to any person equality before the law or equal protection of the laws (Article 14). The State shall not discriminate against any citizen on the grounds of religion (Article 15). All persons are equally entitled to freedom of conscience and the right to freely profess, practice, and propagate any religion (Article 25).'

5. Equal Protection of Laws granted under Article 14 of the Constitution may imply

- A. No person is above the law.
- B. Equal treatment of equals under the law.
- C. Absence of arbitrary power with the state.
- D. The society operates on laws.

**Answer: B**

**Justification:** Article 14 has two parts: equality before the law and equal protection of laws.

The first concept basically means law is for everyone whoever it might be.

The second concept means the law will apply equally to equally situated people. E.g. if an adult receives a punishment of 3 years imprisonment, another adult for the same crime and the same circumstances should also get 3 years of imprisonment.

3. Which of the following fundamental rights are conferred to Indian citizens but not foreign citizens living in India?

1. Right against discrimination on grounds of religion

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 📞8977640939

2. Right to conserve one's culture  
3. Right to Life and Liberty  
4. Right to freedom of speech and expression  
Select the correct answer using the codes below.

A. 2 only

B. 1, 2, and 4 only

C. 1 and 2 only

D. 3 and 4 only

**Answer: B**

**Justification: Learning:** Other rights unavailable to foreign citizens are: Equality of opportunity in matters of public employment (Article 16).

Right of minorities to establish and administer educational institutions (Article 30) Protection of six rights regarding freedom of (i) speech and expression, (ii) assembly, (iii) association, (iv) movement, (v) residence, and (vi) profession (Article 19). It is notable that foreign citizens even enjoy the Right to Elementary education (Article 21A)

2.

5. Consider the following in relation to Article 368 of the Constitution :

A. It empowers the Parliament to amend the Constitution.

B. It empowers the Parliament to amend the Constitution by 2/3 majority.

C. It does not empower the Parliament to amend the Fundamental Rights.

D. The Parliament can amend any provisions of the Constitution except Basic Structure.

Which of the above statements are correct ?

(1) A, B, C and D are true.

(2) Only A, B and D are true.

(3) Only A, B and C are true.

(4) Only A and B are true.

2. Consider the following statements.

1. Assertion (A): The preamble of the Constitution cannot be amended by the Parliament.

2. Reason (R): The preamble is not considered a part of the Constitution.

In the context of the above, which of these is correct?

A. A is correct, and R is an appropriate explanation of A.

B. A is correct, but R is not an appropriate explanation of A.

C. A is correct, but R is incorrect.

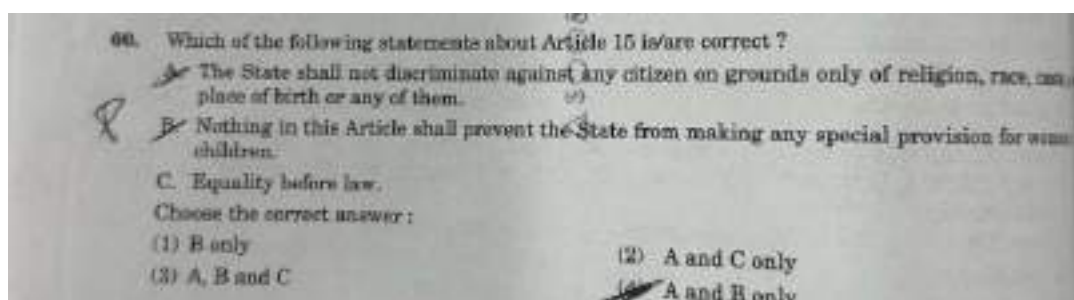
D. Both A and R are incorrect.

**Answer: D**

**Justification:** The Supreme Court has held that the Preamble is a part of the Constitution.

As per the SC, the Preamble can be amended under A368, subject to the condition that no amendment is done to the 'basic features'. The Preamble has been amended only once so far, in 1976, by the 42nd Constitutional Amendment Act, which has added three new words-Socialist, Secular, and Integrity-to the Preamble. This amendment was held to be valid.

3.



1. The value of secularism can be found in which of the following parts of the constitution?

1. Preamble
  2. Directive Principles of State Policy
  3. Fundamental Duties
  4. Fundamental Rights
- Select the correct answer using the codes below.
- A. 1 and 2 only
- B. 3 and 4 only
- C. 1, 3, and 4 only
- D. 1, 2, 3 and 4

**Answer: D**

**Justification:** Statement 1: The Preamble secures to all citizens of India the liberty of belief, faith, and worship.

Statement 2: The State shall endeavour to secure for all the citizens a Uniform Civil Code (Article 44 of DPSP).

Statement 3: Article 51A mentions this as one of the fundamental duties: "to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women."

Statement 4: The State shall not deny to any person equality before the law or equal protection of the laws (Article 14). The State shall not discriminate against any citizen on the grounds of religion (Article 15). All persons are equally entitled to freedom of conscience and the right to freely profess, practice, and propagate any religion (Article 25)."

14. The Supreme Court in NALSA judgment recognized the right to self-determination of gender

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY ☎8977640939

equality. Following the judgment, the transgenders were entitled to which of the following fundamental rights?

1. Article 14
2. Article 15
3. Article 16
4. Article 21

How many of the constitutional articles given above is/are can be attributed as entitlement to transgenders as per NALSA judgement?

- (a) All four are correct
- (b) only three are correct
- (c) only two are correct
- (d) only one is correct

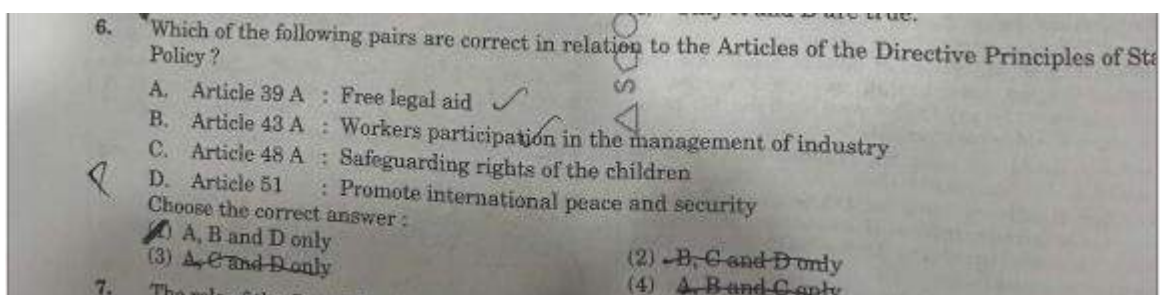
**Solution: A**

**Explanation:**

• Statement 1 and 4 are correct: The Supreme Court in its National Legal Services Authority v. Union of India (NALSA) judgment recognized the right to self-determination of gender identity. The Court interpreted 'dignity' under Article 21 of the Constitution to include diversity in self-expression, which allowed a person to lead a dignified life. It placed one's gender identity within the framework of the fundamental right to dignity under Article 21. Further, it noted that the right to equality (Article 14 of the Constitution) and freedom of expression (Article 19(1)(a)) was framed in gender-neutral terms. Consequently, the right to equality and freedom of expression would extend to transgender persons.

• Statement 2 and 3 are correct: Under Articles 15 and 16, discrimination on the ground of sex is explicitly prohibited. The Court held that sex here does not only refer to biological attributes (such as chromosomes, genitalia and secondary sexual characteristics) but also includes gender based on one's self-perception). Thus, the Court held that discrimination on the grounds of —sex included discrimination on the basis of gender identity. The Court held that transgender persons were entitled to fundamental rights under Articles 14, 15, 16, 19(1)(a) and 21 of the Constitution

4.



20. Consider the following Directive Principles

1. To organise agriculture and animal husbandry on modern and scientific lines
2. To promote equal justice and to provide free legal aid to the poor

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL ANTHROPOLOGY ☎8977640939

3. To take steps to secure the participation of workers in the management of industries
4. To prohibit the consumption of intoxicating drinks and drugs which are injurious to health
5. To protect and improve the environment and to safeguard forests and wild life

Which of the above were added in to the Constitution by the 42nd Amendment Act of 1976

- a. 1, 3, 4 and 5 only
- b. 2, 4 and 5 only
- c. 1, 2, 3 and 4 only
- d. 2, 3 and 5 only

**Answer: d**

**EXPLANATION:** The 42nd Amendment Act of 1976 added four new Directive Principles to the original list.

They require the State –

- To secure opportunities for healthy development of children (Article 39).
- To promote equal justice and to provide free legal aid to the poor (Article 39 A).
- To take steps to secure the participation of workers in the management of industries (Article 43 A).
- To protect and improve the environment and to safeguard forests and wild life (Article 48 A).

23. The State shall endeavour to promote international peace and security and maintain just and honourable relations between nations. It is mentioned in:

- (a) Article 51
- (b) Article 48
- (c) Article 44
- (d) Article 40

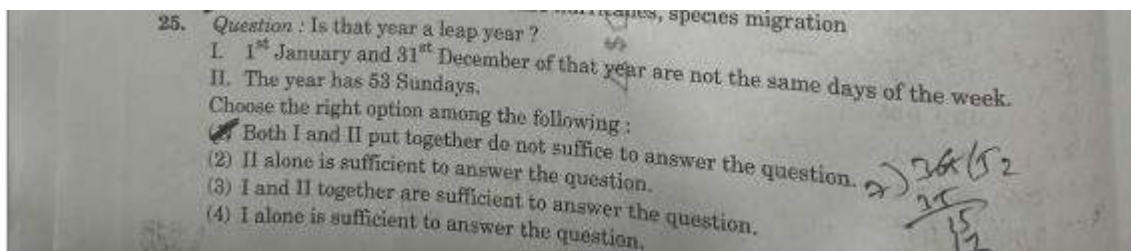
**Answer: a**

**Explanation:** Article 51 deals with the promotion of international peace and security.

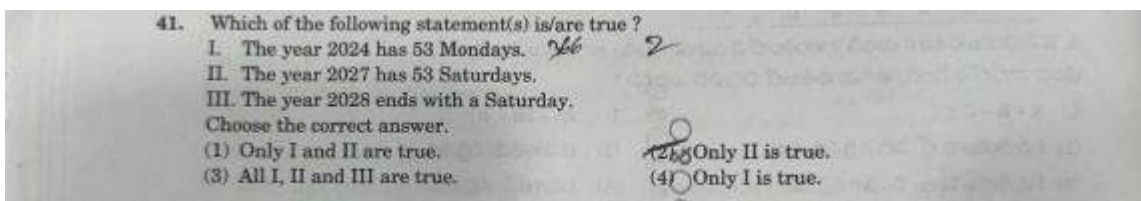
It says that the State shall endeavour to –

- promote international peace and security;
- maintain just and honourable relations between nations;
- foster respect for international law and treaty obligations in the dealings of organised people with one another;
- encourage settlement of international disputes by arbitration.

5.



6.



1. Satish remembers that his brother's birthday is after fifteenth but before eighteenth of February whereas his sister kajal remembers that her brother's birthday is after sixteenth but before nineteenth of February. On which day in February is sathish's brother's birthday?

- a. 16<sup>th</sup>
- b. 17<sup>th</sup>
- c. 18<sup>th</sup>
- d. 19<sup>th</sup>

Ans: b

Explanation:

As per satish, his brother's birthday is either 16 or 17 of feb

As per kajal, either 17 or 18.

So birthday is on 17<sup>th</sup>.

2. On what dates on April 2001 did Wednesday fall?

- a. 1st, 8th, 15th, 22nd, 29th
- b. 2nd, 9th, 16th, 23rd, 30th
- c. 4th, 11th, 18th, 25th
- d. 3rd, 10th, 17th, 24th

ans: c

explanation:

We shall find the day on 1st April 2001 1st April 2001 = 2000 years + Period from 1.1.2001 to 1.4.2001

Odd days in 1600 years = 0

Odd days in 400 years = 0

Jan, Feb, Mar, April = 31 + 28 + 31 + 1 = 91 days = 0 odd days On 1st April it is Sunday.

In April, 2001 Wednesday falls on 4th, 11th, 18th and 25th.

7.

138. Match the following diseases with their carrier type:

Disease	Carrier type
A. Cholera	I. Air-borne
B. Filaria	II. Food-borne
C. Tuberculosis	III. Vector-borne
	IV. Water-borne

Choose the correct answer :

(1) A-II; B-IV; C-III

(3) A-II; B-IV; C-I

(2) A-IV; B-III; C-I

(4) A-IV; B-I; C-III

TEST 2.24 R (46)





**30. Consider the following pairs:**

Vitamin Deficiency leads to

1. Vitamin A : Dry and scaly skin
2. Vitamin B1 : Attention deficit
3. Vitamin C : Pain in joints and muscles

Which of the pairs given above are correctly matched?

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

Solution: D

Vitamin A (beta-carotene or retinol) : night blindness and eye disease, dry and scaly skin, increased infections, and kidney stones.

Vitamin B-1 (thiamin) : Disease is beriberi; Symptoms of a deficiency include depression, irritability, attention deficit; Severe deficiency leads to edema, paralysis, and heart failure.

Vitamin C (ascorbic acid) Scurvy is the deficiency disease- pain in the muscles and joints.

Hence, All three Pairs are correct.

9.

3. Dr. B.R. Ambedkar, on the debate of "due process" in the Constituent Assembly, observed that :

- A. it involves the relation between legislature and judiciary.
- B. in a federal system, it is about judiciary deciding law as ultra vires or intra vires.
- C. It involves the adjustment of federal arrangement.

Choose the correct answer :

- (1) A, B and C are true.
- (2) Only B and C are true.
- (3) Only A and C are true.

28. Regarding "due process of law", consider the following statements:

- A. It checks that the law does not deprive life and liberty of a person and that the law made is fair, just, and not arbitrary.
- B. As compared to 'Procedure established by law', 'due process of law' has a narrow interpretation.
- C. The Maneka Gandhi case is related to Due process of law.

How many of the statements given above is/are correct?

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY | CALL: 8977640939

- (1) Only one
- (2) Only two
- (3) All three
- (4) None of the above

**Answer: (2)**

**Justification:**

Statement A - Correct: Due process of law ensures that law is fair, just, and not arbitrary. It acts as a check against laws that could deprive a person of life or liberty without proper justification. The law itself should be reasonable and not violate fundamental rights.

The American Constitution provides for 'due process of law' against that of 'procedure established by law' which is contained in the Indian constitution. "The due process of law" gives wide scope to the American Supreme Court to grant protection to the rights of its citizens. It can declare laws violative of these rights void not only on substantive grounds of being unlawful but also on procedural grounds of being unreasonable, unjust, and unfair.

Statement B - Incorrect: Due process of law has a wider scope than "procedure established by law." "Procedure established by law" simply ensures that a law is followed correctly during its application. Due process, however, goes beyond following procedures and ensures the law itself is fair and just.

Statement C - Correct: The Maneka Gandhi case (Maneka Gandhi v. Union of India, 1978) is a landmark case related to due process of law. In this case, the Supreme Court ruled that a law cannot be arbitrary or unreasonable, even if it follows a proper procedure. This case helped establish the importance of substantive due process in India. The Supreme Court, while interpreting the scope of Article 21 of the Constitution, stated that the "due process of law" is an integral part of "procedure established by law".

10.

4. Which of the following is an essential feature of a Federal Constitution ?
- (1) Distribution of Powers (2) Supremacy of Judiciary  
(3) Parliamentary Supremacy (4) Election Commission

9. Consider the following statements

- A. The purpose of the Constitution is to serve better coordination in the nation amongst the individuals.  
B. Adopting the Constitution confirms that the country is intended to be democratic.

Which of the statements mentioned above is/are correct?

- (1) A only  
(2) B only  
(3) Both A and B  
(4) Neither A nor B.

**Answer: (1)**

**Justification:**

Statement A – Correct The Constitution does establish a framework for a well-coordinated nation by defining the structure of the government, the powers and limitations of different branches, and the fundamental rights of citizens. This framework helps to ensure everyone operates under the same set of rules and promotes cooperation towards common goals.

Statement B – Incorrect the Constitution explicitly lays out a democratic framework for India. It establishes a parliamentary system of government with a sovereign legislature, an independent judiciary, and a federal structure with the distribution of powers between the center and states. These features are the hallmarks of a democracy.

But this was not the case with every country other countries are non-democratic and they adopted a constitution ex- Algeria, Angola, Burma (Myanmar), Iran, Libya, Pakistan, Sudan, Syria, Uzbekistan, Zimbabwe, and Syria, Etc...

11.

62. Match the following Acts with the year :

Act	Year
A. The SCs and STs (Prevention of Atrocities) Act	I. 2016
B. National Commission for Safai Karamcharis Act	II. 1986
C. Child Labour (Prohibition of Regulation) Act	III. 1993
D. Rights of Persons with Disabilities Act	IV. 1989

Choose the correct answer :

(1) A-IV; B-III; C-II; D-I  
(2) A-II; B-I; C-III; D-IV  
(3) A-III; B-IV; C-I; D-II  
(4) A-I; B-II; C-IV; D-III

3) As per Section 2(s) of the Rights of Persons with Disabilities Act, 2016 "person with disability" means?

- (A) A person with long term physical or sensory impairment only.
- (B) A person with long term physical, mental, intellectual or sensory impairment.
- (C) A person with only long-term mental, intellectual impairment.
- (D) None of the above

**Correct Answer: (B)**

**Explanation:** The Rights of Persons with Disabilities Act, 2016 was enacted in 2016 replacing the erstwhile Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. As per Section 2(s) of the Rights of Persons with Disabilities Act, 2016 "person with disability" means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.

28) Consider the following acts

1. The Protection of Civil Rights Act, 1955.
2. The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.
3. The abolition of untouchability act 1975.

Which of the Acts given above specifically aim at curbing untouchability and atrocities against SCs and STs?

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY CONTACT: 8977640939

- (A) 1 Only
- (B) 1, 2
- (C) 2, 3
- (D) All

**Correct Answer: (B)**

**Explanation:** The Constitution contains several provisions in the nature of safeguards for the Scheduled Castes. The following two Acts specifically aim at curbing untouchability and atrocities against SCs and STs, and are therefore very important for the Scheduled Castes:

- (a) The Protection of Civil Rights Act, 1955, and
- (b) The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.

7) Consider the following statements regarding the Child Labor (Prohibition & Regulation) Act

1. The Child Labor (Prohibition & Regulation) Act was amended in 2018.
2. The act was prohibiting the employment of Children below 16 years in all employment.
3. The act was prohibiting the employment of Children of adolescents (14-18 Years) in the scheduled hazardous occupations and processes.

Choose the correct statements:

- (A) 1, 2 only  
(B) 2, 3 only  
(C) 3 only  
(D) 1, 2, 3

**Correct Answer: (C)**

**Explanation:** Based on the recommendations of Gurupadawamy Committee, the Child Labor (Prohibition & Regulation) Act was enacted in 1986. As per the Act, employment of children was prohibited in certain

specified hazardous occupations and processes and regulates the working conditions in others. The list of hazardous occupations and processes is progressively being expanded on the recommendation of Child Labor Technical Advisory Committee constituted under the Act.

Subsequently the act was amended in 2016 with the enactment of the Child Labor (Prohibition & Regulation) Amendment Act 2016 prohibiting the employment of Children below 14 years in all employment and also with the provisions for prohibition on employment of adolescents (14-18 Years) in the scheduled hazardous occupations and processes.

12.

71. The Cabinet Secretariat of India is organised in three wings. Which one of the following is *not* one of the three wings?

(1) Agricultural Policy Wing  
(2) Fiscal Policy Wing  
(3) Social Policy Wing  
(4) Military Wing

TEST 2.24 [R] ( 26 )

75) Consider the statements regarding the Cabinet Secretariat.

1. It functions directly under the President of India.
2. It is responsible for the administration of the Government of India (Allocation of Business) Rules, 1961.
3. It ensures that the President, the Vice President, and Ministers are kept informed of the major activities of all ministries/departments.

Choose the correct statements

- (A) 1, 3  
(B) 3 Only  
(C) 2, 3  
(D) 1, 2

**Correct Answer: (C)**

**Explanation:**

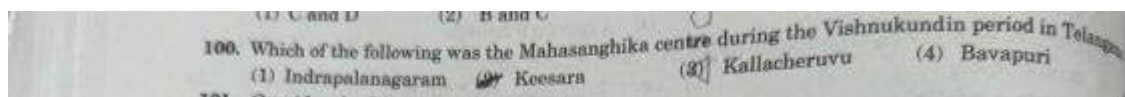
The Cabinet Secretariat functions directly under the Prime Minister.

The administrative head of the Secretariat is the Cabinet Secretary who is also the ex-officio Chairman of the Civil Services Board. The business allocated to Cabinet Secretariat under Government of India (Allocation of Business) Rules, 1961 includes, Secretarial assistance to the Cabinet and Cabinet Committees; and Rules of Business.

The Cabinet Secretariat is responsible for the administration of the Government of India (Transaction of Business) Rules, 1961 and Government of India (Allocation of Business) Rules, 1961 facilitating smooth transaction of business in Ministries/ Departments.

The Cabinet Secretariat ensures that the President, the Vice President and Ministers are kept informed of the major activities of all Ministries/Departments by means of monthly summary of their activities. Management of major crisis situations in the country and coordinating activities of various Ministries in such a situation is also one of the functions of the Cabinet Secretariat.

13.



