

# BPSC ASO Exam 2025 Solved Question Paper

## [Exam Date: 10 September 2025]

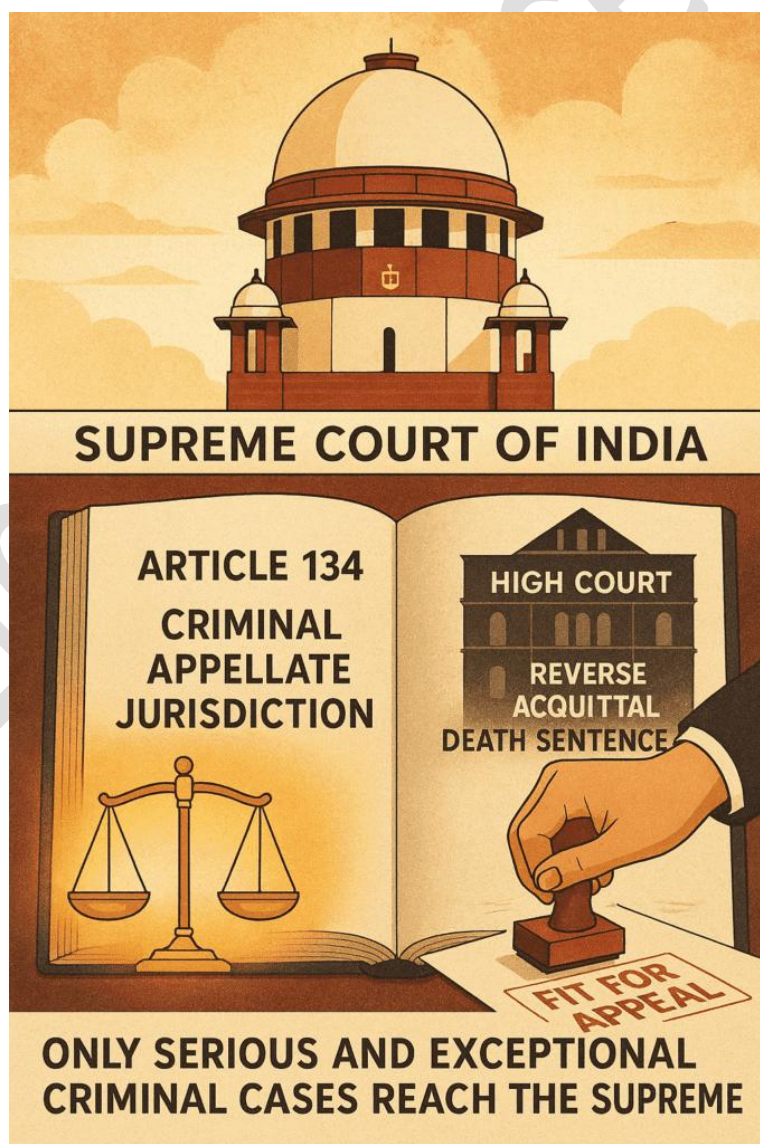
1. Appellate Jurisdiction of Supreme Court in regard to criminal matters is

- (A) Related to political matters only
- (B) Unlimited
- (C) Not defined in the Constitution
- (D) Limited

**Answer: (D) Limited**

**Explanation:**

The **Appellate Jurisdiction** of the **Supreme Court** in **criminal matters** is **limited** and defined under **Article 134** of the Constitution. It applies only in **specific cases**, such as when the **High Court** has reversed an acquittal and sentenced the accused to death, or when it certifies that the case is fit for appeal. This ensures that only **serious and exceptional criminal cases** reach the Supreme Court, maintaining judicial efficiency.



**2. In 2024, which international agreement on Artificial Intelligence was signed by over 25 countries including the USA and UK to promote safe AI development**

- (A) Ethical AI Convention
- (B) Bletchley Declaration
- (C) AI Geneva Charter
- (D) Global AI Framework Agreement

**Answer: (B) Bletchley Declaration**

**Explanation:**

The **Bletchley Declaration** was signed in **2024** by over **25 countries**, including the **USA and UK**, to promote **safe and responsible development of Artificial Intelligence**. It emphasizes **international cooperation, transparency, and risk mitigation** in AI technologies. The declaration emerged from the **AI Safety Summit** held in **Bletchley Park**, marking a significant step toward **global governance of AI**.

**3. Which of the following are present in higher amount in hard water ?**

- (A) Sodium and Magnesium
- (B) Calcium and Magnesium
- (C) Sodium and Manganese
- (D) Calcium and Sodium

**Answer: (B) Calcium and Magnesium**

**Explanation:**

**Hard water** contains high concentrations of **Calcium ( $\text{Ca}^{2+}$ )** and **Magnesium ( $\text{Mg}^{2+}$ )** ions. These minerals interfere with soap's ability to lather and can cause **scale buildup** in pipes and appliances. The presence of these ions is the primary reason water is classified as "hard."

**4. Mule Hunter.ai has been introduced by**

- (A) CERT-In
- (B) RBI
- (C) NPCI
- (D) SEBI

**Ans: (B) RBI**

**Explanation:** It is an AI-based tool developed by the **Reserve Bank Innovation Hub (RBIH)**, an initiative of the **Reserve Bank of India (RBI)**. It is designed to detect and eliminate mule accounts used in financial frauds by leveraging machine learning algorithm

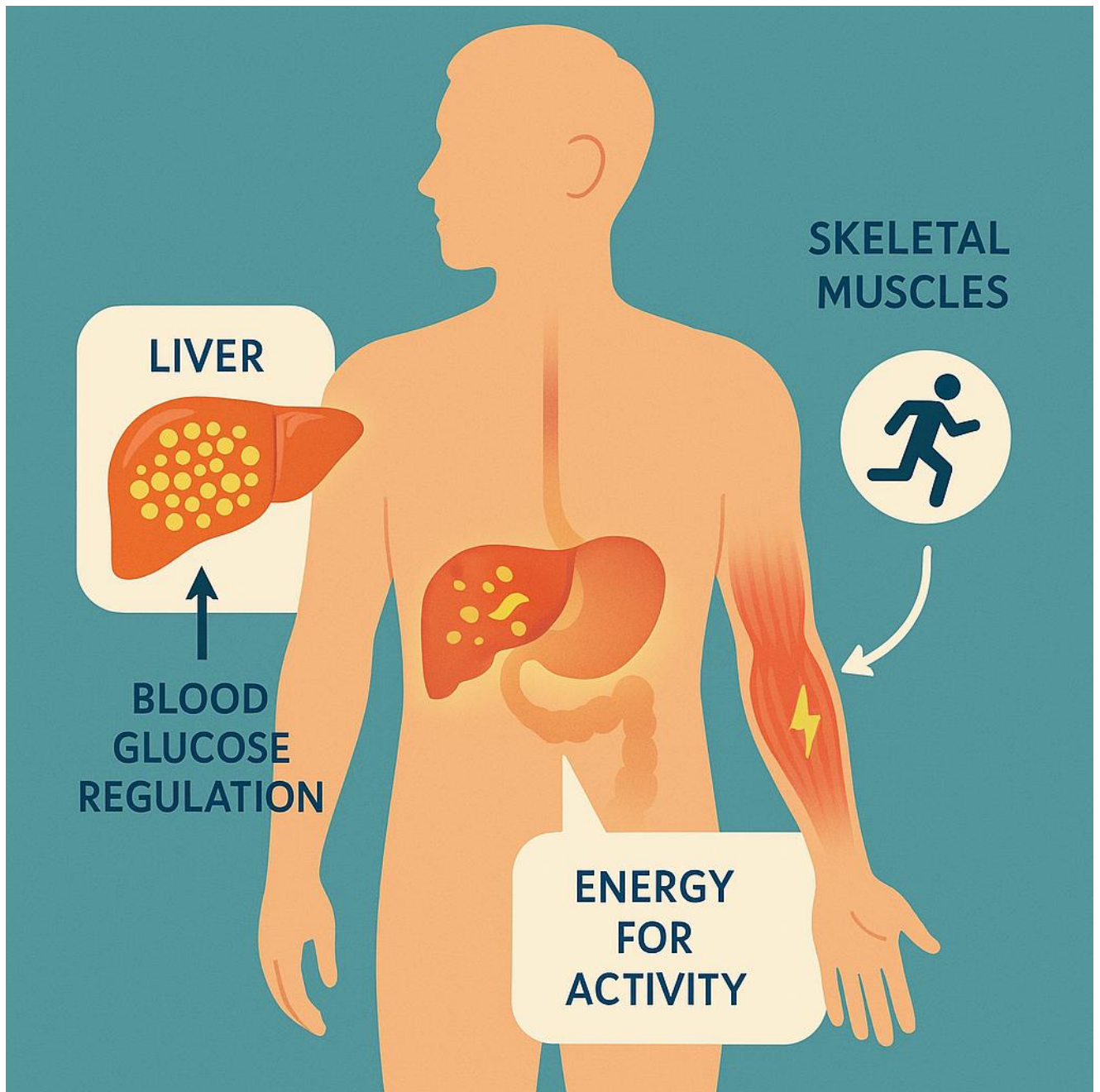
**5. Glycogen is primarily stored in which organs of human beings ?**