10) Consider the following statements regarding the vishnukundins

1. Vishnukunds were the followers of Jain religion.
2. Sriparyataswamy was their family deity.
3. On the coins the Vishnukunds, they carved the word 'Sri parvata' it referred as Nagarjunakonda.

Choose the incorrect answer

(A) 1, 2

(B) 2, 3

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

(C) All

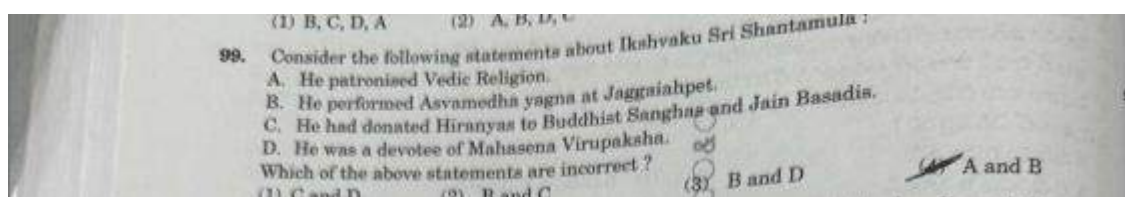
(D) 1, 3

**Correct Answer: (D)**

**Explanation:**

Vishnukunds were the followers of Vedic religion. Sriparyataswamy was their family deity. Their names indicate that they were the followers of Vedic religion and their titles, such as 'Paramamaheswara and Parama Brahmanya' suggest that they were the devotees of Siva and the followers of Brahmanical religion. Madava Varma II, married Vakatakadevi, Vakatakas and Guptas were relatives and followers of Vedic – Brahmin religion due to their influence. Vishnukunds became the followers of Vedic – brahmana religion. On their coins the Vishnukunds carved the word 'Sri parvata'; thus Sricaita Mallikarjuna became popular during the time of vishnukunds only.

14.





52) Famous stone sculpture of Ikshyakus time is “Mandhata Shilpam”, in this the king will raise his right hand. The king is surrounded by Horse and Elephant. This stone engraving is found at

- (A) Jaggavaneta
- (B) Nagarjuna Konda
- (C) Vijaya Puri
- (D) Battiprolu

**Correct Answer: (A)**

**Explanation:**

Famous stone sculpture of Ikshyakus time is “Mandhata Shilpam”, in this the king will raise his right hand. The king is surrounded by Horse and Elephant. This stone engraving is found in “Jaggavaneta”.

15.

94. Who among the following was the author of “Prataparudra Yasobhushanam” ?  
(1) Sakalya Malla (2) Mallinatha (3) Iswara Suri (4) ~~Vidyanatha~~

42) Consider the following statements regarding the administration of the Kakatiya dynasty

1. The Kakatiya kings divided their administration between 72 Niyogas or departments.
2. The famous book ‘Prataparudra Yasobhushanam’ is supporting above information of the existence of 72 Niyogas or departments in the Kakatiya administration.
3. The chief on these 72 departments under the Kakatiya period was known as ‘Bahattara Niyogadhipati’.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

Choose the incorrect answer

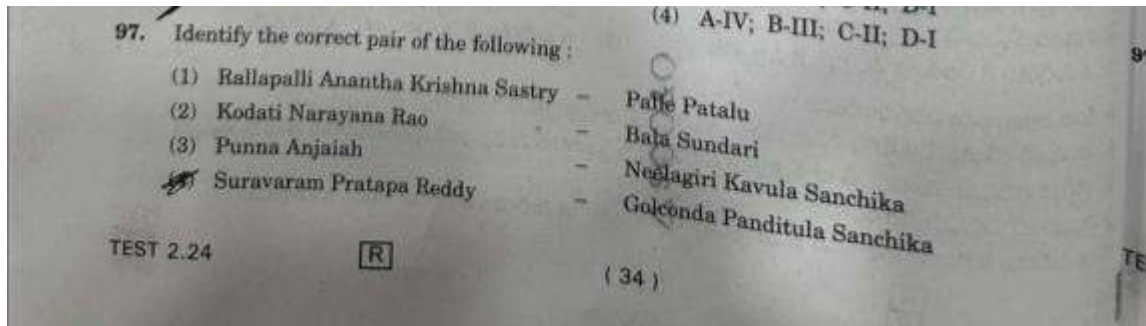
- (A) 1, 2
- (B) 2, 3
- (C) 2 Only
- (D) All

**Correct Answer: (C)**

**Explanation:**

Kakatiyas divided their administration into different units. Central Government’s control was well established over provincial, district, and village units. King was assisted in the administration by different ministers and officials. At the Central Council, Pradhani, Pragada, Amatya, Mantri, and Senadhipathi were important members. The feudatory kings were well respected. They were taken into confidence by the ruler. The kakatiya kings divided their administration between 72 Niyogas or departments. ‘Purushartha saram’ of Shivadevayya is supporting above information. The chief on these 72 departments was known as ‘Bahattara Niyogadhipati’. The king himself used to preside over the meetings of council.

16.



5) Consider the following literary writings of Suravaram Pratapa Reddy

1. Suddhantakatha
2. Ariveerlu
3. Bhakta Tukaram
4. Thyagamurthulu
5. Janapadam

Choose the correct answer

- (A) 2, 3  
(B) 1, 3, 4  
(C) 2, 3, 5  
(D) 1, 2, 3

**Correct Answer: (D)**

**Explanation:**

Suddhantakatha (Novel), Ariveerlu (Novel), Bhakta Tukaram (Drama) are the literary writings of Suravaram Pratapa Reddy.

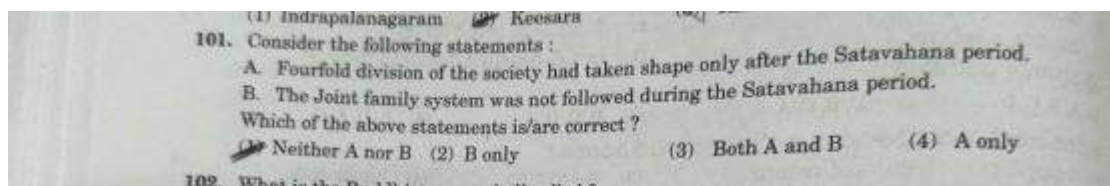
Thyagamurthulu is the literary writing of Pasam Narayana Reddy

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

Janapadam in 1976 is literary writing of Dasarathi Rangacharya

17.



26) Which of the following statements is/are not correct regarding the Satavahanas?

1. The Satavahanas ruled over parts of present-day Andhra Pradesh, Telangana, Maharashtra and Uttar Pradesh.
2. The Shaka ruler Nahapana was defeated by Satavahana king Yasishthiputra Pulumavi.
3. The Naneghat Inscription attributed to Queen Naganika sheds light on the Satavahana administration.
4. The women who married Satavahana rulers adopted names derived from their husband's gotra name.

Choose the correct answer

- (A) 1, 2, 3  
(B) 1, 3, 4  
(C) 1, 2, 4  
(D) 2, 3, 4

**Correct Answer: (C)**

**Explanation:**

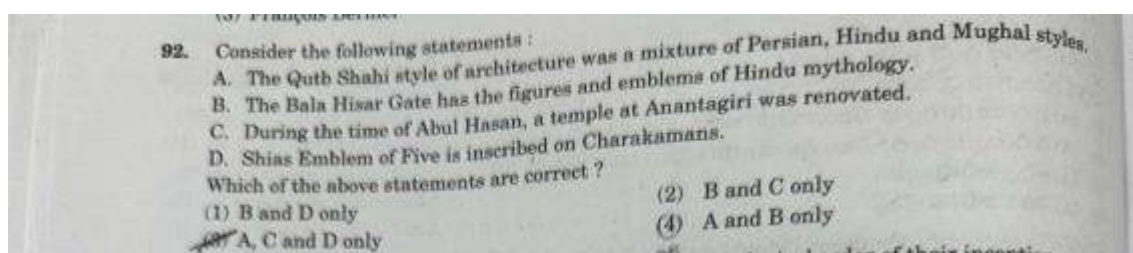
The Satavahanas emerged in the first century BCE in the Deccan region. They ruled over parts of Andhra, Maharashtra, Karnataka and Madhya Pradesh (not UP).

Gautamiputra Satakarni was the greatest of the Satavahana kings. He defeated the Shaka ruler Nahapana and reissued the coins of Nahapana with his own royal insignia (not Vasishthiputra Pulumavi).

The Naneghat inscriptions was attributed to Naganika, a queen of the Satavahana dynasty. She was likely the wife of king Satakarni.

Many of the women who married Satavahana rulers had names derived from their father's gotras. They retained these names instead of adopting names derived from their husband's gotra name.

18.



27) Consider the statements with reference to the Qutb Shahi Dynasty

1. The Qutb Shahi dynasty, a Persianate Shia Islamic dynasty, was established after the collapse of Bahmani Sultanate.
2. The Qutb Shahi Monuments of Hyderabad and the Golconda Fort were included in the tentative list of UNESCO World Heritage Sites in 2019.
3. During the reign of Abul Hasan Qutb Shah, the dynasty was annexed in to the Mughal Empire by Aurangzeb.

Choose the correct answer

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

(A) 1 Only

(B) 1, 2

(C) 2, 3

(D) 1, 3

**Correct Answer: (D)**

**Explanation:**

The Qutb Shahi dynasty was a Persian Shia Islamic dynasty which ruled Golconda during the 16th and 17th century. It was established after the collapse of Bahmani Sultanate by Sultan Quli Qutb Shah.

The Qutb Shahi Monuments of Hyderabad, the Golconda Fort, Qutb Shahi Tombs and Charminar were included in the tentative list of UNESCO World Heritage Sites in 2010.

In 1687, during the reign of sultan Abul Hasan Qutb Shah, the dynasty was annexed in to the Mughal Empire by Aurangzeb.

127) Consider the following statements about Charminar built during Qutub Shahi dynasty?

1. Charminar was built in the 17<sup>th</sup> century.
2. The four pillars of Charminar are associated with the first four caliphs of Islam.
3. Charminar is situated on the east bank of Musi River.

How many of the above statements is /are incorrect?

(A) Only One

(B) Only Two

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977640939

(C) All

(D) None

**Correct Answer: (A)**

**Explanation:**

Sultan Mohammed Quli Qutb Shah commissioned the construction of Charminar in 1591, dedicating it to his wife, Bhagmati. Legend has it that the monument also symbolizes the city's recovery from a devastating plague outbreak.

Charminar four pillars are often associated with the first four caliphs of Islam. The Iranian architect, Mir Momin Astrawadi, who had settled in Hyderabad, designed this iconic structure, drawing inspiration from Shia "tazias" commemorating Hussain, the son-in-law of Prophet Muhammad. Charminar was meticulously crafted using granite, lime mortar, and pulverized marble. The top floor houses the city's oldest mosque.

Located on the east bank of the Musi River, Charminar holds a place of significance, listed among India's archaeological and architectural treasures by the Archaeological Survey of India.

53) Bala Hisar, the citadel on top of the hill, gives a bird's view of the entire neighboring area is located at,

- (A) Golkonda fort
- (B) Bhongir fort
- (C) Medak fort
- (D) Warangal fort

**Correct Answer: (B)**

**Explanation:**

Bhongir Fort: This fort was built by the Western Chalukya ruler Tribhuvana Malla Vikramaditya VI on an isolated monolithic rock, named after him and called Tribhuvanagiri. With the passage of time, it began to be called Bhuvanagiri and is subsequently called Bhongir. The town is about

39 kilometers from Hyderabad. Besides, the hill on which the fort is built is about 500 feet high and 40 acres wide. This fort is associated with the rule of Queen Rudrama Devi and her grandson Prataparudra. One finds a moat encircling the fort, a vast underground chamber, wells, ponds, stables, armory, trapdoors and other similar features. The fort provides an impressive view of the surrounding country side from the top. Bala Hisar, the citadel on top of the hill, gives a bird's view of the entire neighboring area.

67) Which of the following is correct regarding Kuchipudi dance?

1. Ibrahim Qutub Shah donated Kuchipudi village to Kuchipudi dancers
2. Siddendra Yogi is the founder of Kuchipudi dance
3. Famous forms of dance are Bhami Kalapam, Usha Parinavam and Golla Kalapam.

Choose the correct answer

- (A) 1 Only
- (B) 2 Only
- (C) 3 Only

(D) 2, 3

**Correct Answer: (D)**

**Explanation:**

Abul Hasan donated Kuchipudi village to Kuchipudi dancers. Siddendra Yogi is the founder of Kuchipudi dance belongs to his time. Famous forms of dance are Bhami Kalapam, Usha Parinavam, Golla Kalapam.

19.

95. Consider the following statements :

- A. At Srisailem, God Mallikarjuna was called Chenchuramayya.
- B. Tikkana propagated the Harihara cult in his Mahabharata.
- C. 'Anantarundhati Vrata' was an important activity during the Kakatiya period.
- D. The Panditaradhya matha was located at Tirupati.

Which of the above statements are correct ?

- (1) C and D only
- (2) B and C only
- (3) A and C only
- (4) A and B only

96. Match the following authors with their works :

37) Consider the following statements

1. Sriparyataswamy was the family deity of the Vishnukundins.
2. The Vishnukunds carved the word 'Sri parvata' on their coins referred to as Nagarjunakonda.

Choose the incorrect answer

- (A) 1 Only
- (B) 2 Only
- (C) Both
- (D) None

**Correct Answer: (B)**

**Explanation:**

Vishnukunds were the followers of the Vedic religion. Sriparyataswamy was their family deity. Their names indicate that they were the followers of Vedic religion and their titles, such as 'Paramamaheswara and Parama Brahmanya' suggest that they were the devotees of Siva and the followers of Brahmanical religion. Madava Varma II, married Vakatakadevi, Vakatakas and Guptas were relatives and followers of Vedic the Brahmin religion due to their influence. Vishnukunds became followers of the Vedic-Brahmana religion. On their coins the Vishnukunds carved the word 'Sri parvata', thus Srisaile Mallikarjuna became popular during the time of Vishnukunds only.



14) Consider the following statements regarding the Kakatiya dynasty

1. The 'Chandupatla' epigraph inscription confirmed that Queen Rudrama Devi came to power after Ganapati Deva
2. Queen Rudrama Devi assumed the title 'Raya Gajakesari'.

Choose the correct answer

- (A) 1 Only  
(B) 2 Only  
(C) Both

(D) None

**Correct Answer: (B)**

**Explanation:**

According to 'Chandupatla' epigraph issued by 'Puvvula Munimadi' a servant of Mallikarjuna nayaka, Commander of Rudrama along with Queen Rudrama died in the battle fought with Ambadeva. She was the most capable, brave, talented ruler among the Kakatiyas. She assumed the title 'Raya Gajakesari'. She also reorganised her army. She repaired the rock fort of Warangal fort. She also constructed steps of the fort and made Warangal fort stronger than in earlier times.

15) Consider the following statements regarding the Art and architecture of the Kakatiya dynasty

1. 'Ramappa temple' built by Recherla Rudra the General of Rudrama Devi at Palampet is an excellent example of Kakatiya Architecture.
2. 'Nrityaratnavali' is the monumental work on dance was written by Jayana.

Choose the correct answer

- (A) 1 Only  
(B) 2 Only  
(C) Both  
(D) None

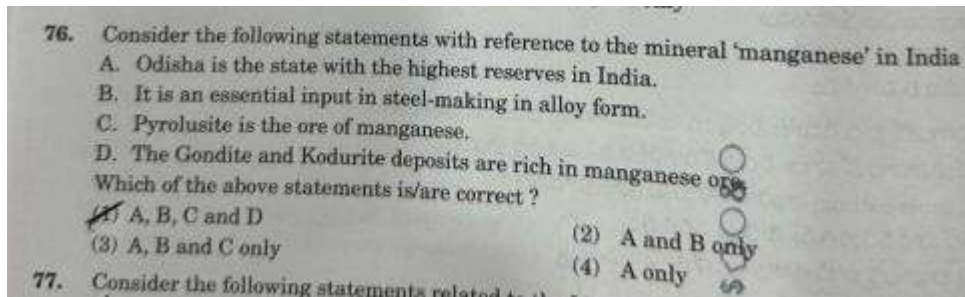
**Correct Answer: (B)**

**Explanation:**

'Ramappa temple' built by Recherla Rudra the General of Ganapati Deva at Palampet in the year 1213 CE is an excellent example of Kakatiya Architecture. It was built in star model. The Roof ceiling is well painted with glimpses from Ramayana and Mahabharata. On the pillars of this temple. Specially prepared brick which can float on surface of water are used in the construction of 'Gopuram' of this temple. The monumental work of Jayana on dance i.e., 'Nrityaratnavali', is describing the different styles. 'Desi' and 'maarga' dance styles are described.



21.



18) Consider the statements regarding the minerals and its associated places

1. Graphite: Nalgonda
2. Gold: Warangal
3. Copper: Khammam
4. Manganese: Nizamabad

Choose the incorrect pair

- (A) 1, 4
- (B) 1, 2
- (C) 1 Only

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

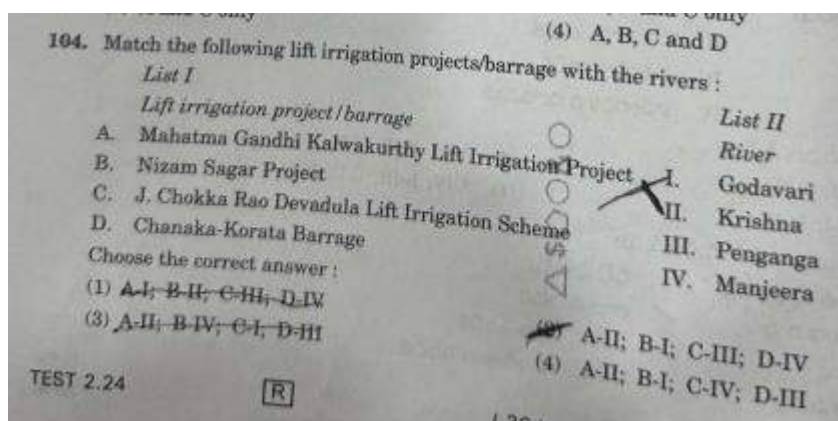
(D) 2 Only

**Correct Answer: (C)**

**Explanation:**

Minerals	Places
1. Graphite:	Khammam
2. Manganese:	Adilabad, Nizamabad
3. Copper:	Khammam
4. Chromite:	Khammam
5. Gold:	Warangal and Khammam

22.



12) Identify the incorrect pair regarding Kaleshwaram project

1. Link-I: From Medigadda Barrage on Godavari River to Sripada Yellampalli Project
2. Link-II: From Sripada Yellampalli Project to Mid Manair Dam

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

3. Link-III: From Mid Manair Dam to Upper Manair Reservoir
4. Link-IV: From upper Manair Dam to Konda Pochamma Reservoir

Choose the correct answer

- (A) 1, 2  
(B) 2, 3  
(C) 1, 4  
(D) None

**Correct Answer: (D)**

**Explanation:**

The Kaleshwaram Lift Irrigation Project or KLIP is a multi-purpose irrigation project on the Godavari River in Kaleshwaram, Bhupalapally, Telangana. Currently the world's largest multi-stage lift irrigation project, its farthest upstream influence is at the confluence of the Pranhita and Godavari rivers.

**Links & Irrigated Command Area/Ayacut (Acres)**

1. Link-I: From Medigadda Barrage on Godavari River to Sripada Yellampalli Project (30,000 acres)
2. Link-II: From Sripada Yellampalli Project to Mid Manair Dam
3. Link-III: From Mid Manair Dam to Upper Manair Reservoir (86,150 acres)
4. Link-IV: From upper Manair Dam to Konda Pochamma Reservoir (595,754 acres)
5. Link-V: From Anicut to Chityala (243,500 acres)
6. Link-VI: From Sri Komaravelli Mallanna Sagar to Singur Dam (280,296 acres)
7. Link-VII: From SRSP Foreshore to Nizam Sagar Canals and to Dilawarpur and Hangarga village for Nirmal and Mudhole Constituency (590,000 acres).

22) Consider the following statements

1. The Centre is yet to grant environmental clearance to Chanaka-Korata barrage on Penganga River.
2. It is an inter-State project jointly initiated by the Governments of Telangana and Maharashtra in March 2018.
3. The barrage is aimed at providing irrigation facilities to the whole district of Adilabad.

Choose the correct answer

- (A) 1 Only  
(B) 2 Only  
(C) 3 Only  
(D) None

**Correct Answer: (D)**

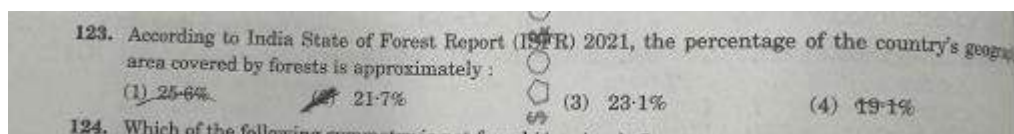
**Explanation:**

The Centre on 15<sup>th</sup> March 2024, granted environmental clearance to Chanaka-Korata barrage on Penganga River, interstate Irrigation Project situated in Adilabad district.

The Chanaka-Korata Barrage, located on the Penganga River, is an inter-State project jointly initiated by the Governments of Telangana and Maharashtra in March 2016.

This irrigation project aims to provide water for agricultural purposes in both Telangana and Maharashtra. The barrage is aimed at providing irrigation facilities to ryots in four mandals under Boath and Adilabad segments.

23.



23) Arrange the following in the ascending order of the land use pattern in Telangana.

1. Non-Agriculture land
2. Forest Cover
3. Net Sown Area
4. Fallow Lands
5. Barren and Uncultivable Land

Choose the correct answer

- (A) 5-4-1-2-3  
(B) 5-4-1-3-2  
(C) 5-1-4-2-3  
(D) 4-5-1-2-3

**Correct Answer: (A)**

**Explanation:**

Telangana State is the 11<sup>th</sup> largest State in the country with a geographical area of over 276.95 lakh acres (112.08 lakh hectares).

Of this, 52.88 percent of the area is under Net Sown Area

24.70 percent is under Forest Cover

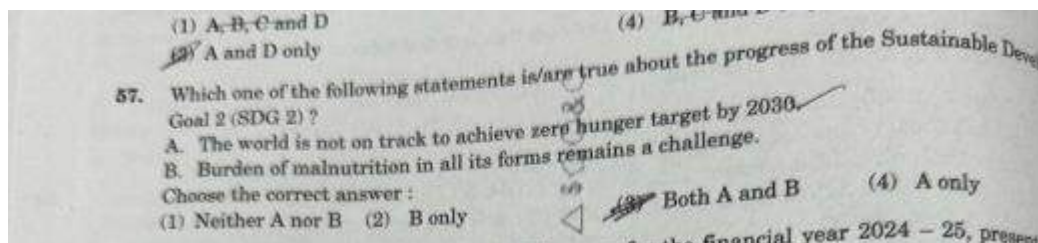
7.46 percent is under land put to Non-agriculture use

5.26 percent area is under Fallow lands

5.42 percent is under Barren and uncultivable land

The balance area is under permanent pastures and other grazing lands.

24.



**6. Consider the following pairs of Sustainable Development Goals and government programs in India.**

1. SDG 2: Poshan Abhiyan
2. SDG 3: Beti Bachao Beti Padhao
3. SGD 6: Green India Mission
4. SDG 11: AMRUT

How many of the above pairs are correct?

- (A) Only One
- (B) Only Two
- (C) Only Three
- (D) All

**Correct Answer: B**

**Explanation:**

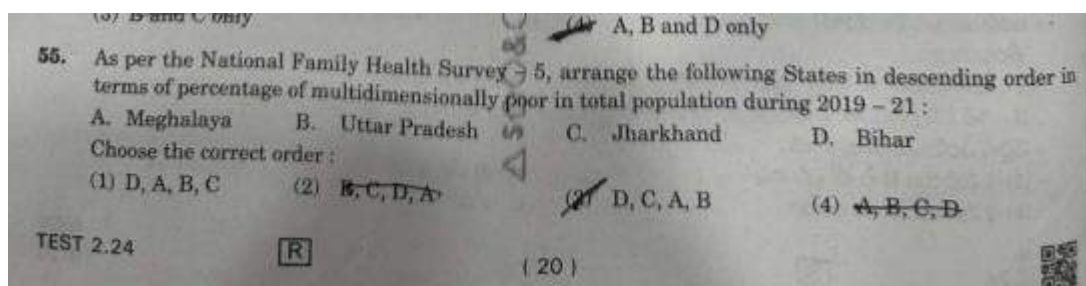
SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

SDG 3: Ensure healthy lives and promote well-being for all at all ages. Beti Bachao Beti Padao relates to SDG 5 (Achieve gender equality and empower all women and girls). (Hence statement 2 is incorrect)

SDG 6: Ensure availability and sustainable management of water and sanitation for all. Green India Mission is related to SDG 13 (Take urgent action to combat climate change and its impacts).

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

25.



7. Consider the following statements with reference to the National Multidimensional Poverty Index.

1. India has registered a decline in the number of 'multidimensional poor individuals in 2019-2021 compared with 2014-15.
2. The index is released by the Ministry of Home Affairs.
3. It captures overlapping deprivations in health, education and living standards.
4. Urban areas witnessed the fastest decline in poverty

How many of the above are incorrect?

- (A) Only One  
(B) Only Two  
(C) Only Three  
(D) All

**Correct Answer: C**

**Explanation:**

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

According to the Report, India has registered a significant decline of 9.89 percentage points in number of India's multidimensional poor from 24.85% in 2015-16 to 14.96% in 2019-2021. The rural areas witnessed the fastest decline in poverty from 32.59% to 19.28%. During the same period, the urban areas saw a reduction in poverty from 8.65% to 5.27%. Uttar Pradesh registered the largest decline in number of poor with 3.43 crore people escaping multidimensional poverty.

This is the second edition of NITI AAYOG report on the Multidimensional Poverty Index (MPI).

The primary data source to arrive at these figures was National Family Health Survey-5 (NFHS-5).

Under the three broad indicators of health, education and living standards, NITI AAYOG assigns specific dimensions - such as nutrition and child adolescent mortality under health, years of schooling under education, and access to cooking fuel, electricity, bank accounts etc. under the quality of living.

Nutrition deprivation decreased from 37 per cent to 31 per cent, maternal health deprivation improved from 22.5 per cent to 19.17 per cent, and child and adolescent mortality deprivation declined from 2.69 per cent to 2.06 per cent.

8) As per National Family Health Survey-5 (NFHS-5), about 97% of deliveries in the State were institutional deliveries, what percentage that the institutional deliveries increased from National Family Health Survey-4?

- (A) 4 percent
- (B) 5 percent
- (C) 6 percent
- (D) 7 percent

**Correct Answer: (C)**

**Explanation:**

Improving access to institutional care is vital in reducing infant and maternal mortality, and in treating complications that may arise during delivery. As per National Family Health Survey-5 (NFHS-5), about 97% of deliveries in the State were institutional deliveries, a six percentage point increase from NFHS-4.

26.

52. According to the Household Consumption Expenditure Survey 2022 - 23, which of the following statements are true ?

- A. Chhattisgarh has the lowest rural and urban Monthly Per Capita Expenditure (MPCE).
- B. Rural-urban difference in average MPCE is the lowest in Meghalaya.
- C. Sikkim has the highest rural and urban MPCE.
- D. Chandigarh has the lowest MPCE in urban areas.

Choose the correct answer :

- (1) B and D only
- (2) B and C only
- (3) A and C only
- (4) A and B only

**62. Match the following regarding how frequently they are conducted:**

- |                                   |                         |
|-----------------------------------|-------------------------|
| (i) Periodic Labour Force Survey  | 1. Decadal              |
| (ii) Economic Census              | 2. Quinquennial         |
| (iii) Consumer Expenditure Survey | 3. Annual               |
| (iv) Census                       | 4. No fixed periodicity |

Select the correct answer using the code given below:

- (a) (i) – 4, (ii) – 2, (iii) – 4, (iv) – 1  
(b) (i) – 3, (ii) – 4, (iii) – 2, (iv) – 1  
(c) (i) – 4, (ii) – 2, (iii) – 3, (iv) – 1  
(d) (i) – 3, (ii) – 1, (iii) – 4, (iv) – 2

**Ans: (b)**

**Exp:** Economic Census is conducted by NSO, MoSPI and has no fixed periodicity and presently the 7th Economic Census is being conducted (2019). Economic census gives insights on the economic activities being carried out across the country, their geographical distribution, the number and distribution of workers, types of ownership and sources of finance. It covers all structures across the country, whether residential or commercial including informal/unorganized units but excludes certain economic activities such as crop-production, plantation activities, illegal activities, public administration and defence, and activities of extra-territorial organisations.

Periodic Labour Force Survey is conducted by National Statistics Office (NSO) to produce annual statistics of employment and unemployment characteristics for both rural and urban areas, along with quarterly estimates for urban areas. Earlier it was conducted after five years.

Household consumption expenditure survey is conducted by National Statistical Office (NSO), after every five years and generates estimates of household Monthly Per Capita Consumer Expenditure.

Census (of the population) is conducted by Registrar General and Census Commissioner under Ministry of Home Affairs after every 10 years. The 2021 census will be digital.

Annual Survey of Industries (ASI) is the most important source of industrial statistics of the registered organized manufacturing sector (Factories registered under Factories Act 1948 i.e. those factories employing ten or more workers using power and those employing twenty or more workers without power) of the economy and extends to the entire country. It is conducted annually by MoSPI



27.

22. Which of the following statements are true about greenhouse gases ?

- A. Greenhouse gases absorb long wave radiation from the Earth.
- B. The greenhouse effect is responsible for heating of the Earth's surface and atmosphere.
- C. The greenhouse effect causes El Nino effect.
- D. Few of the direct greenhouse gases under Kyoto Protocol are CO<sub>2</sub>, CH<sub>4</sub>, SF<sub>6</sub> and SO<sub>2</sub>.

The correct answer is :

(1) A, B and C only      (2) B and C only

(3) A, C and D only      (4) A and B only

19) Consider the statements about the types of carbon trading

1. Emission trading, also known as 'cap-and-trade', allows countries to sell unused emission units to those exceeding their targets.
2. Offset trading is a mechanism where countries can earn credits by investing in carbon projects that emit more greenhouse gases.

Double-click to hide white space

3. Joint Implementation under the Kyoto Protocol enables Annex B countries to earn emission reduction units from projects in non-Annex B countries.
4. In offset trading, countries create carbon credits by investing in projects that emit fewer greenhouse gases.

Choose the correct answer

- (A) 1, 4
- (B) 2, 3
- (C) 1, 2, 3
- (D) All

**Correct Answer: (A)**

**Explanation:**

Emission trading allows the sale of unused emission units. Offset trading involves creating credits through investments in projects that reduce greenhouse gas emissions. Offset trading involves investing in projects that emit less, not more, greenhouse gases. Joint Implementation allows credits from projects in other Annex B countries, not non-Annex B countries.

13) Consider the following statements about the natural greenhouse effect and its importance.

1. The natural greenhouse effect is harmful and leads to global warming.
2. Without the natural greenhouse effect, Earth's average temperature would be much lower, making it less hospitable for life.
3. Water vapor and carbon dioxide are the primary contributors to the natural greenhouse effect.

Choose the correct answer

- (A) 2, 3  
(B) 1 Only  
(C) 2 Only  
(D) All

**Correct Answer: (A)**

**Explanation:**

The natural greenhouse effect keeps Earth's average temperature at a level suitable for life. Without it, Earth would be much colder. The water vapor and carbon dioxide are significant contributors to the natural greenhouse effect. The natural greenhouse effect is essential for maintaining Earth's climate; it is the enhanced greenhouse effect due to human activities that leads to harmful global warming.



28.

(c) Allows ozone depleting chemicals to accumulate

24. Select the correct set of statements regarding the effects of climate change :

(1) Reduced agricultural productivity, decrease in renewable energy sources, increased polar populations

(2) Decrease in global temperatures, increased sea ice, expansion of tropical forests

(3) Decrease in ocean's acidity, reduced CO<sub>2</sub> emission, increased glacier mass

(4) Increased sea level, more intense hurricanes, species migration

25. Question : Is that year a leap year ?

---

25) Consider the following statements regarding various environmental processes and their roles in climate change mitigation.

1. Anaerobic digestion is a process where anaerobic microorganisms decompose biodegradable matter in the presence of oxygen to produce biogas.
2. Pyrolysis involves heating organic material in the absence of air, breaking down molecules to produce syngas.
3. Co-generation is a method of producing only one form of energy, typically electricity, from a single fuel source.
4. Carbon offsetting involves credits for reductions in greenhouse gases made at another location and sold in metric tons of carbon dioxide equivalent.

Choose the correct answer.

- (A) All
- (B) 1, 3
- (C) 1, 2, 3
- (D) 2, 4

**Correct Answer: (D)**

**Explanation:**

Pyrolysis heats organic material in the absence of air to produce syngas. Carbon offsetting involves trading credits for reductions in greenhouse gases made at different locations. Anaerobic digestion

---

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

---

---

---

occurs in the absence of oxygen. Co-generation produces two forms of energy, typically heat and electricity, from one fuel source.

29.

(1) I, III, II, IV      (2) I, III, IV, II      ~~(3) I, II, III, IV~~      (4) I, IV, III, II

130. Match the following Acts/Rules in India with respect to their year of passing :

Act/Rule in India		Year of passing
A. Forest (Conservation) Act	<input type="radio"/>	I. 2010
B. National Green Tribunal Act	<input type="radio"/>	II. 2016
C. Wild Life (Protection) Act	<input type="radio"/>	III. 2002
D. Hazardous Wastes (Management, Handling and Transboundary Movement) First Amendment Rules	<input type="radio"/>	IV. 1972
E. Biological Diversity Act	<input type="radio"/>	V. 1980
		VI. 2020

Choose the correct answer :

~~(1) A-V; B-I; C-IV; D-II, E-III~~      (2) ~~A-I; B-IV; C-V; D-III, E-II~~

(3) A-VI; B-V; C-IV; D-II, E-III      (4) ~~A-V; B-I; C-IV; D-III, E-VI~~

131. The core loading of India's first indigenous Forest D...

33) Consider the following statements about the applicability and enforcement of the Wildlife Protection Act, 1972

1. The Act was extended to Jammu and Kashmir post the abrogation of Article 370, bringing uniform wildlife protection regulations across India.
2. Under the WPA, 1972, the State Government has the authority to declare any area as a Sanctuary or National Park without the need for a central government notification.
3. The Act mandates that all wildlife-related offenses be tried exclusively in the Supreme Court of India.
4. The Chief Wildlife Warden, appointed by the State Government, is the primary authority responsible for the implementation of the Act.

Choose the correct answer

- (A) 1, 2  
(B) 1, 3

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

- (C) 2, 3, 4  
(D) 1, 2, 4

**Correct Answer: (D)**

**Explanation:**

The Wildlife Protection Act was extended to Jammu and Kashmir post the abrogation of Article 370 (A). The State Government can declare areas as Sanctuaries or National Parks. The Chief Wildlife Warden is responsible for the Act's implementation. Wildlife-related offenses are tried in various judicial forums, not exclusively in the Supreme Court.

**38) Which of the following statements is/are correct related to the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019?**

1. It prohibits import of solid plastic waste into India, including in Special Economic Zones.
2. Domestically manufactured exported electronic component which turned out to be defective can now be imported back to India within a year of export.
3. The rules apply to all the waste generating industries.

Choose the correct answer

(A) 1 Only

(B) 1, 3

(C) 2, 3

(D) 1, 2

**Correct Answer: (D)**

**Explanation:**

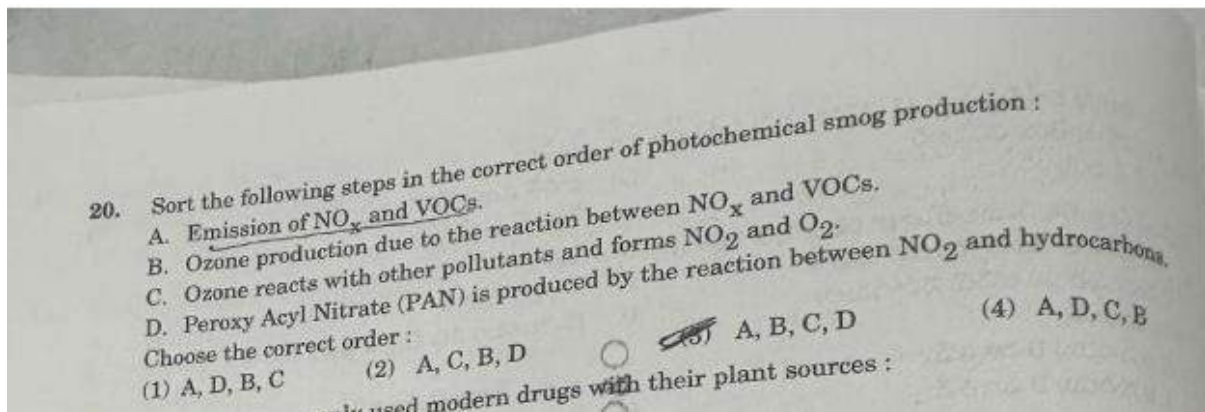
Salient features of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019 are as follows,

Solid plastic waste has been prohibited from import into the country including in Special Economic Zones and by Export Oriented Units. Exporters of silk waste have now been given exemption from requiring permission from the Ministry of Environment, Forest and Climate Change.

Electrical and electronic assemblies and components manufactured in and exported from India, if found defective can now be imported back into the country, within a year of export, without obtaining permission from the Ministry of Environment, Forest and Climate Change.

Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

30.



48) Consider the following statements with reference to Photochemical smog.

1. Primary precursors of photochemical smog are  $\text{NO}_2$  and hydrocarbons.
2. It can be responsible for cracking of rubber and extensive damage to plant life.

Choose the incorrect answer

- (A) 1 Only  
(B) 2 Only  
(C) Both  
(D) None

**Correct Answer: (D)**

**Explanation:**

The common components of photochemical smog are ozone, nitric oxide, acrolein, formaldehyde and peroxyacetyl nitrate (PAN). The primary precursors of photochemical smog, such as  $\text{NO}_2$  and hydrocarbons, the secondary precursors such as ozone and PAN. Photochemical smog causes serious health problems. Both ozone and PAN act as powerful eye irritants.

Photochemical smog leads to cracking of rubber and extensive damage to plant life.

31.

144. Covaxin, India's indigenous COVID-19 vaccine, was developed by :

- I. Bharat Biotech ✓
- II. Serum Institute of India Pvt. Ltd.
- III. Pharmacy Council of India – AstraZeneca
- IV. Indian Council of Medical Research (ICMR) – National Institute of Virology (NIV)

Choose the correct answer :

- (1) I and IV      (2) II and III      (3) I and III      (4) I and IV

11) Consider the following pairs

**COVID-19 vaccines**

**Approach**

- |                |                         |
|----------------|-------------------------|
| 1. Covishield: | Viral Vector Vaccine    |
| 2. COVAXIN:    | Inactivated vaccine     |
| 3. iNOVACC:    | Live-attenuated vaccine |
| 4. Comirnaty:  | Plasmid DNA vaccine     |

How many pairs given above is/are correctly matched?

- (A) Only One
- (B) Only Two
- (C) Only Three
- (D) All

**Correct Answer: (C)**

**Explanation:**

The Oxford–AstraZeneca COVID-19 vaccine, sold under the brand name Covishield is a viral vector vaccine which is used for the prevention of COVID-19.

A Viral Vector Vaccine uses a modified version of a virus (a vector) that cannot cause disease but serves as a platform to produce coronavirus proteins to generate an immune response by delivering genetic instructions to the body's cells.

Covishield uses a replication-deficient chimpanzee viral vector based on a weakened version of a common cold virus (adenovirus) that causes infections in chimpanzees and contains the genetic material of the SARS-CoV-2 virus spike protein. After vaccination, the surface spike protein is produced, priming the immune system to attack the SARS-CoV-2 virus if it later infects the body.

Inactivated vaccines use a form of the virus that has been inactivated or weakened so it doesn't cause disease but still generates an immune response.

COVAXIN, is India's indigenous (inactivated) COVID-19 vaccine developed by Bharat Biotech in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV).

The nasal Covid-19 vaccine, INCOVACC, is an Indian vaccine developed to protect against the Covid-19 virus.

Unlike the traditional Covid-19 vaccines, administered through injection, the INCOVACC is administered through the nose. The vaccine uses a live attenuated virus modified to be less virulent. The vaccine contains a small amount of the Covid-19 virus, which helps the body recognize and fight the virus when exposed.

The vaccine, a homologous live-attenuated LSD vaccine, has been developed by researchers at the National Centre for Veterinary Type Culture and ICAR-National Research Centre on Equines (ICAR-NRCE), Hisar, Haryana, in collaboration with ICAR-Indian Veterinary Research Institute (IVRI), Izatnagar at Uttar Pradesh.

Messenger RNA vaccines—also called mRNA vaccines make proteins to trigger an immune response. m-RNA vaccines have several benefits compared to other types of vaccines, including shorter manufacturing times and, because they do not contain a live virus, no risk of causing disease in the person getting vaccinated.

Platform	Developer
mRNA vaccine	Pfizer BioNTech
Viral vector vaccine	Oxford/ <u>AstraZeneca</u>
Viral vector vaccine	Johnson & Johnson
mRNA vaccine	Moderna
Inactivated vaccine	Sinopharm
Inactivated vaccine	Sinovac
Inactivated vaccine	Bharat Biotech
Recombinant subunit vaccine	Novavax



32.

Bengaluru, C.V. Raman

143. Match the following satellites with the year of their launching :

Satellite	Year of Launching
A. Bhaskara-II	I. 1988
B. GSAT-10	II. 1981
C. IRS-1A	III. 1990
D. INSAT-1D	IV. 2011
	V. 2012

Choose the correct answer :

(1) ~~A-V; B-II; C-IV; D-I~~

(3) A-II; B-III; C-I; D-IV

(4) ~~A-IV; B-V; C-II; D-I~~

TEST 2.24      R      ( 48 )

18) Consider the statements regarding LVM-3.

1. It is capable of placing the 4 ton class satellites of the GSAT series into Geosynchronous Transfer Orbits.
2. It is a two stage launch vehicle.
3. It uses only solid propellant.

How many of the above statements are correct?