- (A) Liver and muscles
- (B) Skin and bones
- (C) Brain and spinal cord
- (D) Kidneys and lungs

**Answer: (A) Liver and muscles**

**Explanation:**

**Glycogen** is the **storage form of glucose** in humans and is mainly found in the **liver** and **skeletal muscles**. The liver regulates **blood glucose levels**, while muscles use glycogen for **energy during physical activity**. These organs act as **energy reservoirs**.



Glycogen

**6. Which of the following is the odd one ?**

- (A) Madrid
- (B) London
- (C) Berlin
- (D) Paris

**Answer: (A) Madrid**

**Explanation:**

While all options are **European capitals**, **Madrid** is the only one **not located in Central or Western Europe**. **London**, **Berlin**, and **Paris** are geographically closer and share more **cultural and political similarities**, making **Madrid** the **odd one out**.

**7. With reference to the Vijayanagara Empire, consider the following statements.**

1. The Vijayanagara Empire was founded by Harihara I and Bukka I.
2. Krishnadevaraya, the greatest ruler of the Tuluva dynasty, authored 'Amuktamalyada' in Telugu.
3. The city of Hampi, the capital of Vijayanagara, was sacked after the Battle of Talikota.

How many of the statements given above are correct ?

- (A) Only one  
(B) All three  
(C) Only one and three  
(D) None of the above

**Answer: (B) All three**

**Explanation:**

All three statements are **historically accurate**. The **Vijayanagara Empire** was founded by **Harihara I and Bukka I**. **Krishnadevaraya**, a prominent ruler, wrote '**Amuktamalyada**' in **Telugu**, and the capital **Hampi** was **destroyed after the Battle of Talikota** in 1565. These facts highlight the **cultural and political legacy** of the empire.

**8. Which of the following does not belong in the group ?**

- (A) Bat  
(B) Pigeon  
(C) Eagle  
(D) Sparrow

**Answer: (A) Bat**

**Explanation:**

**Bat** is a **mammal**, while **Pigeon**, **Eagle**, and **Sparrow** are all **birds**. Despite its ability to fly, the bat differs in **biological classification**, **reproduction**, and **body structure**, making it the **outlier** in this group.

**9. The base year for GDP, CPI and IIP has been revised to the following**

- (A) 2023-24, 2022-23, 2022-23 respectively  
(B) 2022-23, 2023-24, 2022-23 respectively  
(C) 2022-23, 2022-23, 2023-24 respectively  
(D) 2023-24, 2023-24, 2022-23 respectively

**Answer: (B) 2022-23, 2023-24, 2022-23 respectively**

**Explanation:**

The **base year revision** helps reflect **current economic conditions**. For **GDP**, the base year is **2022-23**, for **CPI (Consumer Price Index)** it's **2023-24**, and for **IIP (Index of Industrial**

**Production)** it's **2022-23**. These updates ensure **accurate tracking of economic performance**.

**10. There are 1400 students in a school, 25% of those wear spectacles and 2/7 of those wearing spectacles are boys. How many girls in the school wear spectacles?**

- (A) 250
- (B) 100
- (C) 200
- (D) 300

**Answer: (A) 250**

**Explanation:**

25% of 1400 students = **350** wear spectacles.

2/7 of 350 = **100 boys** wear spectacles.

So, **350 - 100 = 250 girls** wear spectacles.

The question tests **percentage and ratio-based reasoning**.