- (A) Only One  
(B) Only Two  
(C) All  
(D) None

**Correct Answer: (A)**

**Explanation:**

LVM 3 is essentially a three-stage launch vehicle, including two solid boosters (S200), the core liquid fuel-based stage (L110), and the cryogenic upper stage (C25).

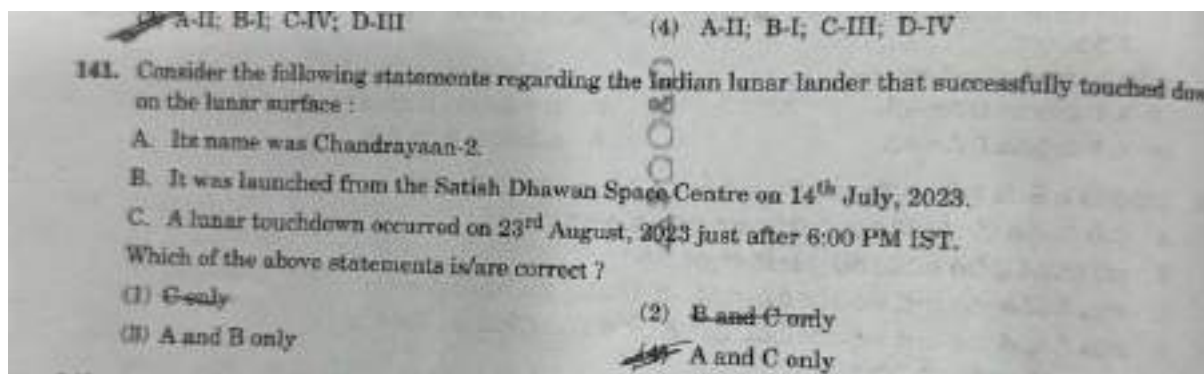
LVM3 is capable of placing the 4 ton class satellites of the GSAT series into Geosynchronous Transfer Orbits.

LVM3 is a three stage launch vehicle consisting of two solid propellant S200 strap-on's and core stages comprising of L110 liquid stage, C25 cryogenic stage, and the equipment bay (EB) and the encapsulated assembly (EA).

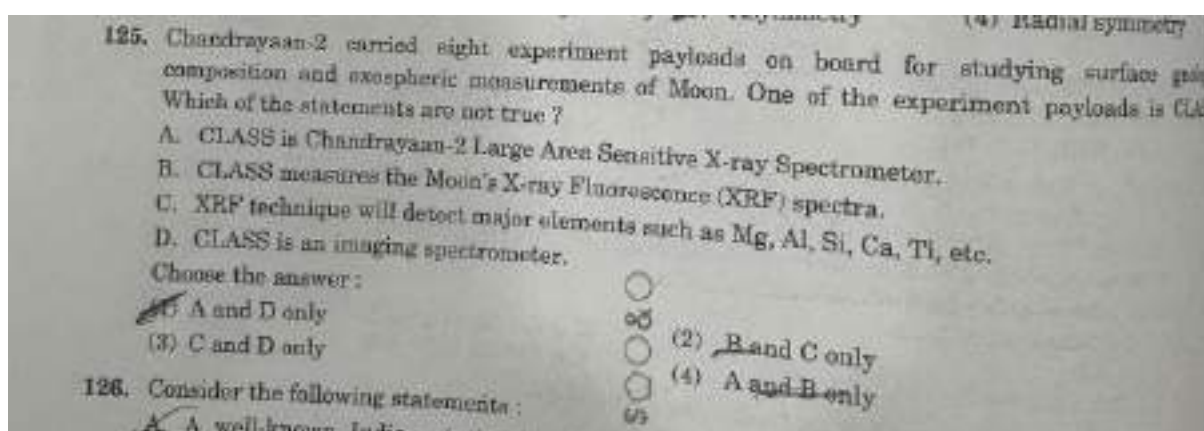
Cryogenic upper stage is configured with the fully indigenous high thrust cryogenic engine (CE20) with a propellant loading of 28 tons.

According to ISRO, "The vehicle takes off with the simultaneous ignition of the two S200 boosters. The core stage (L110) is ignited at about 113s (seconds) through the flight, during the firing of the S200 stages. Both S200 motors burn for about 134s and the separation occurs at 137s. The payload fairing is separated at an altitude of 115 km and at about 217s during L110 firing. The L110 burnout and separation and C25 ignition occur at 313s. The spacecraft is injected into a GTO (Geosynchronous Transfer Orbit) orbit of 180×36000 km at a nominal time of 974s.

33.



34.



71) Consider the following statements

1. Chandrayan 3 landing point is known as "Shiva Shakti Point"
2. PM named the place where Chandrayaan-2 lander crash-landed in 2019 as "Tiranga Point"
3. PM Declared 23 August as "National Space Day"

Choose the correct answer

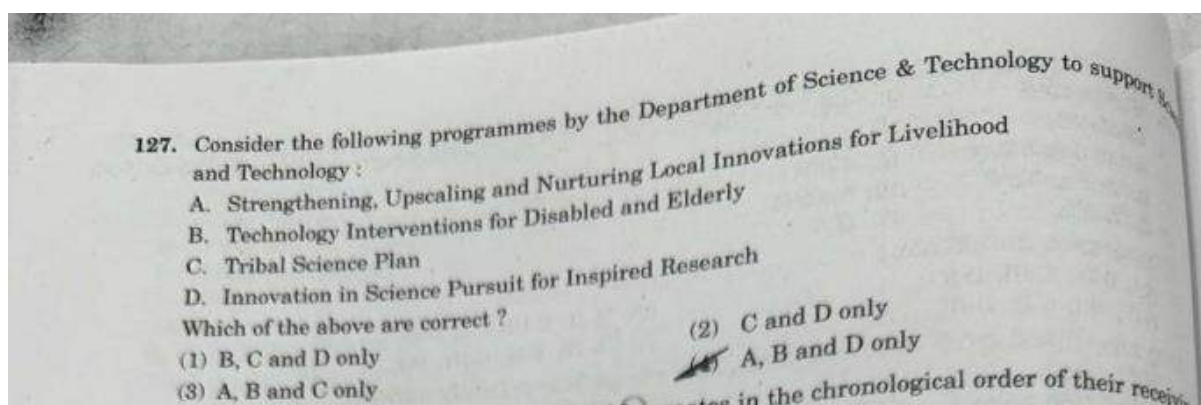
- (A) 1 Only  
(B) 2, 3  
(C) 1, 3  
(D) All

**Correct Answer: (D)**

**Explanation:**

The Prime Minister announced all these decisions during his address, including the names "Shiva Shakti Point" for the place where 'Vikram' touched down and "Tiranga Point" for the place of the Chandrayaan-2 lander crashlanding. He also declared 23 August as "National Space Day."

35.



49) Consider the following statements with reference to the 'SAKSHAM Portal'

1. The SAKSHAM portal is launched by the Technology Information, Forecasting and Assessment Council (TIFAC).
2. The TIFAC is an autonomous organization set up by the Ministry of Information and Electronics.

Choose the correct answer

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

(A) 1 Only

(B) 2 Only

(C) Both

(D) None

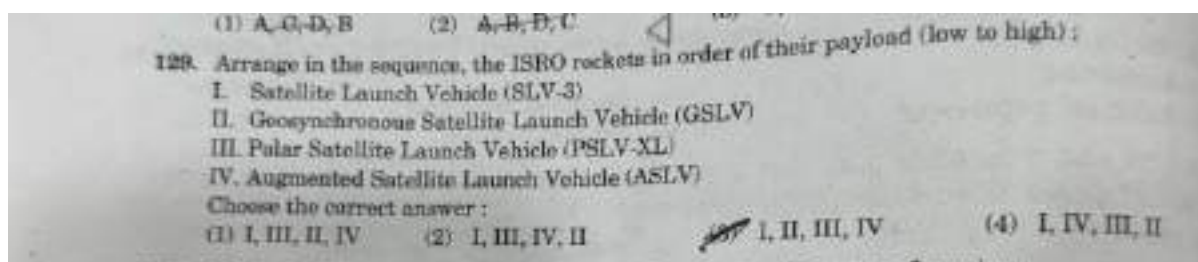
**Correct Answer: (A)**

**Explanation:**

The Technology Information, Forecasting and Assessment Council (TIFAC) has launched SAKSHAM (Shramik Shakti Manch) Job Portal.

TIFAC is an autonomous organization set up in 1988 under the Department of Science & Technology to look ahead in the technology domain, assess the technology trajectories, and support innovation by networked actions in select areas of national importance.

36.



9) Consider the statements regarding the business areas of New Space India Limited (NSIL), the commercial arm of the Indian Space Research Organization (ISRO).

1. Production of Polar Satellite Launch Vehicle (PSLV) and Small Satellite Launch Vehicle (SSLV)
2. Transponder leasing
3. Building Communication and Earth Observation Satellites
4. Transfer of technology developed by ISRO
5. Marketing of products emanating out of ISRO activities

How many of the above are correct?

- (A) 2, 3, 4  
(B) 1, 2, 3, 4  
(C) 2, 4, 5  
(D) All

**Correct Answer: (D)**

**Explanation:**

New Space India Limited (NSIL), incorporated on 6 March 2019 (under the Companies Act, 2013), is a wholly owned Government of India company under the administrative control of the Department of Space (DOS). NSIL is the commercial arm of the Indian Space Research Organization (ISRO) with the primary responsibility of enabling Indian industries to take up high-technology space-related activities. It is also responsible for promoting and commercializing the products and services emanating from the Indian space program.

To satisfy the needs of its customers, NSIL draws upon the proven heritage of the Indian Space Program and ISRO's vast experience in diverse branches of Space Technology.

The major business areas of NSIL include,

- Production of Polar Satellite Launch Vehicle (PSLV) and Small Satellite Launch Vehicle (SSLV) through industry;
- Production and marketing of space-based services, including launch services and space-based applications like transponder leasing, remote sensing and mission support services;
- Building of Satellites (both Communication and Earth Observation) as per user requirements.
- Transfer of technology developed by ISRO centers/ units and constituent institutions of Dept. of Space;
- Marketing spin-off technologies and products/ services emanating out of ISRO activities.
- Consultancy services



38.

- (C), C and D only
116. Which of the following statements related to Aditya-L1 is/are true :
- A. The orbit of Aditya-L1 is located roughly 15 million kilometers away from the Earth.  
B. The mission will help us in understanding Coronal Mass Ejections.
- Choose the correct answer :
- (1) Neither A nor B  
(2) B only  
(3) Both A and B  
(4) A only

8) Consider the following statements

1. PSLV-C57, the 57<sup>th</sup> flight of PSLV and 25<sup>th</sup> mission using PSLV-XL configuration is the launch vehicle of Aditya L1
2. The Lagrangian point 1 (L1) of the Sun-Earth system is about 1.5 million km from the Sun.
3. The distance of L1 from Earth is approximately 1% of the Earth-Sun distance.

Choose the correct answer

- (A) 1 Only  
(B) 2 Only  
(C) 2, 3  
(D) All

**Correct Answer: (D)**

**Explanation:**

PSLV-C57 is the 59<sup>th</sup> flight of PSLV and 25<sup>th</sup> mission using PSLV-XL configuration. It is planned from Second Launch Pad (SLP), SDSC, and SHAR.

PSLV-C57 will launch Aditya-L1 spacecraft in a highly eccentric Earth bound orbit. The spacecraft will perform orbital maneuvers by using its LAM to reach Sun-Earth Lagrange point L1 (1.5 million kilometers from Earth about 4 times farther than the Moon, in a halo orbit).

The Aditya L1 spacecraft is planned to be placed in a halo orbit around the Lagrangian point 1 (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.

The distance of L1 from Earth is approximately 1% of the Earth-Sun distance.

39.

137. What is the name of the Central Programme launched to promote Artificial Intelligence in India and beyond ?  
(1) VIKASai (2) INDIAai  
(3) BHIMai (4) AI4Bharat

6) Telangana has launched AI for Agriculture Innovation Program in collaboration with

- (A) World Bank
- (B) Centre for the Fourth Industrial Revolution
- (C) World Economic Forum
- (D) Both B and C

**Correct Answer: (D)**

**Explanation:**

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

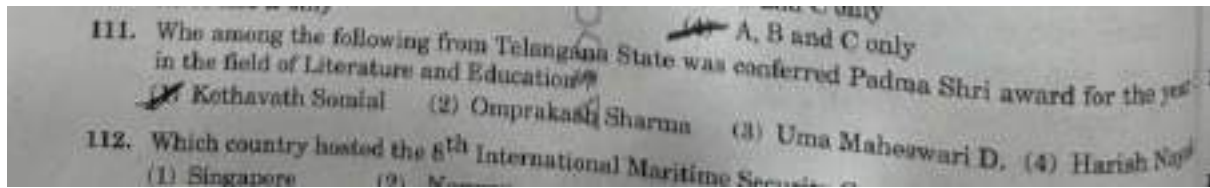
CALL: 8977640939

The Telangana government launched the Artificial intelligence for Agricultural Innovation (AI4AI) programme, in collaboration with the Centre for the Fourth Industrial Revolution, India (C4IR), and World Economic Forum.

The team from C4IR, WEF India worked closely with the Prof. Jai Shankar Telangana State Agricultural University (PJTSAU) and the Telangana government's ITE&C department to identify high Impact use cases of AI which would benefit both, the farmers, and the policymakers.

"Telangana has defined its vision to be a global leader in emerging technologies, including AI, and has made rapid strides towards achieving the vision." The government of Telangana has declared 2020 as the Year of AI to accelerate AI readiness and develop a conducive AI innovation ecosystem in the state.

40.



10) Consider the statements regarding Padma Awards, 2023.

Name	Field
1. Shri Zakir Hussain	Art
2. Shri S M Krishna	Art
3. Shri Deepak Dhar	Literature & Education
4. Shri Kamlesh D Patel	Others-Spiritualism

Choose the incorrect answer

(A) 1, 4 only

(B) 1 only

(C) 2, 3 only

(D) 1, 2, 3 only

**Correct Answer: (C)**

**Explanation:**

A total of 106 Padma Awards with six Padma Vibhushan, nine Padma Bhushan, and 91 Padma Shri conferred across various categories.

Padma Vibhushan (6):

- a) Shri Balkrishna Doshi [Posthumous] [Others - Architecture]

b) Shri Zakir Hussain (Art)

c) Shri S M Krishna (Public Affairs)



41.

108. Which of the following two countries conducted a Joint Military Exercise "SADA TANSEEQ" in January - February 2024 ?  
(1) Pakistan - Tanzania  
 (2) India - Saudi Arabia  
(3) India - Afghanistan  
(4) Iran - Kazakhstan

68) Exercise Sada Tanseeq is a Joint Military Exercise between?

- (A) India and Oman
- (B) India and UAE
- (C) India and Bangladesh
- (D) India and Saudi Arabia

**Correct Answer: (D)**

**Explanation:**

Exercise Sada Tanseeq is the inaugural edition of India-Saudi Arabia Joint Military Exercise 'SADA TANSEEQ' commenced at Mahajan, Rajasthan. The Exercise is conducted from 29<sup>th</sup> January to 10<sup>th</sup> February 2024. Aim of the Exercise is to train troops of both sides for Joint Operations in Semi Desert terrain under Chapter VII of the United Nations Charter.

42.

145. Arrange the following BIMSTEC Secretaries General in chronological order :  
A. Sumith Nakandala  
B. Indra Mani Pandey  
C. Tenzin Lekphell  
D. M. Shahidul Islam  
Choose the correct order :  
(1) D, A, B, C      (2) C, B, A, D  
(3) A, B, C, D      (4) A, D, C, B

2) BIMSTEC countries are partner to which of the following Connectivity Projects?

1. Kaladan Multimodal Project
2. Asian Trilateral Highway
3. BBIN Motor Vehicles Agreement

Choose the correct answer

- (A) 1, 2  
(B) 1, 3  
(C) 2, 3  
(D) 1, 2, 3

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

**Correct Answer: (D)**

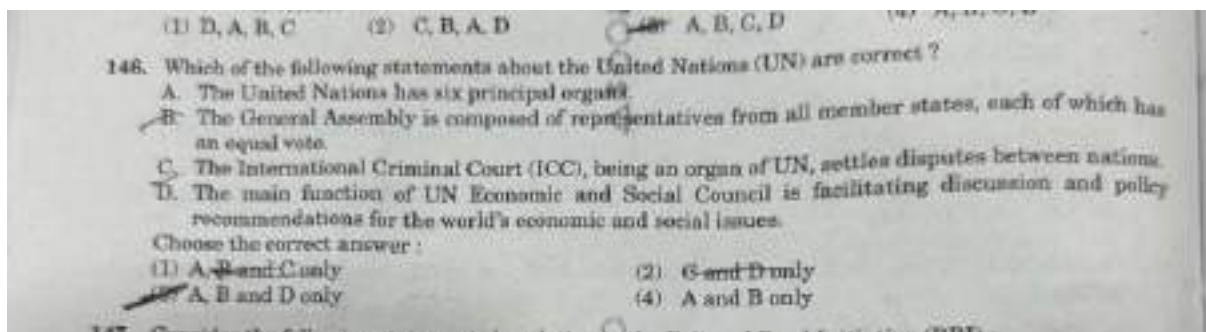
**Explanation:**

**Kaladan Multimodal Project:** Connects the eastern Indian seaport of Kolkata with the Sittwe seaport in Rakhine State, Myanmar by sea. In Myanmar, it will then link the Sittwe seaport to Paletwa in Chin State via the Kaladan river boat route, and then from Paletwa by road to Mizoram state in Northeast India.

**Asian Trilateral Highway:** India-Myanmar-Thailand Trilateral Highway (IMT Highway), a 1,360 km long route, is a highway under construction under India's Look East policy that will connect Moreh, India with Mae Sot, Thailand via Myanmar. Also, there is a proposal to extend it to Cambodia, Laos and Vietnam

**Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement:** for the regulation of Passenger, Personal and Cargo Vehicular Traffic between Bangladesh, Bhutan, India, and Nepal.

43.



44.

148. Which of the following organisation has jurisdiction over the Convention on the Prevention and Punishment of the Crime of Genocide, 1948, also known as Genocide Convention ?  
(1) United Nations General Assembly (UNGA) (2) Permanent Court of Arbitration (PCA)  
~~(3) International Criminal Court (ICC)~~ ~~(4) International Court of Justice (ICJ)~~

49) Consider the following statements with reference to the United Nations Security Council (UNSC)

1. UNSC has 15 members: 5 permanent members (P5) and 10 non-permanent members elected for 2-year terms.
2. India has been a non-permanent member of the Council for 8 Times, latest in 2021
3. Permanent Members of UNSC include US, Germany, Russia, China and the UK.

Choose the correct answer

- (A) 1, 2  
(B) 2, 3  
(C) 1, 3  
(D) All

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

**Correct Answer: (A)**

**Explanation:** The United Nations Security Council (UNSC) has a total of 15 members, consisting of five permanent members, also known as the P5, and ten nonpermanent members. The permanent members possess veto power, allowing them to block any substantive resolution put forth in the Security Council.

India has been a non-permanent member of the Council during 1950-51, 1967-68, 1972-73, 1977-78, 1984-85, 1991-92, 2011-12 and for the 8<sup>th</sup> time, entered the UNSC in 2021 and was on the council for the term 2021-22.

The permanent members of the United Nations Security Council (UNSC), often referred to as the P5, are US, Russia, France, China and the UK. These five countries have permanent seats on the Security Council and possess veto power, which allows them to block any substantive resolution brought before the council.

46) Consider the following statements regarding United Nations World Tourism Organization (UNWTO)

1. The UNWTO is an intergovernmental organization based in Madrid, Spain, and has 159 Member States.
2. UNWTO promotes tourism as a driver of economic growth, inclusive development, and environmental sustainability and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.
3. The General Assembly, which is the principal gathering of the World Tourism Organization, meets every three years.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

How many of the statements given above are incorrect?

- (A) Only One
- (B) Only Two
- (C) All
- (D) None

**Correct Answer: (A)**

**Explanation:**

**United Nations World Tourism Organization (UNWTO):**

The UNWTO is an intergovernmental organization based in Madrid, Spain, and has 159 Member States.

UNWTO promotes tourism as a driver of economic growth, inclusive development, and environmental sustainability and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.

The General Assembly is the principal gathering of the World Tourism Organization. It meets every two years to approve the budget and programme of work and to debate topics of vital importance to the tourism sector.

43) Consider the following statements regarding the 'International Solar Alliance (ISA)';

1. Singapore is the latest country to join ISA.
2. The United Nations General Assembly (UNGA) has granted Observer Status to the International Solar Alliance (ISA).
3. The Assembly of the ISA is the apex decision-making body which comprises of representatives from each Member Country.

How many of the statements given above are correct?

- (A) Only One
- (B) Only Two
- (C) All
- (D) None

**Correct Answer: (C)**

**Explanation:**

94 countries (Members of ISA) have signed and ratified the ISA Framework Agreement, but a total of 116 countries have signed the ISA Framework Agreement (not all countries ratify the agreement). Singapore has ratified the International Solar Alliance, signifying the decision to join collective efforts on climate action.

**Observer Status to International Solar Alliance:**

The United Nations General Assembly (UNGA) has granted Observer Status to the International Solar Alliance (ISA).

It will help provide for regular and well-defined cooperation between the Alliance and the United Nations that would benefit global energy growth and development.

The Assembly of the ISA is the apex decision-making body which comprises of representatives from each Member Country.