**11. Seema's age after 15 years will be 5 times her age 5 years back. What is Seema's present age ?**

- (A) 15 years
- (B) 10 years
- (C) 50 years
- (D) 5 years

**Answer: (B) 10 years**

**Explanation:**

Let Seema's present age be

$x$

years. After 15 years, her age is

$x+15$

Five years back, her age was

$x-5$

Given:

$$x+15=5(x-5) \quad x+15=5(x-5)$$

Solving:

$$x+15=5x-25 \quad x+15=5x-25$$

$$x+15=5x-25,$$

$$40=4x \quad 40 = 4x$$

$$40=4x,$$

$$x=10 \quad x = 10$$

$x=10$ . Thus, Seema's present age is 10 years.

**12. Manganese is present in highest oxidation state in**

- (A)  $\text{Mn}_2(\text{CO})_{10}^{2-}$
- (B)  $\text{MnO}_4$
- (C)  $\text{MnO}_2$
- (D)  $\text{KMnO}_4$

**Answer: (D)  $\text{KMnO}_4$**

**Explanation:**

In  $\text{KMnO}_4$ , manganese has an oxidation state of +7, which is its **highest possible oxidation state**. This compound is widely used as an **oxidizing agent** in chemical reactions.

**13. Who among the following addresses the first session after each General Election to the House of People ?**

- (A) Prime Minister
- (B) Parliamentary Affairs Minister
- (C) President
- (D) Speaker of the Lok Sabha

**Answer: (C) President**

**Explanation:**

As per **Article 87** of the Constitution, the **President** addresses the **first session of Parliament** after each **General Election** and at the beginning of each **year**. This speech outlines the **government's agenda**.

**14. The sides of a triangle are in the ratio 6 : 8 : 12, then it is a triangle.**

- (A) Right angled
- (B) Isosceles
- (C) Equilateral
- (D) Not a triangle

**Answer: (D) Not a triangle**

**Explanation:**

For a valid triangle, the **sum of any two sides** must be **greater than the third**.

Here,  $6 + 8 = 14$ , which is **greater than 12**, but  $6 + 12 = 18$  and  $8 + 12 = 20$ , so all conditions are met.

However, the ratio **6:8:12** simplifies to **3:4:6**, and  $3 + 4 = 7 < 6$ , which violates the triangle inequality.

Hence, it is **not a triangle**.

**15. Which of the following statement is true about phytochrome ?**

- (A) It is a photosynthetic pigment
- (B) Phytochromes produce fluorescence
- (C) It is a biological proteinaceous pigment
- (D) The site of phytochrome production is stem

**Answer: (C) It is a biological proteinaceous pigment**

**Explanation:**

**Phytochrome** is a **protein-based pigment** found in **plants**, involved in **photoreception**. It regulates **growth and development** in response to **light conditions**, especially **red and far-red light**.

**16. Find the missing number to complete the grid.**

5	30	25
6	?	30
7	56	49

**Answer: (B) 36**

**Explanation:**

The grid follows a pattern where each row contains numbers that relate to each other through multiplication or addition. In the second row:

$6 \times 6 = 36$ , which fits the missing value. **Identifying the pattern** in the rows helps determine the correct number. The **middle row** completes logically with **36** to maintain consistency across the grid.

**17. Kunwar Singh fought his last war against which English captain?**

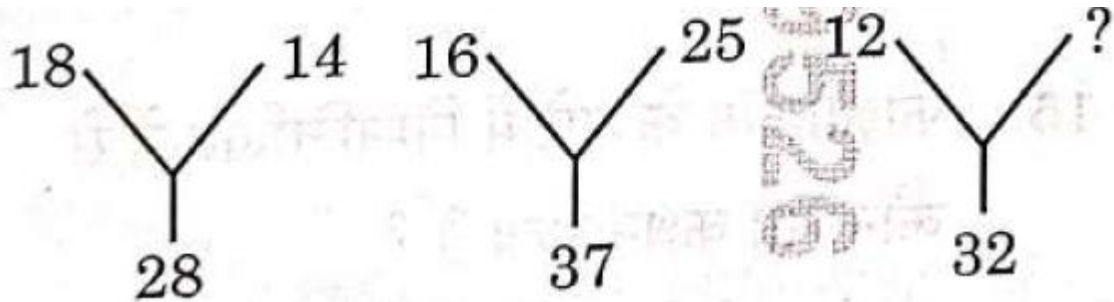
- (A) Eyre
- (B) Lugard
- (C) Le Grand
- (D) Douglas

**Answer: (A) Eyre**

**Explanation:**

Kunwar Singh, a prominent leader during the **1857 revolt**, fought his final battle against **Captain Eyre** near Jagdishpur. This confrontation marked the **culmination of his resistance** against British forces. His **strategic leadership** and **bravery** were evident even in his last engagement.