The Assembly deliberates matters of substance such as the selection of the Director General, achievement of ISA objectives, its functioning, approval of the operating budget and more.

**34) Consider the following statements with reference to the global initiatives related to road safety**

1. The UN General Assembly adopted resolution "Improving global road safety" with the target of preventing at least 50% of road traffic deaths and injuries by 2050.
2. The Brasilia Declaration on Road Safety was signed at the second Global High-Level Conference on Road Safety, and India has also signed it.

Choose the incorrect answer

- (A) 1 Only
- (B) 2 Only
- (C) Both
- (D) None

**Correct Answer: (A)**

**Explanation:**

**Global Initiatives Related to Road Safety:**

**Brasilia Declaration on Road Safety (2015):**

The declaration was signed at the second Global High-Level Conference on Road Safety held in Brazil. India is a signatory to the Declaration.

---

**VISHNU IAS ACADEMY** | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

**CALL: 8977640939**

---

---

---

The countries plan to achieve Sustainable Development Goal 3.6 i.e., to halve the number of global deaths and injuries from road traffic accidents by 2030.

**Decade of Action for Road Safety 2021-2030:**

The UN General Assembly adopted resolution "Improving global road safety" with the ambitious target of preventing at least 50% of road traffic deaths and injuries by 2030.

The Global Plan aligns with the Stockholm Declaration, by emphasizing the importance of a holistic

45.

(3) A-IV; B-III; C-II; D-I      (4) A-III; B-IV; C-II; D-V

118. Which of the following statements about G-20 is/are correct ?  
A. India held the presidency of the G-20 from 1<sup>st</sup> December 2022 to 30<sup>th</sup> November 2023.  
B. New Zealand is a member country of G-20 as of 2023.  
C. G-20 is the premier forum for international humanitarian co-operation.  
D. G-20 was founded in 1998.  
Choose the correct answer :  
(1) A only       (2) B, C and D only  
(3) A and B only       (4) A, B and D only

119. Match the following sportspersons with their respective countries.

11) Consider the following statements regarding India- Indonesia Relations.

1. Indonesia has emerged as the largest trading partner of India in the ASEAN region.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

2. Both countries are members of G20, East Asia Summit and the United Nations.
3. The stories from the great epics of Ramayana and Mahabharata form a source of Indonesian folk art and dramas.

How many of the above statements are incorrect?

- (A) Only One  
(B) Only Two  
(C) Both  
(D) None

**Correct Answer: (A)**

**Explanation:**

**India-Indonesia Relations:**

**Commercial Relations:**

Indonesia has emerged as the second largest trading partner of India in the ASEAN region.

Bilateral trade has increased from USD 4.3 billion in 2005-06 to USD 38.84 billion in 2022-23.

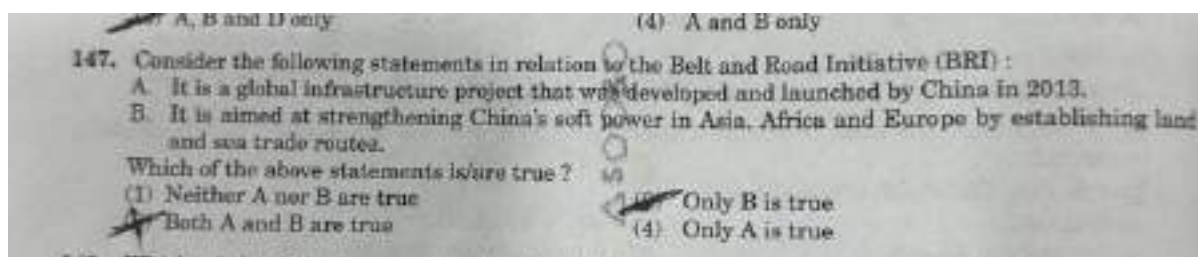
**Political Relations:**

Both countries were chief supporters of independence for Asian and African countries, leading to the Bandung Conference of 1955 and the formation of the Non-Aligned Movement in 1961.

Since India adopted the 'Look East Policy' in 1991, there has been rapid development in bilateral relations.

Both countries are members of G20, East Asia Summit and the United Nations.

46.



26) Consider the statements regarding China's Belt and Road Initiative (BRI)

1. It was launched in 2013 and aims to link Southeast Asia, Central Asia, the Gulf region, Africa, and Europe with a network of land and sea routes
2. India initially joined the project but withdrew from the project in 2018 on the grounds of sovereignty and transparency.

Choose the correct answer

- (A) 1 Only
- (B) 2 Only
- (C) Both
- (D) None

**Correct Answer: (A)**

**Explanation:**

**China's Belt and Road Initiative:**

The BRI, represents a multifaceted development strategy aimed at enhancing global connectivity and cooperation.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 8977640939

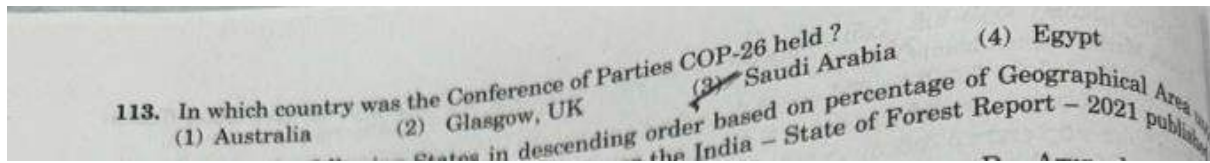
It was launched in 2013 and aims to link Southeast Asia, Central Asia, the Gulf region, Africa and Europe with a network of land and sea routes.

The project was first named the 'One Belt, One Road' but was renamed as the BRI to convey a more open and inclusive initiative as opposed to a Chinese dominated one.

India opposes the project on the grounds of sovereignty and transparency. India has boycotted the BRI summits held by China in 2017, and 2019 and has not endorsed the BRI joint statements issued by the Shanghai Cooperation Organization (SCO).

India never joined the project.

47.



35) Consider the following statements with reference to the Loss and Damage Fund

1. This fund recognizes and aims to compensate for the real losses incurred by communities, countries, and ecosystems due to the impacts of climate change.
2. After intense negotiations at the UNFCCC Conference of Parties (COP 26), representatives of the UNFCCC's member states agreed to set up the Loss and Damage fund.

Choose the correct answer

- (A) 1 Only
- (B) 2 Only
- (C) Both
- (D) None

**Correct Answer: (A)**

**Explanation:**

**Loss and Damage Fund:**

The 'Loss and Damage' (L&D) fund is a financial mechanism designed to address the irreversible consequences of climate change that cannot be avoided or mitigated through adaptation efforts.

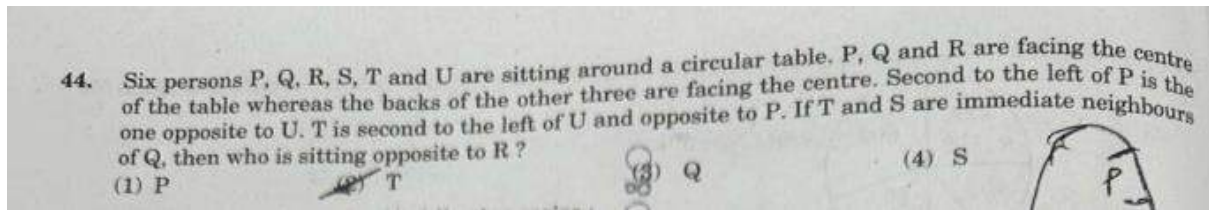
This fund recognizes and aims to compensate for the real losses incurred by communities, countries, and ecosystems due to the impacts of climate change.

After intense negotiations at COP 27, representatives of the UNFCCC's member states agreed to set up the L&D fund. Additionally, a Transitional Committee (TC) was established to figure out how the new funding mechanisms under the fund would operate.

The TC was tasked with preparing recommendations for countries to consider, deliberate on, and potentially adopt by COP 28.



48.



5) Five women A, B, C, D and E sit in an office in two rows one row has three chairs and the other row has two chairs. D and E does not sit in one row. A and B does not sit in one row. In how many ways can the 5 women be seated?

(A) 46

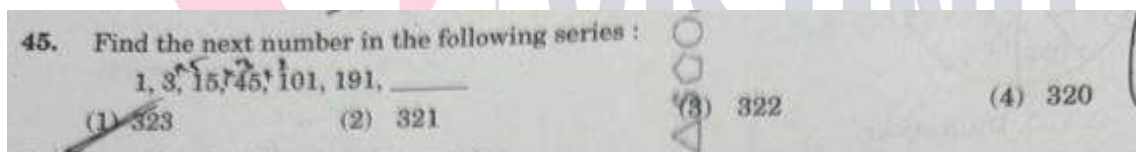
(B) 48

(C) 49

(D) 50

Correct Answer: (B)

49.



10) Find the wrong number in the series given below

18, 55, 167, 504, 1516, 4660

(A) 4660

(B) 167

(C) 55

(D) 18

Correct Answer: (A)

Explanation:

$$18 * 3 + 1 = 55$$

$$55 * 3 + 2 = 167$$

$$167 * 3 + 3 = 504$$

$$504 * 3 + 4 = 1516$$

$$1516 * 3 + 5 = 4553$$

53) Find the "?" in the given series

59, 101, 131, ? , 163, 169, 171

(A) 153

(B) 156

(C) 148

(D) 151

**Correct Answer: (D)**

**Explanation:**

$$59 + 42 = 101$$

$$101 + 30 = 131$$

$$131 + 20 = 151$$

$$151 + 12 = 163$$

$$163 + 6 = 169$$

$$169 + 2 = 171$$

$$42 = 6*6 + 6$$

$$30 = 5*5 + 5$$

$$20 = 4*4 + 4$$

$$12 = 3*3 + 3$$

$$6 = 2*2 + 2$$

$$2 = 1*1 + 1$$



50.

31. In the following letter series, six blank spaces are given. By filling these blanks with appropriate letters, the series becomes a series with definite pattern. Choose the right option that makes the series with a definite pattern.

- xy z yz x z y yxy xy xzx \_ y  
 (1) z, x, y, y, z, x (2) z, x, x, z, x (3) x, y, x, x, y, z (4) x, x, x, y, y, z

12) Which set of letters when sequentially placed at the gaps in the given letter series shall complete it.

d \_ j \_ mu \_ ba \_ \_ of \_ ata \_ he \_ nai

- (A) lemikkcn  
 (B) ehmikkcn  
 (C) elmikkcn  
 (D) elmicnkk

Correct Answer: (B)

Explanation:

It can be observed that it is the names of four Indian metropolis. If we fill all the blank places, it will become: delhi/mumbai/kolkata/chennai

51.

28. A notation representing the blood relationships between two individuals A and B is given below :

A - B means A is the mother of B.  
 A - B means A is the brother of B.  
 A @ B means A is the father of B.  
 A & B means A is the sister of B.  
 A % B means A is the daughter of B.

For the given four individuals P, Q, R and S, using the notation given above, which one of the following shows that P is the mother-in-law of S?

(1) P + Q - R @ S (2) P & Q + R @ S (3) P + Q @ R % S (4) P - Q - R @ S

66) P, Q, R, S, T, U are 6 members of a family in which there are two married couples. T, a teacher is married to a doctor who is mother of R and U. Q the lawyer is married to P. P has one son and one grandson. Of the two married ladies one is a house wife. There is also one student and one male engineer in the family.

Which of the following is true about the granddaughter of the family?

- (A) She is a lawyer  
 (B) She is an engineer  
 (C) She is a student  
 (D) She is a doctor

Correct Answer: (C)

Explanation:

T is a teacher. He is father of R and U. T is husband of, who is doctor  
 Q is husband of P. P is housewife.  
 Q is father of T  
 Grandson of the family is an engineer  
 Grand - daughter of the family is a student.

94) Read the following information carefully and answer the related questions correctly.

'M is the mother of N' is represented by 'M@N'.

'M is the husband of N' is represented by 'M\$N'.

'M is the sister of N' is represented by 'M#N'.

'M is the son of N' is represented by 'M \* N'.

P \* H @ D \* K represents what relation of K with P?

- a) Father
  - b) Sister
  - c) Mother
  - d) Father-in-law
- Ans. (A)

15) Naresh tells Sritham that "Your father Shinde is my wife's father's son's brother." How Naresh is related to Sritham?

- (A) Father-in-law
- (B) Brother-in-law
- (C) Son-in-law
- (D) Nephew

**Correct Answer: (A)**

**Explanation:**

**VISHNU IAS ACADEMY** | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

**CALL: 8977640939**

---

---

---

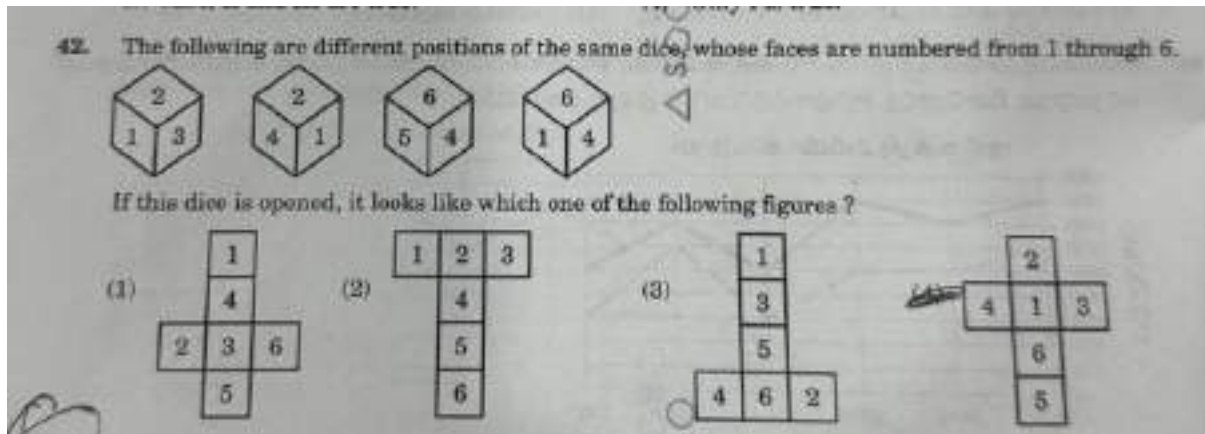
Your Father (Shinde) means Sritham's Father (Shinde)

My Wife means Naresh's wife

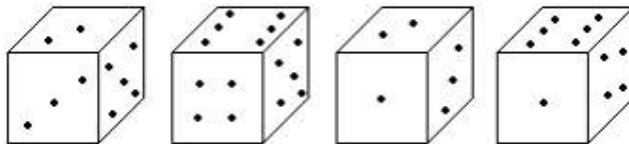
Father's Son's Brother means Brother

Sritham's Father (Shinde) is Naresh's wife's Brother. i.e., Shinde is Brother-in-law of Naresh. Hence Naresh is the Father-in-law of Sritham.

52.



16) How many points will be on the face opposite to in face which contains 2 points?



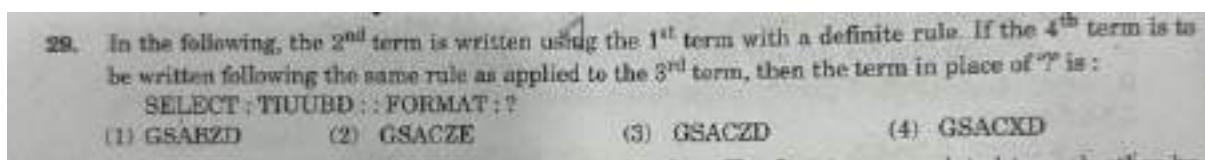
- (A) 5
- (B) 1
- (C) 6
- (D) 3

Correct Answer: (C)

Explanation:

In first two positions of dice one common face containing 5 is same. Therefore, the face opposite to the face which contains 2 points, will contains 6 points.

53.



19) If PHONE is coded as RJQPG. Then MOBILE is coded as,

(A) OQDKNG

(B) QDOGNK

(C) GKNODQ

(D) ODQNGK

Correct Answer: (A)

Explanation:

Word PHONE is coded with two additional alphabets.

$P+2=R$ ,  $H+2=J$ ,  $O+2=Q$ ,  $N+2=P$ ,  $E+2=G$ .

20) If MOTHER is coded as 1416219619. Then FATHER is coded as,

(A) 72126917

(B) 72121968

(C) 72219619

(D) 72219618

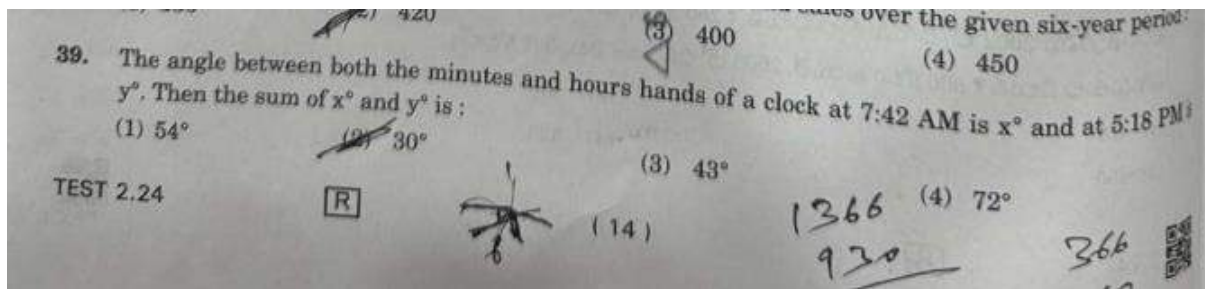
Correct Answer: (C)

Explanation:

Word MOTHER is coded with alphabetical number plus one.



54.



122. What will be the angle between hours hand and minutes hand of a clock at the time 11:20?

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977650939

- a)150°      b)140°      c) 165°      d)120°  
Ans.(B)

21) At what time between 7 and 8 o'clock will the hands of a clock be in the same straight line but, not together?

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY      CALL: 8977640939

- (A) 5 2/11 min. past 7  
(B) 5 3/11 min. past 7  
(C) 5 5/11 min. past 7  
(D) 5 min. past 7

Correct Answer: (C)

Explanation:

When the hands of the clock are in the same straight line but not together, they are 30 minute spaces apart.

At 7 o'clock, they are 25 min. spaces apart.

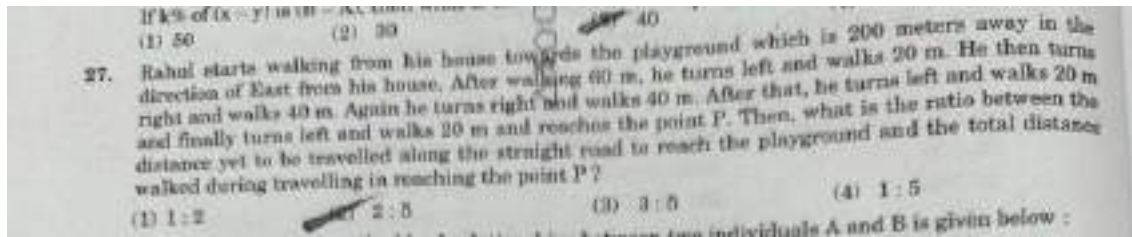
Minute hand will have to gain only 5 min. spaces.

55 min. spaces are gained in 60 min

5 min. spaces are gained in  $(60/55 * 5)$  min = 5 5/11 min

Therefore, required time = 5 5/11 min. past 7

55.



43) The door of Naresh's house faces the east. From the back of his house, he walks straight 50 meters, then turns to the right and walks 50 meters again. Finally, he turns towards left and stops after walking 25 meters. Now, he is in which direction from the starting point?

- (A) South east
- (B) North east
- (C) South west
- (D) North west

Correct Answer: (D)

Explanation:

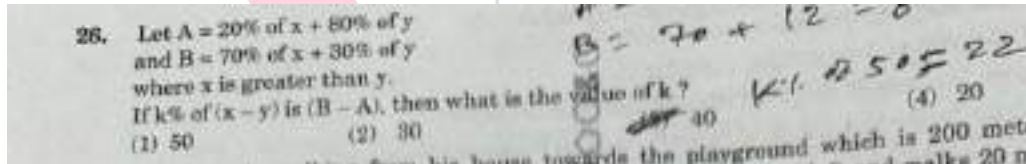
Naresh starts from the west, and walks 50m.

From there he turns his right means to the north, and walks 50m again.

He turns to his left now, means towards west again, and walks 25m.

So he is in northwest direction from the starting point.

56.

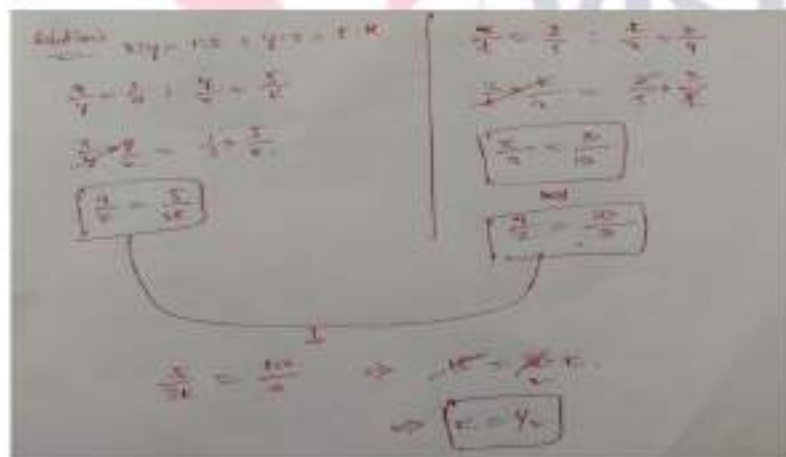


55) If  $x : y = 1 : 2$ ,  $y : z = 5 : k$ ,  $z : t = 2 : 5$ ,  $t : x = 3 : 4$ , then what is the value of  $k$ ?