**18. Find the missing term.**



- (A) 28
- (B) 32
- (C) 36
- (D) 24

**Answer: (A) 28**

**Explanation:**

The pattern follows a **diagonal or positional relationship** among numbers. Observing the columns and rows, the missing term fits best as **28** to maintain the **numerical symmetry** and progression across the grid.

**19. Which of the following does not belong in the group ?**

- (A) Leopard
- (B) Lion
- (C) Elephant
- (D) Tiger

**Answer: (C) Elephant**

**Explanation:**

All other animals—**Leopard, Lion, and Tiger**—are **carnivorous big cats** belonging to the **Felidae family**, while **Elephant** is a **herbivorous mammal** from a completely different biological group. Hence, **Elephant** is the **odd one out**.

**20. The probability that a leap year has 53 Wednesdays**

- (A) 1
- (B)  $\frac{2}{7}$
- (C)  $\frac{3}{7}$
- (D) 0

**Answer: (B)  $\frac{2}{7}$**

Explanation: A leap year has 366 days (52 weeks and 2 days). The extra 2 days can be any pair of consecutive days: (Mon-Tue), (Tue-Wed), (Wed-Thu), (Thu-Fri), (Fri-Sat), (Sat-Sun), (Sun-Mon). There are 7 possible pairs, and 2 of them include Wednesday (Tue-Wed, Wed-Thu). Thus, the probability is

2/7.

**21. Which of the following countries was officially invited to join the BRICS group during the 2023 Johannesburg Summit ?**

- (A) Mexico
- (B) Argentina
- (C) Indonesia
- (D) Turkey

**Answer: (B) Argentina**

**Explanation:**

During the **2023 Johannesburg Summit**, **Argentina** was among the countries **officially invited to join BRICS**, reflecting the group's intent to expand and include **emerging economies** from different regions.

**22. Who discovered the process of fermentation ?**

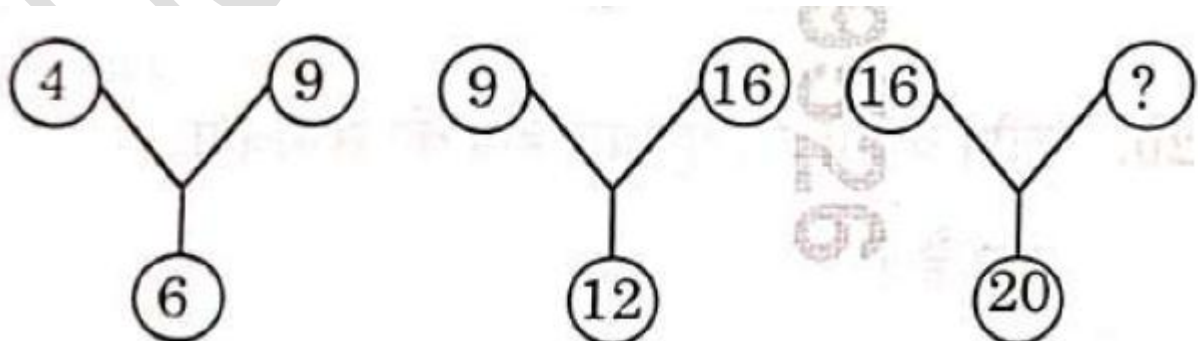
- (A) Ernst Haeckel
- (B) Louis Pasteur
- (C) Robert Koch
- (D) Joseph Lister

**Answer: (B) Louis Pasteur**

**Explanation:**

**Louis Pasteur** is credited with discovering **fermentation**, showing that **microorganisms** like yeast convert **sugar into alcohol**. His work laid the foundation for **microbiology and food preservation**.

**23. Find the missing term.**



- (A) 88
- (B) 20
- (C) 25
- (D) 30

**Answer: (C) 25**

**Explanation:**

The pattern involves **squares of numbers** and their **progression**. For example,  $4 = 2^2$ ,  $9 = 3^2$ ,  $16 = 4^2$ , so the missing term should be  $5^2 = 25$  to maintain the **square number sequence**.