- (A)  $1/2$
- (B)  $1/3$
- (C) 2
- (D) 3

Correct Answer: (C)

Explanation:





57.  
58.  
59.

47. Consider the following statements and conclusions. Identify the right conclusion(s), which follow(s) the given statements.

Statements :

I. Some employees are managers.

II. All managers are engineering graduates.

Conclusions :

P. All employees are engineering graduates.

Q. All engineering graduates are managers.

~~R~~ Some employees are engineering graduates.

Choose the most suitable option :

(1) Only P (2) Only R and P

(3) Only P and Q ~~(4) Only R~~

48. A statement is given below which is to be taken as true, followed by two assumptions. Decide which of the given assumption(s) implicitly follow(s) from the statement.

Statement :

The pass percentage of the students of a college significantly increased.

Assumptions :

I. Most of the students go for higher studies.

II. Students studied more efficiently than before.

Choose the correct option :

(1) Neither I nor II is implicit

(2) Both I and II are implicit

(3) Only II is implicit

(4) Only I is implicit

49. Consider the following statement and conclusions. Identify the right conclusion(s), which follow(s) the given statements.

Statement :

As it stands today, some Indian sports are not what they were once. India had significant victories in Football and Hockey earlier.

Conclusions :

I. Presently, we have no good players of Football and Hockey in our country.

II. India lost many Football and Hockey matches in recent years.

Choose the correct option :

(1) Neither I nor II

(3) Both I and II

~~(2) Only II~~

(4) Only I

**63) Statements:**

1. Some actors are singers.
2. All the singers are dancers.

**Conclusions:**

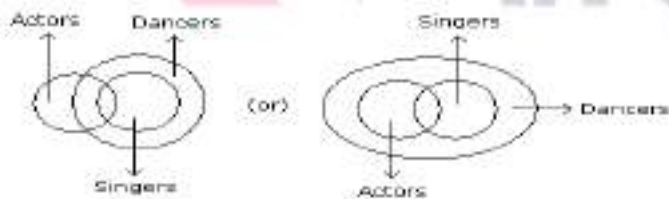
1. Some actors are dancers.
2. No singer is actor.

**Options:**

- (A) Only 1 conclusion follows  
(B) Only 2 conclusion follows  
(C) Either 1 or 2 follows  
(D) Neither 1 nor 2 follows

**Correct Answer: (A)**

**Explanation:**



Only (1) follows.

**74) In the following question, three statements are given and followed by three conclusions. You have to consider the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.**

**Statements:**

1. Most rings are chains
2. Some bangles are chains
3. No ring is bangle

**Conclusions:**

- I. Some bangles are chains
- II. All chains can be rings
- III. Some bangles are not rings

- (A) Only I and III follows  
(B) Only I and II follows  
(C) Only II and III follows  
(D) All follows

**Correct Answer (C)**

**Explanation:**

**VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY**

**CALL: 8977640939**

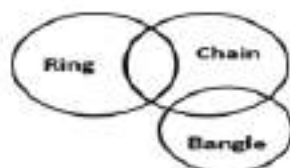
In this question, let us draw the Venn diagram as per the given statements.

Conclusion I: Some bangles are chains is false because same statement cannot be given as a conclusion.

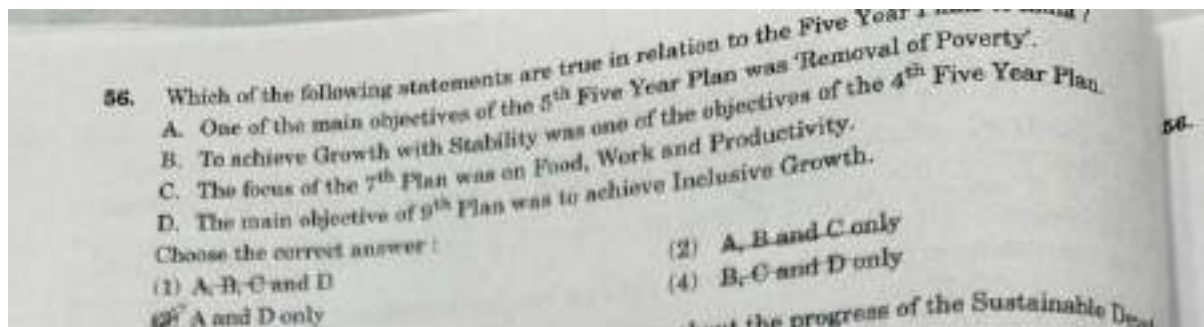
Conclusion II: Some chains are not bangles definitely follows. From this we can say, All chains can be rings.

Conclusion III: Some bangles are not rings is true.

Hence, conclusions II and III follows



60.



25) Consider the following plans and their models/strategy/basis

FYPs

Models

- |                          |  |
|--------------------------|--|
| 1. First five-year plan  | a) Nehru-Mahalanobis                   |
| 2. Second five-year plan | b) Harrod Domar strategy               |
| 3. Third five-year plan  | c) John Sandy and Sukhamoy Chakravorty |

Match the above correctly

- A) 1 -a, 2-b, c-3  
B) 1-b, 2-c, 3-a  
C) 1-b, 2-a, 3-c  
D) 1-c, 2-b, 3-a

Ans-C

Exp:

**VISHNU IAS ACADEMY** | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977640939

Strategies of Planning:

**Harrod Domar Strategy:**

- The 1st Five Year Plan was based on this strategy.
- This strategy emphasized the role of capital accumulation's dual character, which on the one hand, increases the national income (demand-side role) and on the other hand, increases the production capacity (supply-side role).
- According to this growth model, the rate of economic growth in an economy is dependent on the level of savings and capital-output ratio.
- Here, the capital-output ratio, defined as the change in capital divided by change in output measures the productivity of investment that takes place.

**Nehru-Mahalanobis Strategy**

- This strategy was based on the two-sector model, that is, consumer goods sector and capital goods sector.
- The strategy emphasised investment in heavy industry to achieve industrialisation for rapid economic development.
- It was based on the Russian experience.
- The objective was to become self-reliant and overcome capital constraints.
- This strategy was adopted in the 2nd Five Year Plan and with minor modifications, up to the 5th Plan. It was a long-term strategy.

The Mahalanobis strategy called for a larger role for the public sector ■ ■ ■ ■ ■

Strategies of Planning:

**Harrod Domar Strategy:**

- The 1st Five Year Plan was based on this strategy.
- This strategy emphasized the role of capital accumulation's dual character, which on the one hand, increases the national income (demand-side role) and on the other hand, increases the production capacity (supply-side role).
- According to this growth model, the rate of economic growth in an economy is dependent on the level of savings and capital-output ratio.
- Here, the capital-output ratio, defined as the change in capital divided by change in output measures the productivity of investment that takes place.

**Nehru-Mahalanobis Strategy**

- This strategy was based on the two-sector model, that is, consumer goods sector and capital goods sector.
- The strategy emphasised investment in heavy industry to achieve industrialisation for rapid economic development.
- It was based on the Russian experience.
- The objective was to become self-reliant and overcome capital constraints.
- This strategy was adopted in the 2nd Five Year Plan and with minor modifications, up to the 5th Plan. It was a long-term strategy.

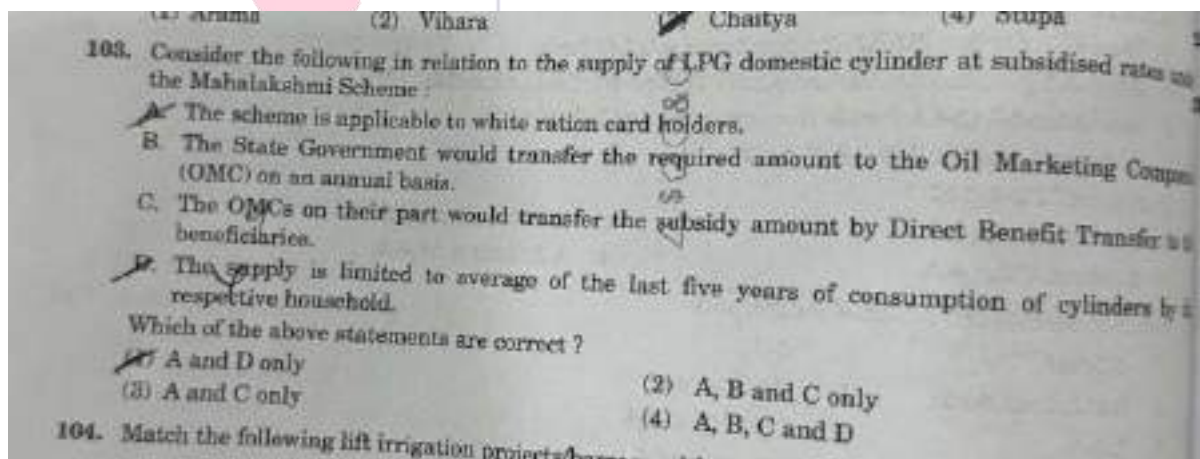
The Mahalanobis strategy called for a larger role for the public sector

**Third five-year plan-** It was based on John Sandy and Sukhamoy Chakraborty's model.

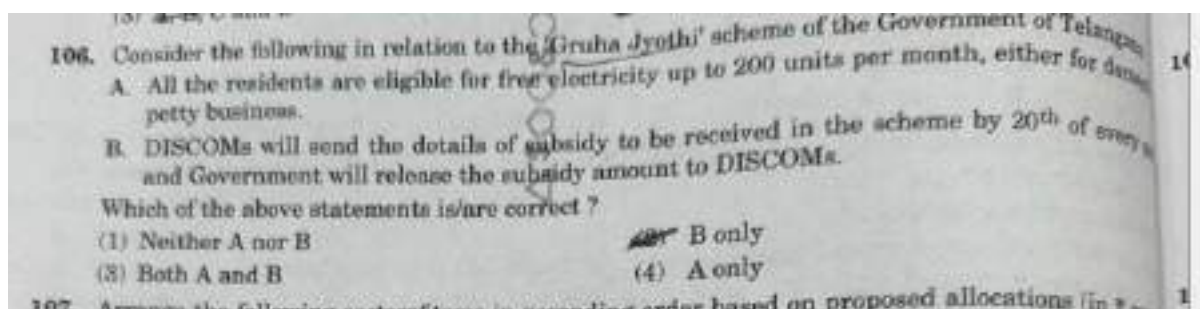
Focus: 'self-reliant' and 'self-generating' economy based on the experience of the first two plans, agriculture was given top priority to support the exports and industry.

Due to two wars- war with China, 1962 and war with Pakistan, 1965 and the severe drought of 1965-66; it failed on many levels

61.



62.



**115)** Consider the following statements

1. Rajiv Aarogyasri has been revamped and the limit for medical treatment is doubled from Rs.5 lakhs to Rs.10 lakhs
2. Free RTC Bus Transport Facility under Mahila shakthi Scheme was launched by on 09 December 2023
3. Supply of LPG cylinder @ Rs. 750/- under Gruha Jyothi scheme is approved by the state government
4. 100 units of free electricity per month to all eligible consumers are also approved by the council of ministers recently

Choose the correct answer

- (A) 1 Only  
(B) 2 Only  
(C) 3 Only  
(D) 4 Only

**Correct Answer: (A)**

**Explanation:**

Rajiv Aarogyasri has been revamped and the limit for medical treatment is doubled from Rs.5 lakhs to Rs.10 lakhs

Free RTC Bus Transport Facility under Mahalakshmi Scheme was launched by our government on 09 December 2023. To ensure smooth implementation of the scheme, the government have provided funds to TSRTC to the tune of Rs.300 crores each month.

Supply of LPG cylinder @ Rs. 500/- under Gruha Jyothi scheme, 200 units of free electricity per month to all eligible consumers are also approved by the council of ministers recently.

**103)** Which of the following benefits are offered to women under the Mahalakshmi Scheme?

1. Free travel in Telangana RTC buses
2. Subsidized LPG gas cylinders
3. Monthly cash transfer to bank accounts
4. Free healthcare services

Choose the Correct Answer

- (A) 1 Only  
(B) 1, 2  
(C) 1, 2, 3  
(D) All

**Correct Answer: (C)**

**Explanation:**

The Maha Lakshmi Scheme in Telangana provides various benefits aimed at women's empowerment.

These benefits include,

- Financial assistance of Rs 2500 for women in Telangana who are heads of their families.
- Gas cylinders at a subsidized rate of Rs 500.
- Free TSRTC (Telangana State Road Transport Corporation) bus travel across the state.

106) Consider the following statements regarding Gruha Jyothi Scheme

1. Free electricity upto 200 units is provided under this scheme for Domestic electric connections
2. Tenants are not eligible to avail free electricity under this scheme.
3. Commercial and Industrial electricity used are also need not to pay any charge up to 200 units.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977650939

How many of the statements given above is/are correct?

- (A) Only One  
(B) Only Two  
(C) All  
(D) None

**Correct Answer: (A)**

**Explanation:**

Under the Gruha Jyothi Scheme, the Government of Telangana will provide the following benefits to residents:

1. Free electricity per month will be provided to every eligible household.
2. Each domestic connection will receive 200 units per month of free electricity.
3. No electricity charges need to be paid if the monthly electricity consumption is less than 200 units.

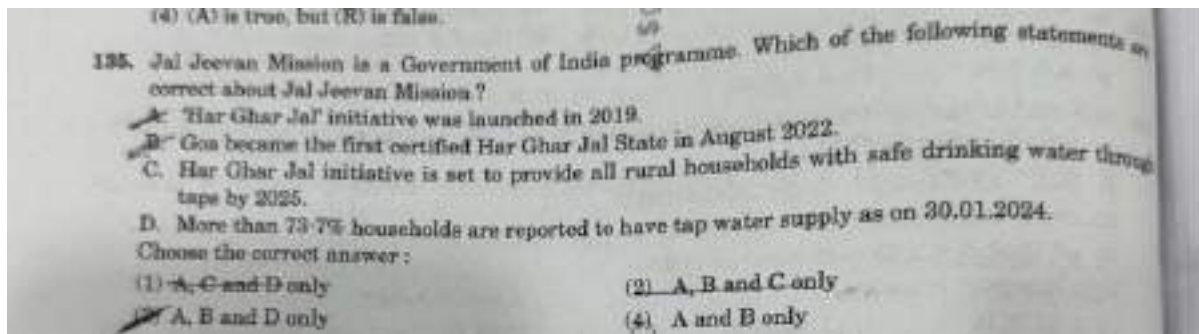
Coverage Extension: The scheme now includes tenants if they meet the eligibility criteria.

Eligibility Criteria:

Eligibility depends on who settles the bill for the domestic connection. Tenants are affirmed to fall within the scope of the scheme.

The scheme was officially launched by the new Chief Minister, Revanth Reddy, in Telangana. It is expected to benefit over 83 lakh households across the state. Additionally, households consuming less than 200 units per month will not be required to pay for electricity, further easing the financial burden on smaller families.

63.



## MINISTRY OF JAL SHAKTI

### Jal Jeevan Mission

- Nodal Ministry: Department of Drinking Water and Sanitation under the Jal Shakti Ministry
- It is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India
- It is based on a community approach to water and will include extensive information, education and communication as a key component of the mission

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY ☎8977640939

---

---

---

- The Mission will converge with other Central and State Government Schemes to achieve its objectives of sustainable water supply management across the country
- Funding Pattern: 50:50 between Centre and States; 90:10 for Himalayan and North-Eastern States. In case of UTs, 100% funding is provided by the Central government.

**145)** Consider the following statements with reference to Mission Bhagiratha

1. It was launched by KCR on August 6, 2016 at Komatibanda village, Medak district, Gajwel constituency.
2. Telangana received 1st Prize under Jal Jeevan Awards-2023

Choose the correct answer

- (A) 1 Only
- (B) 2 Only
- (C) Both
- (D) None

**Correct Answer: (D)**

**Explanation:**

Mission Bhagiratha stands as Telangana's flagship program aimed at providing safe, sustainable, and treated drinking water to every household across the entire state. Launched by Prime Minister Narendra Modi on August 6, 2016, at Komatibanda village, Medak district, Gajwel constituency. It has emerged as a crucial initiative in addressing the water needs of rural and urban communities alike.

Telangana's efforts under Mission Bhagiratha were recognized nationally, with the state receiving the 1st Prize under the Jal Jeevan Awards, 2022. This recognition highlights the exemplary progress made by Telangana in ensuring access to safe drinking water for its citizens.

64.

23. Collapsing of polar vortex contributes to the stabilization of the ozone layer because it : 23
- (1) Triggers the release of additional chlorine into the stratosphere
  - (2) Disperses ozone-destroying forms of chlorine
  - (3) Accelerates ozone depletion reactions
  - (4) Allows ozone depleting chemicals to accumulate

24. Select the correct set of statements regarding the effects of climate change. 2

77. Consider the following statements : Chlorofluorocarbons, known as ozone-depleting substances, are used

1. in the production of plastic foams
2. in the production of tubeless tyres
3. in cleaning certain electronic components

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY

CALL: 89776409393

4. as pressurizing agents in aerosol cans

Which of the statements given above is/are correct?

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

**Solution :- C**

**Explanation :-** Chlorofluorocarbons, known as ozone-depleting substances, are used in the production of **plastic foams**, in **cleaning electronic components**, and as pressurizing agents in **aerosol cans**. Chlorofluorocarbons (CFCs) are nontoxic, non-flammable chemicals containing atoms of carbon, chlorine, and fluorine.

chloroform is also used in pesticide formulations, as a solvent for fats, oils, rubber, alkaloids, waxes, gutta-percha, and resins, as a cleansing agent, grain fumigant, in fire extinguishers, and in the rubber industry. CDCl<sub>3</sub> is a common solvent used in NMR spectroscopy



65.

33. In an examination, 27 students passed in English (E), 29 students passed in Hindi (H), 25 students passed in Telugu (T); 10 students passed in E and H; 8 students passed in H and T; and 6 students passed in E and T. The number of students who passed in each subject alone was equal, and was 15. A total of 70 students wrote the exams in all the three subjects. Match the following List A with the List B:

$E = 27$   
 $H = 29$   
 $T = 25$  List B

List A

A. The number of students who passed in T and H, but not in E	I. 9
B. The number of students who have failed in all the three subjects	II. 12
C. The number of students who passed in all the three subjects	III. 16
D. The number of students who passed in two subjects only	IV. 34
	V. 4

Choose the correct answer :

(1) A-IV; B-I; C-V; D-II	(2) A-II; B-III; C-IV; D-V
(3) A-I; B-III; C-IV; D-V	(4) A-IV; B-II; C-III; D-I

66.

(1) 3016      (2) 1140

36. In a degree programme of a college, the number of students who opted for only Physics is twice the number of students who opted for Chemistry. The number of students who opted only for Chemistry is twice the number of students who opted for both Physics and Chemistry. Then the number of students who opted for Physics is how many times the number of students who opted for both Physics and Chemistry?

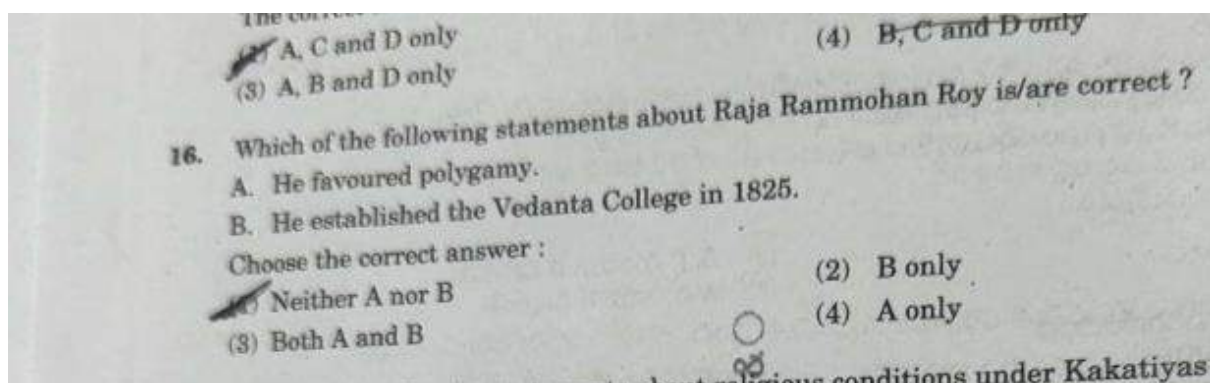
(1) 3      (2) 7

$\frac{P}{C} = \frac{2C}{C} = 2$   
 $\frac{C}{P+C} = \frac{2C}{C+2C} = \frac{2}{3}$   
 $\frac{P}{C} = \frac{2}{3} \times \frac{3}{2} = 1$

89) There are 7 students appearing in an examination of which 3 have to appear in a Mathematics paper and the remaining 4 in different subjects. In how many ways can they be made to sit in a row if the candidates in Mathematics cannot sit next to each other?

- a) 540
  - b) 480
  - c) 540
  - d) 740
- Ans. (B)

67.



13. Consider the following pairs

- 1) Lord Hastings: Abolished censorship.
- 2) The Samachar Darpan: first vernacular newspaper.
- 3) Rajaram Mohan Roy: Sambad Kaumudi.
- 4) William Bentinck: abolition of sati.

How many of the Pairs mentioned above is/are correct

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

**Answer: (b)**

**Justification:** Abolition of censorship: Lord Hastings This pair is incorrect. Lord Hastings did not abolish censorship.

Samachar Darpan: first Vernacular newspaper. This pair is incorrect. Samachar Darpan was not the first vernacular newspaper. It was the first Bengali newspaper, but not the first vernacular newspaper in India. The first vernacular newspaper in India is generally considered to be the Bengali newspaper, "Bengal Gazette," which was published by James Augustus Hicky in 1780.

**VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977650939**

---

---

---

Sambad Kaumudi: Raja Ram Mohan Roy This pair is correct. Sambad Kaumudi was associated with Raja Ram Mohan Roy.

William Bentinck: abolition of sati. This pair is correct. William Bentinck, as the Governor-General of India, is credited with the abolition of the practice of Sati through the passage of the Sati Regulation Act in 1829.

**VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977640939**

10. Consider the following statements

- 1) Bethune school set up in 1849 was associated with the education of minorities
- 2) Raja Ram Mohan Roy was a supporter of capitalism and Industrialisation.
- 3) Raja Ram Mohan Roy was a staunch believer in Western education and culture.
- 4) Devendra Nath Tagore was the first secretary of Brahma Sabha.

How many of the statements mentioned above is/are correct

- (a) Only one
- (b) Only two.
- (c) Only three
- (d) All of the above.

Answer: (b)

Justification: The Bethune school set up in 1849 was associated with the education of minorities. This statement is **incorrect**. The Bethune School, established in 1849, is associated with women's education in India. The English educator, mathematician, and polyglot John Elliot Drinkwater Bethune (1801-1851) founded the school as the Calcutta Female School, the first school for girls in Calcutta. The school began with 21 girls in 1849, and the following year, enrollment rose to 80. In 1856, the school was renamed Bethune School, and the Government took charge Raja Ram Mohan Roy was a supporter of capitalism and industrialization.

This statement is **correct**. Raja Ram Mohan Roy was a supporter of capitalism or industrialization in the modern sense. He was primarily known as a social and religious reformer who advocated for social equality, education, and the eradication of social evils like sati and caste discrimination.

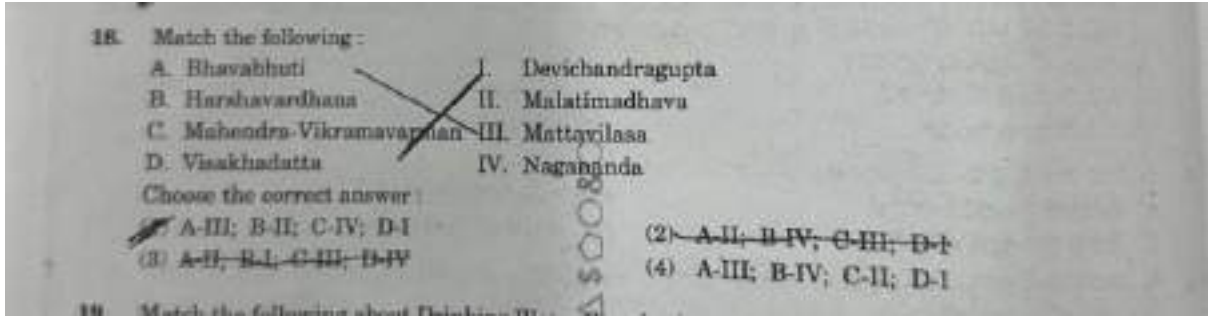
**VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977640939**

Roy, in particular, wished for his countrymen to accept a rational and scientific approach, as well as the principles of human dignity and social equality for all men and women. He was also a supporter of the country's introduction of modern capitalism and industry. He was a synthesis of Eastern and Western thought.

Raja Ram Mohan Roy was a staunch believer in Western education and culture. This statement is **correct**. Raja Ram Mohan Roy did support the introduction of Western education and ideas in India, he also emphasized the importance of integrating beneficial aspects of Indian culture and traditions. He advocated for a synthesis of Eastern and Western knowledge to foster social progress and enlightenment.

Devendra Nath Tagore was the first secretary of Brahma Sabha. This statement is **incorrect**. Tarachand Chakraborty was the first secretary of the Brahma Samaj, which was founded in 1828 by Raja Ram Mohan Roy. The Brahma Samaj's objectives included fighting against idol worship, caste oppression, and other social evils, and promoting women's rights.

68.



2. Consider the following statements based on the Mauryan administration literature
- 1) Megasthenes' "Indica" provides information about the Mauryan administration.
  - 2) Visakhadatta's "Mudrarakshasa" provides information about the socio-economic conditions of the Mauryas.
  - 3) Chronicles such as the "Dipavamsa" and the "Mahavamsa" provide information about Mauryan criminal law and diplomacy.

Which of the statements mentioned above is/are correct

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

Answer: (a)

Justification: Megasthenes' "Indica": Megasthenes, a Greek ambassador to the Mauryan court during the reign of Chandragupta Maurya, indeed provided valuable insights into Mauryan administration and society through his work "Indica." His accounts offer information on various aspects such as the administration, economy, and social structure of the Mauryan Empire.

Visakhadatta's "Mudrarakshasa": Visakhadatta's "Mudrarakshasa" is a Sanskrit play that primarily focuses on the political intrigues and power struggles during the reign of Chandragupta Maurya and his minister Chanakya. While it provides insights into the political landscape of the Mauryan period, it primarily deals with political events rather than socio-economic conditions.

Chronicles such as the "Dipavamsa" and the "Mahavamsa": These are ancient Sri Lankan chronicles that primarily focus on the history of Sri Lanka and the spread of Buddhism in the

region. It has Jatakas about Buddha's teachings which were spread by Ashoka in the Island's not regarding criminal law and diplomacy.

69.

(1) D, B, A, C      (2) B, A, D, C

115. Which of the following statements about Agni-5 are correct:

A. It uses a three-stage solid-fuelled engine.  
 B. It is capable of striking targets at ranges up to 2000 kilometers only.  
 C. It is indigenously developed by DRDO.  
 D. It uses Multiple – Dependable Targetable Re-entry Vehicle (MDRV) technology.

Choose the correct answer :

(1) A and C only      (2) A, B and C only  
 (3) A, C and D only      (4) A and B only

59. Consider the following statements with respect to Agni-5 ballistic missile,

1. It is also known as "Divyastra".
2. Agni-5 is a solid fuelled Inter- Continental Ballistic Missile (ICBC)
3. Its range is more than 5,500 km.

Which of the following statements above is/are correct?

- (a) Only One
- (b) Only two
- (c) All three
- (d) None

**Solution: (c)**

**Explanation:**

**Statement 1 is correct:** The successful test of the Agni-5 ballistic missile, also known as "Divyastra", mark a significant advancement in India's nuclear deterrence capabilities.

**Statement 2 and 3 are correct:** An intercontinental ballistic missile (ICBM) is a guided ballistic missile with a minimum range of **5,500 kilometres** (3,400 km) primarily designed for nuclear weapons delivery (delivering one or more thermonuclear warheads).

70.

34. In the following graph, the ratio of the amount of imports and amount of exports of a company over the period of time 2000 – 2005 is given.

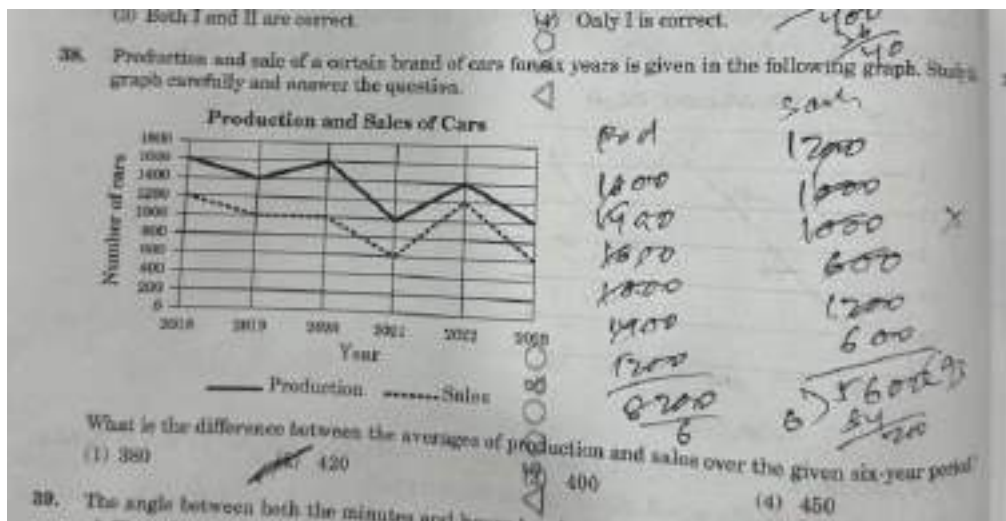
**Ratio of imports to exports**

Year	Ratio
2000	0.5
2001	0.9
2002	1.25
2003	1.5
2004	1.0
2005	1.4

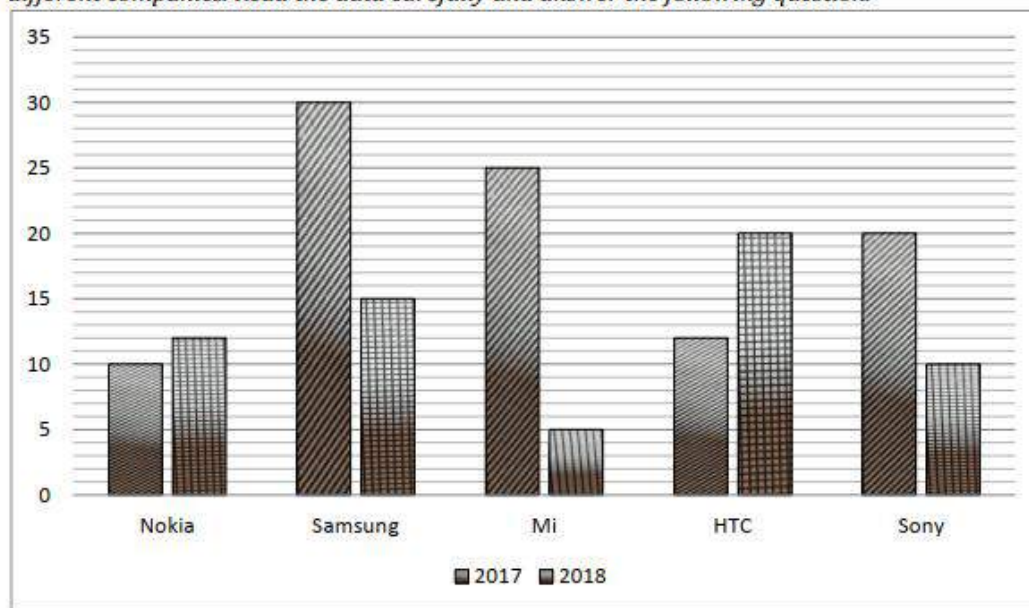
If the imports in 2002 were valued at ₹ 250 crores, and the value of total exports in the years 200 and 2003 together was ₹ 500 crores, then the imports in 2003 were (in ₹ crores) :

(1) 420      (2) 500  
 (3) 450      (4) 525

71.



**Directions (81-85):** Bar graph given below shows number of mobile phones ('000) sold in 2017 and percentage increase in sales of these of these mobile phones in 2018 as compared to previous year of 5 different companies. Read the data carefully and answer the following question.



**81)** Find the number of phones sold by Nokia and Samsung together in 2018.

- (a) 48400 (b) 43200 (c) 45700 (d) 41900

Ans. (C)

**82)** Number of Mi mobile sold in 2017 is what percent more than no. of Sony mobile sold in same year?

- (a) 20% (b) 12% (c) 14% (d) 25%

Ans. (D)

**83)** Number of HTC mobile sold in 2018 are how much more/less than no. of Sony mobile sold in 2017?

(a) 5600 less (b) 6600 more (c) 5600 more (d) 6600 less

Ans. [A]

**84)** If number of Mi mobile sold in 2016 are 30% less than mi mobile sold in 2017, find ratio between Samsung mobile sold in 2018 and Mi mobile sold in 2016?

(a) 17:12 (b) 67:35 (c) 69:35 (d) 69:37

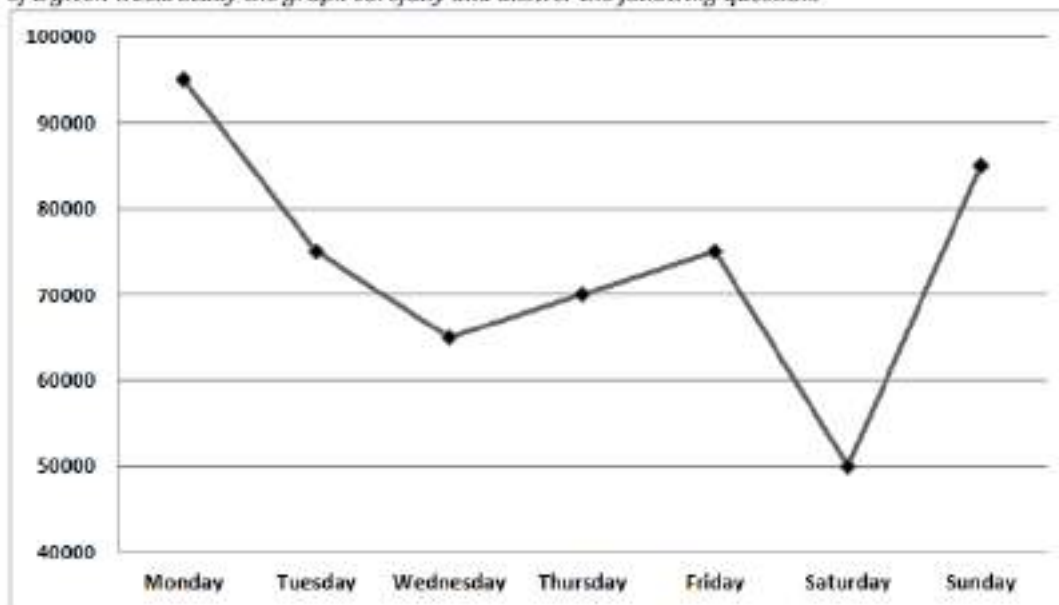
Ans. [C]

**85)** What is average no. of MI and HTC mobiles sold in year 2018?

(a) 20325 (b) 17325 (c) 18050 (d) 19050

Ans. [A]

**Directions (86-90):** The line graph shows the number of passengers who travels from Metro in 7 days of a given week. Study the graph carefully and answer the following question.



**86)** What is the average number of passengers travels from Tuesday to Saturday?

(a) 64000 (b) 67000 (c) 72000 (d) 70000

Ans. [B]

**87)** Passenger who travels on Thursday is what percentage of passengers who travels on Saturday?

(a) 120% (b) 71.4% (c) 140% (d) 87.5%

Ans. [C]

72.

35. In the following table, the numbers in the third column are related to the respective numbers in the first and second columns with a definite relation. Find the suitable number in place of '?'.

2209	784	15
3249	1444	19
4489	?	13

(1) 3016                      (2) 1140                      (3) 2918                      (4) 3254

101) Find the missing character?

- (a) 70                      (b) 80                      (c) 90                      (d) 100

Ans. (B)

73.

40. The following pie chart shows the sale of different vegetables in a shop.

Consider the following statements :

- A. Sum of sales of pumpkins and drumsticks is equal to that of cabbage.
- B. People are buying beans more than cabbage.
- C. Potatoes are the best-selling vegetables in the shop.
- D. Potatoes and beans collectively account for half of the total sales.

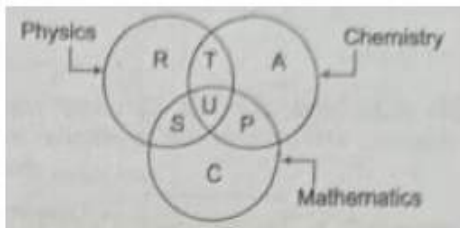
Which of the above statements are correct ?

(1) A and D only                      (2) C and D only  
 (3) A, C and D only                      (4) A, B and C only



102) The diagram below represents the students who study Physics, Chemistry and Mathematics.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977650939



Study the diagram and identify the region which represents students who study both Physics and Chemistry but not Mathematics.

- (a)  $T + S + U + P$  (b) C  
(c)  $R + T + A + U + P + S$  (d) T

Ans. (D)

74.

43. Is  $y > x$  ?

Statements :

I.  $x \neq 0, xy > xq \Rightarrow y < q$

II.  $y \neq 0, \frac{l}{y} < \frac{x}{y} \Rightarrow l < x$

Choose the right option among the following :

(1) Neither I nor II is sufficient to answer the question.  
(2) Only II is sufficient to answer the question.  
(3) Both I and II together are sufficient to answer the question.  
(4) Only I is sufficient to answer the question.

TEST 2.24 [R]

103) If numbers  $x, y, z$  are all less than 40, how many of them are positive?

I.  $x + y = 46$

II.  $x + y + z = 80$

- a) If the statement I alone can give the answer to the question
- b) If the statement II alone can give the answer to the question
- c) If the statements I and II together are necessary to give the answer to the question
- d) If the statements I and II both are not sufficient to answer the question and additional information is necessary.

Ans. (D)

75.

46. Consider the following statements :  
I. Crime against women is lower in a state with higher literacy rate.  
II. Higher literacy rate leads to better economy.  
Read the statements carefully and choose the most suitable option among the following :

(1) Both I and II are independent effects of the same cause.  
(2) II is the cause and I is its effect.  
(3) Both I and II are effects of independent causes.  
(4) I is the cause and II is its effect.

Handwritten notes: (1) 323, (2) 321, (3) 322, (4) 320. A circular diagram with letters L, P, T is also visible.

104)

**Statements:**

All Scientists working in America are experts.

Some of them are Indians.

**Conclusions:**

- I) None of the Indian Scientists are experts.
- II) Some experts Indian Scientists emigrated to America.
- III) All skilled Scientists are in America.
- IV) Some Indian Scientists are experts.

- a) Only (III) and IV follow
- b) Only I follow.
- c) Only II and IV follow.
- d) Only III follows.

Ans. (C)

76.

98. Arrange the following organisations in chronological order of their establishment :  
A. Matangi Sabha  
B. Arundatiya Mahasabha  
C. Ambedkar Youth League  
D. Munnurukapu Mahasabha

Choose the correct order :  
(1) B, C, D, A      (2) A, B, D, C  
(3) C, D, B, A      (4) C, B, A, D

Handwritten note: Sri Shantamula :

141] Which of the following statements is incorrect?

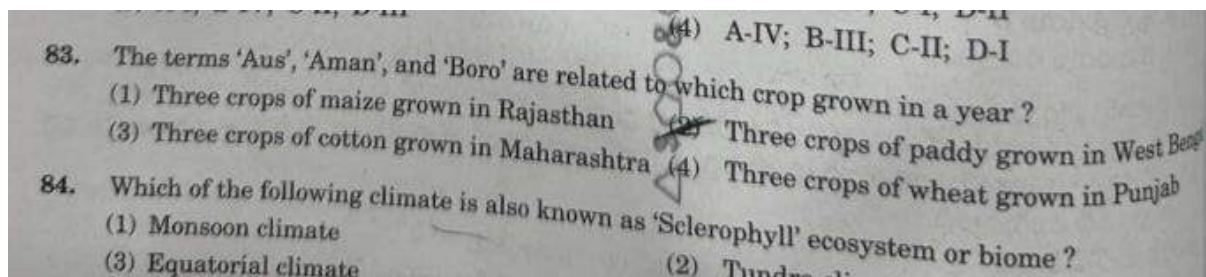
- (A) Vetti Madiga was written by Bhagya Reddy Varma
- (B) Sunita Bala Samajam was established by Arige Ramaswamy
- (C) Ambedkar Youth League was established by ML Adeyya
- (D) J.S Muthaiah was the editor of first Dalit newspaper, The Panchama

**Correct Answer: (C)**

**Explanation:**

In 1936, BS Venkat Rao established Ambedkar Youth League and fought for the upliftment of Dalit Youth.

77.



78. consider the following statements

1. In Orissa farmers grow three crops of rice called 'aus', 'aman' and 'boro'.
2. In Himalayas and north-western parts of the country, it is grown as a kharif crop during southwest Monsoon season.
3. India contributes 22.07 per cent of rice production in the world and ranked second after China in 2018.
4. West Bengal, Andhra Pradesh, and Punjab are the leading rice producing states in the country.

How many above of the statements are correct

- A. Only two
- B. Only three
- C. Only four
- D. none

**Answer:- A**

**Explanation:-** Rice is a staple food for the overwhelming majority of population in India. Though, it is considered to be a crop of tropical humid areas, it has about 3,000 varieties which are grown in different Agro-climatic regions. These are successfully grown from sea level to about 2,000 m altitude and from humid areas in eastern India to dry but irrigated areas of Punjab, Haryana, western U.P. and northern Rajasthan. In southern states and West Bengal the climatic conditions allow the cultivation of two or three crops of rice in an agricultural year.