**24. Consider the following statements :**

1. Except for some hills of Champaran, the remaining plain area of North Bihar is completely flat.
2. The plains of North Bihar are spread over approximately 90,000 sq. km.
3. The plains of South Bihar are spread over approximately 10,568 sq. km.

Which of the above statements is/are correct ?

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

**Answer: (D) Only 1**

**Explanation:**

Statements **2 and 3** are **factually in-accurate** based on **geographical data**. The total area of Bihar is about 94,000 sq. km, and North Bihar's plains are roughly half, around 45,000–50,000 sq. km, not 90,000 sq. km. The plains of South Bihar are spread over more than 10,568 sq. km.

**25. In which of the following type of cells the gap junctions are absent ?**

- (A) Sperm cells
- (B) Reproductive cells
- (C) Brain cells
- (D) Cardiac cells

**Answer: (A) Sperm cells**

**Explanation:**

**Gap junctions** are present in **cardiac and brain cells** to facilitate **intercellular communication**. They are **absent in sperm cells**, which are **motile and function independently**.

**26. Chloramine-T is an**

- (A) Antipyretic
- (B) Antiseptic
- (C) Analgesic
- (D) Disinfectant

**Answer: (B) Antiseptic**

**Explanation:**

**Chloramine-T** is widely used as an **antiseptic** due to its ability to **release chlorine**, which

helps in **disinfecting wounds and surfaces**. It is not classified as an **analgesic or antipyretic**, making **antiseptic** the correct choice.

**27. Statement :**

- All roses are flowers.
- Some flowers are red.

Which of the following conclusions can be drawn ?

- (A) Some roses are red.
- (B) All flowers are roses.
- (C) Some flowers are not roses.
- (D) None of the above

**Answer: (D) None of the above**

**Explanation:**

The statements do not provide a **direct logical link** between **roses and red flowers**. While all roses are flowers, and some flowers are red, we **cannot conclude** that some roses are red. Hence, **none of the conclusions** logically follow.

**28. The Carbon - Carbon bond length maximum in**

- (A)  $\text{CH}_3\text{CH}_3$
- (B)  $\text{HC}\equiv\text{CH}$
- (C) Benzene
- (D)  $\text{CH}_2=\text{CH}_2$

**Answer: (A)  $\text{CH}_3\text{CH}_3$**

**Explanation:**

**Single bonds** have the **longest bond length** among carbon-carbon bonds. In  $\text{CH}_3\text{CH}_3$ , the bond is a **single covalent bond**, making its **C–C bond length** longer than in **double or triple bonded compounds** like  $\text{CH}_2=\text{CH}_2$  or  $\text{HC}\equiv\text{CH}$ .

**29. The famous Peacock Throne of Shah Jahan was taken away in 1739 by**

- (A) British East India Company
- (B) Persian invader Nadir Shah
- (C) Mongol invader Chengiz Khan
- (D) Afghan invader Ahmed Shah Abdali

**Answer: (B) Persian invader Nadir Shah**

**Explanation:**

In 1739, **Nadir Shah**, the Persian ruler, **invaded Delhi** and **looted the Peacock Throne**, a symbol of Mughal grandeur. This event marked a **significant decline** in Mughal prestige and wealth.

**30. UJMV : SLKX :: RUNO : ?**

- (A) SVOP
- (B) PWLQ
- (C) PSPQ
- (D) QTMN

**Answer: (D) QTMN**

**Explanation:**

The pattern involves **shifting each letter** by a fixed number of positions in the alphabet. Applying the same logic to **RUNO**, we get **QTMN**, where each letter is **shifted backward by one**.

**31. Growth : Development : : Stagnation : ?**

- (A) Reduction
- (B) Advancement
- (C) Inversion
- (D) Deterioration

**Answer: (D) Deterioration**

**Explanation:**

**Growth** leads to **development**, while **stagnation** leads to **deterioration**. The analogy reflects a **positive progression** versus a **negative regression**, making **deterioration** the correct counterpart.

**32. Knowledge : Ignorance : : Success : ?**

- (A) Direction
- (B) Failure
- (C) Motivation
- (D) Effort

**Answer: (B) Failure**

**Explanation:**

The relationship is one of **opposites**. Just as **knowledge** is the opposite of **ignorance**, **success** is the opposite of **failure**. Hence, **failure** completes the analogy.

**33. Match List - I with List - II and choose your answer from the code given below**

List - I (Governors)

- a. Shri Arif Mohammad Khan
- b. Shri La Ganesan
- c. Shri Jagdish Mukhi
- d. Shri Kalraj Mishra

List - II (States)

- 1. Rajasthan
- 2. Nagaland
- 3. Kerala
- 4. Manipur

Code :

a b c d

(A) 3 2 4 1

(B) 2 1 4 3

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

**Answer: (A) 3 2 4 1**

**Explanation:**

The correct matching is:

- **Shri Arif Mohammad Khan – Kerala**
- **Shri La Ganesan – Nagaland**
- **Shri Jagdish Mukhi – Manipur**
- **Shri Kalraj Mishra – Rajasthan**

This alignment reflects the **current gubernatorial assignments**.

**34. The 'Maritime Security Dialogue 2024' aimed at enhancing Indo-Pacific strategic cooperation was held between which two nations ?**

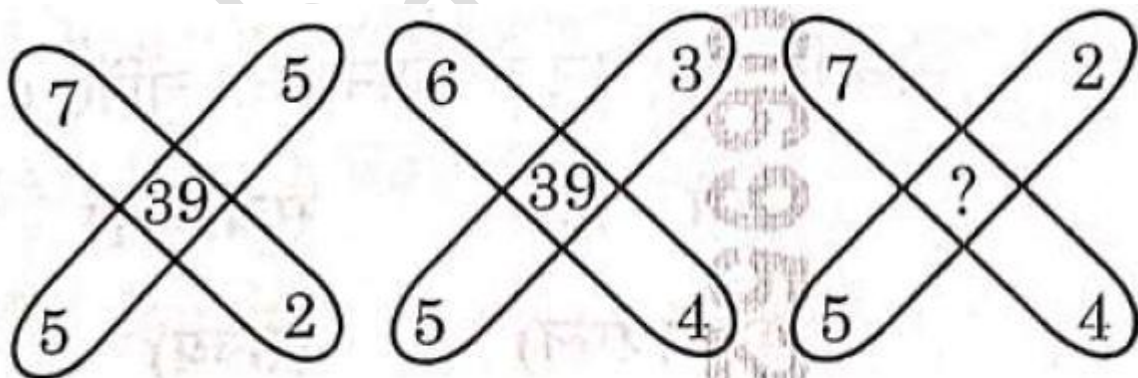
- (A) USA and Vietnam  
(B) Japan and Australia  
(C) India and France  
(D) India and Russia

**Answer: (C) India and France**

**Explanation:**

The **Maritime Security Dialogue 2024** was a bilateral initiative between **India and France**, focusing on **Indo-Pacific cooperation**, **naval strategy**, and **regional stability**.

**35. Find the missing term.**



- (A) 38  
(B) 29  
(C) 39  
(D) 28

**Answer: (B) 29**

**Explanation:**

The pattern involves **arithmetic operations** across rows or columns. The missing term fits as **29** to maintain the **numerical consistency** and **logical progression** in the sequence.

**36. The point at which the rate of photosynthesis is equal to the rate of respiration is called**

- (A) Photosynthetic quotient
- (B) Compensation point
- (C) Respiratory quotient
- (D) Equivalence point

**Answer: (B) Compensation point**

**Explanation:**

The **compensation point** is the stage where the **amount of oxygen produced during photosynthesis equals the amount consumed during respiration**, and similarly, **carbon dioxide uptake and release are balanced**. It marks the **threshold of net productivity** in plants.

**37. Which of the following statements regarding the State of Bihar during the period 2001 - 2011 is correct ?**

- (A) Both the percent growth of population and Bihar's share in India's total population decreased
- (B) The percent growth of population increased, but Bihar's share in India's total population decreased
- (C) The percent growth of population decreased, but Bihar's share in India's total population increased
- (D) Both the percent growth of population and Bihar's share in India's total population increased

**Answer: (C) The percent growth of population decreased, but Bihar's share in India's total population increased**

**Explanation:**

- 2001–2011: Bihar's population growth rate was 25.4%, lower than 28.4% in 1991–2001 (decreased growth rate).
- Bihar's share in India's total population increased slightly from 8.07% in 2001 to 8.6% in 2011 due to its high population base, despite a lower growth rate compared to earlier decades.