**Statement 1 is incorrect:-** In West Bengal farmers grow three crops of rice called 'aus', 'aman' and 'boro'.

**Statement 2 is correct:-** Himalayas and north-western parts of the country, it is grown as a kharif crop during southwest Monsoon season.

**Statement 3 is correct :-** India contributes 22.07 per cent of rice production in the world and ranked second after China in 2018. About one-fourth of the total cropped area in the country is under rice cultivation.

**Statement 4 is incorrect :-** West Bengal, Uttar Pradesh, and Punjab are the leading rice producing states in the country. The yield level of rice is high in Punjab, Tamil Nadu, Haryana, Andhra Pradesh, Telangana, West Bengal and Kerala. In the first four of these states almost the entire land under rice cultivation is irrigated. Punjab and Haryana are not traditional rice growing areas

78.

32. A club has 2780 members belonging to various professions, whose details are shown in the following table:

Profession	Number of members	Ratio between males and females
Doctors	750	3 : 2
Engineers	990	4 : 1
Lawyers	270	5 : 4
Professors	770	4 : 3

What is the difference between the number of male and female members?

(1) 884 (2) 888 (3) 882 (4) 880

Handwritten notes:  $600 + 792 + 440 + 182 = 2014$  (males),  $198 + 120 + 330 + 198 = 948$  (females). Difference =  $2014 - 948 = 1066$ . (Note: The handwritten calculation in the image seems to be for a different problem or contains errors.)

Directions (81-85): Study the table given below and answer the following questions. Table shows the number of girls in 5 different schools (A, B, C, D & E) and ratio of boys & girls in these schools.

School	Number of girls	Ratio of boys to girls
A	720	11 : 9
B	540	3 : 2
C	270	7 : 3
D	576	13 : 12
E	350	8 : 7

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY 8977640939

81) Find ratio of boys in School -A&E together to boys in School -B&C together.

- (a) 3 : 5 (b) 11 : 14 (c) 8 : 9 (d) 1 : 2

Ans. (C)

82) Average number of girls in school -B, C & D is What percent of average number of Students in School -A & D?

- (a) 50 % (b) 15 % (c) 35 % (d) 33%

Ans. (D)

83) Students in School -B are how much more than girls in School -E and boys in School -D together?

- (a) 388 (b) 382 (c) 394 (d) 376

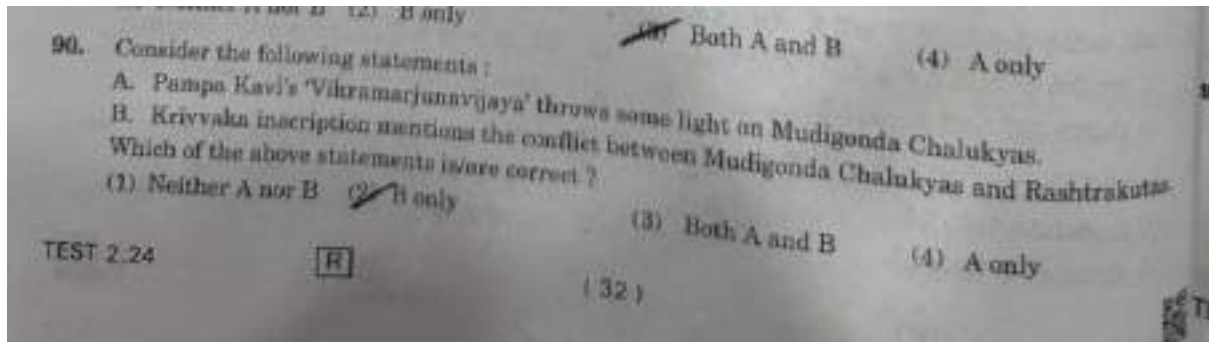
Ans. (D)

84) Students in School -c & E together are What percent more or less than girls in School- A?

- (a)  $118 \frac{1}{6}\%$  (b)  $112 \frac{2}{3}\%$  (c)  $145 \frac{1}{2}\%$  (d)  $129 \frac{1}{6}\%$

Ans. (D)

79.



135) Which of the following books written by Pampa Kavi?

1. Vikramarjuna Vijayam
2. Raghava Pandaviyam
3. Adi Puranam
4. Jinedra Kalyana Abyudayam
5. Champu Kavyam

Choose the correct answer

(A) 1, 2, 3, 5

(B) 1, 3, 4

(C) 2, 3, 4

(D) All

**Correct Answer: (B)**

**Explanation:**

Pampa Kavi (Poet) - he is the court poet of Arikesari-2. Arikesari-2 gifted the "Dharmapuri" Agraharam to Pampa Poet.

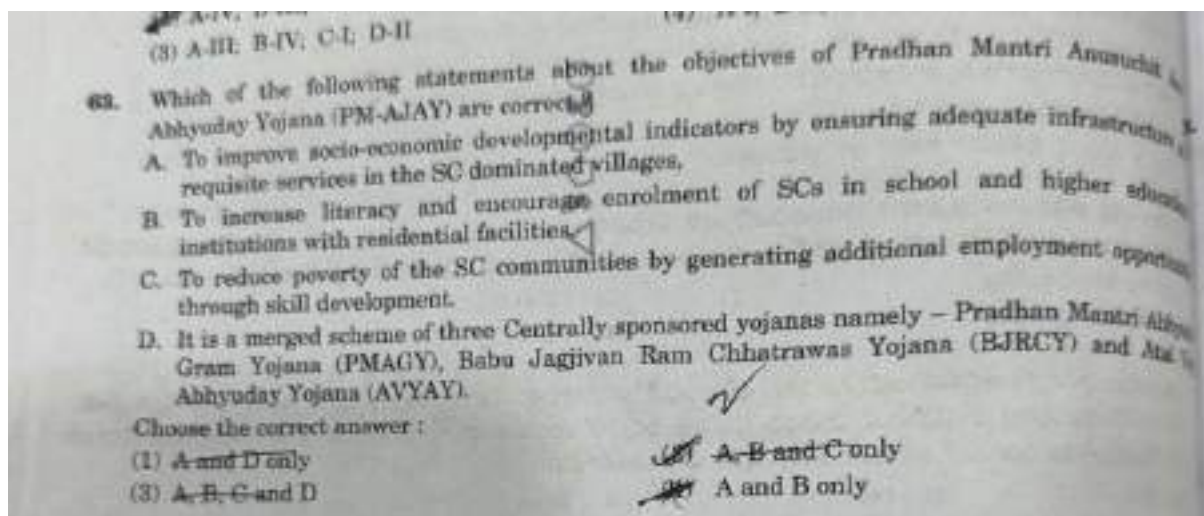
Books written by Pampa poet:- "Vikramarjuna Vijayam", "Adi Puranam", "Pampa Bharatam", "Jinedra Kalyana Abyudayam".

Books written by "Somadeva Suri":- "Yashas Tilaka", "Champu Kavyam", "Katha Sarit Sagaram", "Niti Vakyamrutham-Political Ideology Theme" and "yikta Chintamani".

Titles of Somadevara Suri are:- "Kavi Kula Raju", "Tarkika Chakravarti", "Shwa Dwadha Chala Simha".

Books written by "Vemulawada Bima Kavi", "Raghava Pandaviyam" and "Satakendara Ramayanam".

80.

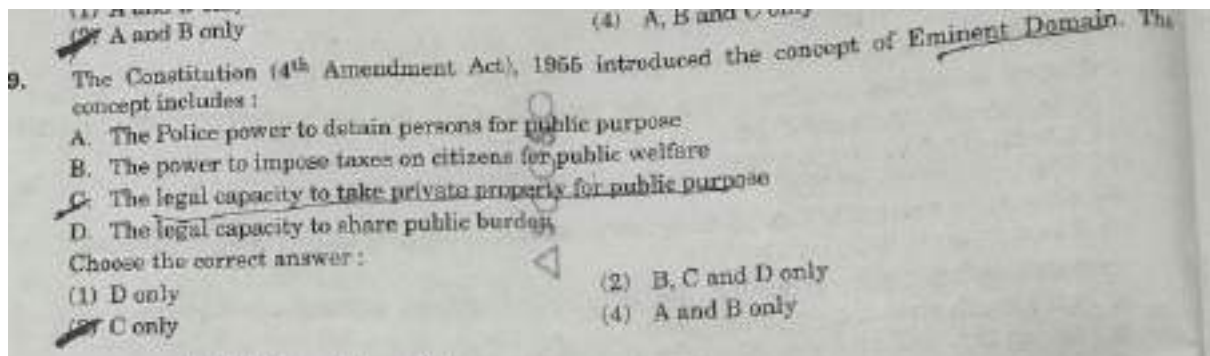


## MINISTRY OF SOCIAL JUSTICE & EMPOWERMENT (MOSJ&E)

Pradhan Mantri Anusuchit Jaati Abhyuday Yojana

- Ministry of Social Justice & Empowerment
- It is a merged scheme of three Centrally Sponsored Schemes, namely Pradhan Mantri Adarsh Gram Yojana (PMAGY), Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP), and Babu Jagjivan Ram Chhatrawas Yojana (BJRCY)
- Aim: To reduce poverty of the SC communities by generation of additional employment opportunities through Skill development, income generating schemes and other initiatives.

81.



### Fourth Amendment Act, 1955

#### Amendments:

- Made the scale of compensation given in lieu of compulsory acquisition of private property beyond the scrutiny of courts.



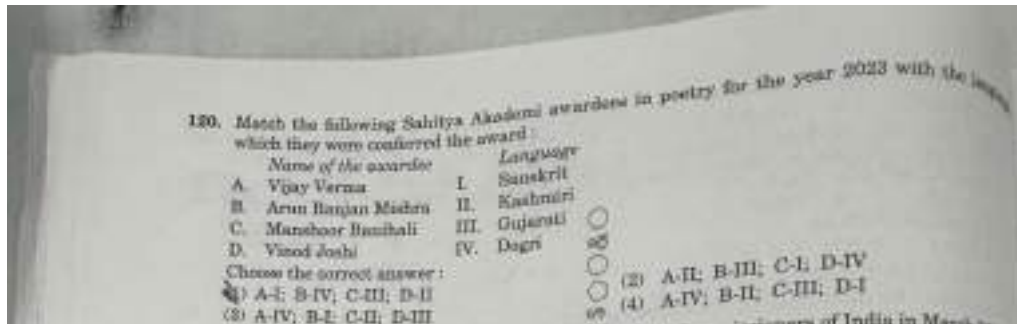
UPSC Prelims | UPSC Mains | UPSC Optional ANTHROPOLOGY | Vishnu IAS Academy



~ 2 ~

- Authorised the state to nationalise any trade.
- Included some more Acts in the Ninth Schedule.
- Extended the scope of Article 31 A (savings of laws).

82.



### Sahitya Akademi Awards 2023

- It is awarded for the most outstanding books of literary merit published in any of the major Indian languages recognised by the Akademi
- Akademi gives 24 awards annually to literary works in the languages it has recognized and an equal number of awards to literary translations from and into the languages of India
- Besides the 22 languages enumerated in the Constitution of India, the Sahitya Akademi has recognised English and Rajasthani as languages in which its programme may be implemented
- The award, in the form of a casket containing an engraved copper-plaque, a shawl and 1,00,000 rupees will be presented.
- Recently, Tamil author Rajasekaran (Devibharathi), Telugu writer T. Patanjali Sastry and Malayalam litterateur E.V. Ramakrishnan were among those named for the Sahitya Akademi Awards for the year 2023.

### PYQ

1. Consider the following statements in respect of Bharat Ratna and Padma Awards.

- a) Bharat Ratna and Padma Awards are titles under the Article 18(1) of the Constitution of India.  
(b) Padma Awards, which were instituted in the year 1954, were suspended only once.  
(c) The number of Bharat Ratna Awards is restricted to a maximum of five in a particular year.

Which of the above statements are not correct?

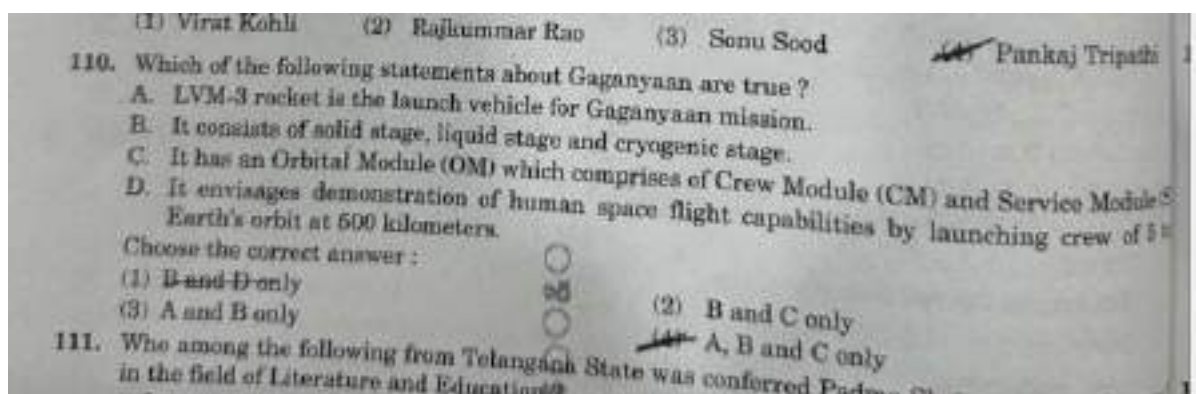
- (a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

### Sahitya Akademi

- It was formally inaugurated in 1954
- Sahitya Akademi, India's National Academy of Letters, is the central institution for literary dialogue, publication and promotion in the country and the only institution that undertakes literary activities in 24 Indian languages, including English
- Though set up by the Government, the Akademi functions as an autonomous organisation
- It was registered as a society under the Societies Registration Act, 1860



83.



#### PM Modi Announces 4 Astronauts For Gaganyaan

- ▶ PM Modi announced the names of the four astronauts, who would fly to low-Earth orbit as part of the ISRO's Gaganyaan — the first crewed Indian space mission.
- ▶ The selected astronauts are: Prashanth Balakrishnan Nair, Angad Prathap, Ajit Krishnan, and Shubanshu Shukla.
- ▶ They are all either wing commanders or group captains with the Indian Air Force (IAF) and have extensive experience working as test pilots.

Gaganyaan -Gaganyaan project envisages demonstration of human spaceflight capability by launching a crew of 3 members to an orbit of 400 km for a 3 days mission and bring them back safely to earth.

- ▶ It is part of the Indian Human Spaceflight Programme (IHSP), which was initiated (2007) by the ISRO to develop the technology needed to launch crewed orbital spacecraft into low earth orbit (LEO).
- ▶ Launch Vehicle Mark-3 (LVM3/GSLV Mk3) rocket. India's heaviest rocket consists of solid stage, liquid stage and cryogenic stage.
- ▶ All systems in the LVM3 launch vehicle are re-configured to meet human rating requirements and christened Human Rated LVM3/HLVM3.

DVO

84.

(4) Tropical Savanna climate (Aw)

82. Match the following National parks and their States :

National Park	State
A. Tadoba National Park	I. Karnataka
B. Madhav National Park	II. Uttar Pradesh
C. Dudhwa National Park	III. Maharashtra
D. Bandipur National Park	IV. Madhya Pradesh

Choose the correct answer :

(1) A-III; B-IV; C-II; D-I

(2) A-III; B-IV; C-I; D-II

(3) A-I; B-IV; C-II; D-III

(4) A-IV; B-III; C-II; D-I

83. The terms 'Aus', 'Aman', and 'Boro' are related to which...

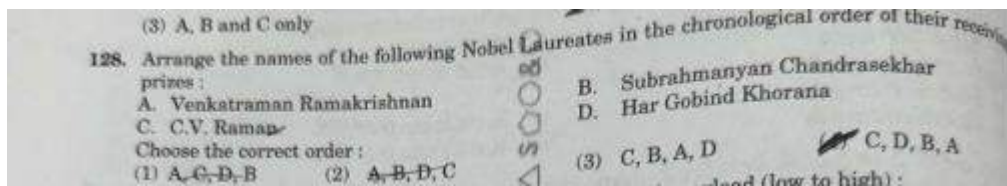
### Mudumalai Tiger Reserve



- Established In 1942 In The Mudumalai Forest Area
- Located In The Nilgiris District Of Tamil Nadu State At The Tri-junction Of Three States, Viz, Karnataka, Kerala And Tamil Nadu
- Part Of Nilgiri Biosphere Reserve (1st Biosphere Reserve In India) Along With Wayanad Wildlife Sanctuary (Kerala) In The West, Bandipur National Park (Karnataka) In The North, Mukurthi National Park And Silent Valley In The South
- The Moyar River Flows Into The Mudumalai Tiger Reserve And Serves As A Natural Boundary Between Mudumalai And Bandipur Sanctuary
- Tall Grasses Known As "Elephant Grass" And Timber Species Such As Teak And Rosewood Can Be Found In The Reserve.
- Flagship Species: Tiger And Asian Elephant
- Oscar For Best Documentary Short Was Announced For 'The Elephant Whisperers' Which Revolves Around A Family Who Adopts 2 Orphan Baby Elephants In Mudumalai Tiger Reserve And Rears Them.

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY CALL US: 8977640939

85.



### Nobel Prize

- ▶ Nobel Prize is an international award administered by the Nobel Foundation in Stockholm, Sweden, and based on the last will of Alfred Nobel (in 1895)
- ▶ Alfred Nobel, a Swedish inventor, and entrepreneur, is popularly known for inventing dynamite.
- ▶ Instituted in 1901, the prize is awarded annually from the bulk of fortune left by Alfred Nobel in five categories: Physics, Chemistry, Physiology or Medicine, Literature and Peace
- ▶ The sixth category, the Nobel Prize in Economic Sciences, was instituted in 1968 by the Royal Bank of Sweden and was first awarded in 1969
- ▶ Royal Swedish Academy of Sciences awards the Nobel Prize in Physics, Chemistry and Economics
- ▶ Nobel Prize in Literature is awarded by the Swedish Academy, Stockholm, Sweden
- ▶ Nobel Assembly at Karolinska Institute, Stockholm, Sweden awards the Nobel Prize in Medicine (Physiology)
- ▶ Norwegian Nobel Committee is responsible for the selection of eligible candidates and the choice of the Nobel Peace Prize laureates

VISHNU IAS ACADEMY | UPSC | TSPSC | APPSC | OPTIONAL: ANTHROPOLOGY CALL: 8977640939

India has seen a total of nine Nobel Prize laureates from 1913 to 2023, in the following fields:

- ▶ Literature: Rabindranath Tagore (1913),
- ▶ Physics: C. V. Raman (1930), Subrahmanyam Chandrasekhar (1983),
- ▶ Physiology or Medicine: Har Gobind Khorana (1968),
- ▶ Peace: Mother Teresa (1979),
- ▶ Kailash Satyarthi (2014), Economics: Amartya Sen (1998), Abhijit Banerjee (2019)

### Nobel Prize in Medicine 2023

- ▶ Nobel Prize in Medicine or Physiology for 2023 has been awarded to Katalin Karikó and Drew Weissman for their groundbreaking work on nucleoside base modification of messenger Ribonucleic Acid (mRNA)
- ▶ The discoveries by the two Nobel Laureates were critical for developing effective mRNA vaccines against Covid-19 during the pandemic that began in early 2020.
- ▶ m-RNA (messenger RNA) = It is a type of molecule that carries instructions from the DNA to a cell's cytoplasm where those messages are 'read' to produce various proteins

### Nobel Prize in Physics 2023

- ▶ France's Pierre Agostini, Hungarian Austrian Ferenc Krausz and French Swedish Anne L'Huillier won the Nobel Prize in physics for research using ultraquick light flashes that enable the study of electrons inside atoms and molecules
- ▶ Their technique employs pulses measured in atto seconds, a unit so short that there are as many in one second as there have been seconds since the universe's birth over 13 billion years ago
- ▶ Ms. L'Huillier, only the fifth woman to be awarded the Physics Prize since 1901

### **Nobel Prize in Physics 2023**

- ▶ France's Pierre Agostini, Hungarian Austrian Ferenc Krausz and French Swedish Anne L'Huillier won the Nobel Prize in physics for research using ultraquick light flashes that enable the study of electrons inside atoms and molecules
- ▶ Their technique employs pulses measured in atto seconds, a unit so short that there are as many in one second as there have been seconds since the universe's birth over 13 billion years ago
- ▶ Ms. L'Huillier, only the fifth woman to be awarded the Physics Prize since 1901

### **Nobel Prize in Chemistry 2023**

- ▶ Recently, the 2023 Nobel Prize in Chemistry was awarded to Alexei Ekimov, Louis Brus and Moungi Bawendi for their work on quantum dots

### **Nobel Peace Prize 2023**

- ▶ Recently, the imprisoned Iranian activist Narges Mohammadi won the Nobel Peace Prize.
- ▶ She was awarded the prize in recognition of her tireless campaigning for women's rights and democracy, and against the death penalty.

### **Economics Nobel Prize 2023**

The Nobel Prize for economics was awarded to Harvard University professor Claudia Goldin for her research that has advanced the understanding of the gender gap in the labor market

- ▶ She became just the third woman to win the prize out of 93 economics laureates + Globally, around 50% women are in paid employment, while the equivalent figure for men is 80%
- ▶ In India, the labour force participation rate among females is 24% and among males is 73.6% for 2022.