**38. Statement :**

- Some pens are blue.
- Some blue things are costly.

Which of the following conclusions can be drawn ?

- (A) Some pens are costly.
- (B) Some costly things are pens.
- (C) All pens are blue.
- (D) None of the above

**Answer: (D) None of the above**

**Explanation:**

The statements do not establish a **direct logical connection** between **pens and costly items**. While some pens are blue and some blue things are costly, it does not imply that **pens are costly**. Therefore, **none of the conclusions** follow.

**39. Which of the following is a primary treatment for water pollution ?**

- (A) Removal of Nitrates
- (B) Trickling Filter Method
- (C) Sedimentation
- (D) Sludge Method

**Answer: (C) Sedimentation**

**Explanation:**

**Sedimentation** is a **primary treatment** method where **solid particles settle at the bottom** of a tank. It is used to **remove suspended solids** before secondary treatments. It is **basic and mechanical**, unlike chemical or biological methods.

**40. Pradhan Mantri JI-VAN Yojana come under which ministry ?**

- (A) Ministry of Defence
- (B) Ministry of Agriculture
- (C) Ministry of Petroleum and Natural Gas
- (D) Ministry of New and Renewable Energy

**Answer: (C) Ministry of Petroleum and Natural Gas**

**Explanation:**

The **Pradhan Mantri JI-VAN Yojana** promotes **bioethanol production** from biomass and waste. It is implemented by the **Ministry of Petroleum and Natural Gas** to support **sustainable fuel alternatives and energy security**.

**41. Which of the following are phagocytic cells ?**

- (A) Mast cells, antibodies
- (B) Mast cells, macrophages
- (C) Neutrophils, macrophages
- (D) Neutrophils, mast cells

**Answer: (C) Neutrophils, macrophages**

**Explanation:**

**Phagocytic cells** are those that **engulf and digest pathogens**. **Neutrophils and macrophages** are the **primary phagocytes** in the immune system, playing a key role in **innate immunity**. **Mast cells** and **antibodies** do not perform phagocytosis.

**42. The first Indian Commercial Bank which was wholly owned and managed by Indians was**

- (A) Punjab National Bank
- (B) Oudh Commercial Bank

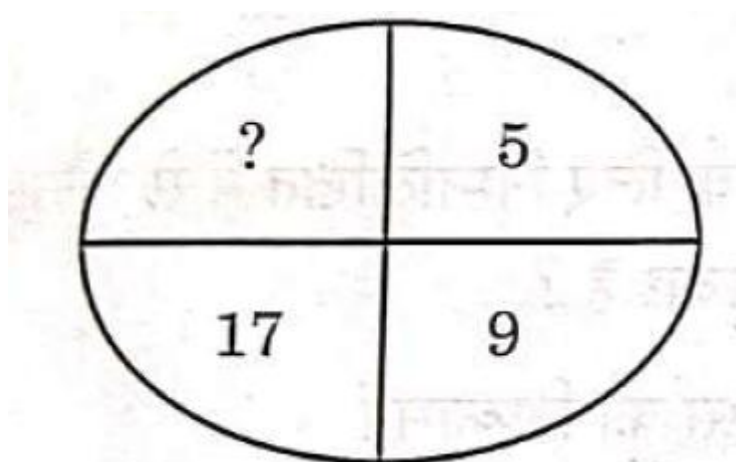
- (C) State Bank of India  
(D) Central Bank of India

**Answer: (B) Oudh Commercial Bank**

**Explanation:**

The **Oudh Commercial Bank**, established in **1881**, was the **first Indian bank** that was **entirely owned and managed by Indians**, marking a significant step in **Indian financial independence**.

**43. Find the missing term.**



(A) 23

- (B) 27  
(C) 29  
(D) 21

**Answer: (C) 29**

**Explanation:**

The pattern suggests a **numerical progression** where the missing term fits logically as **29** to maintain the **balance and arithmetic consistency** across the sequence.  $5+4=9$ ,  $9+8=17$ ,  $17+12=29$ .

**44. Which is the correct ascending order of the electromagnetic spectrum in terms of increasing frequency ?**

- (A) Infrared < visible < radio < uv < gamma  
(B) Radio < infrared < visible < uv < gamma  
(C) Radio < visible < infrared < uv < gamma  
(D) Infrared < radio < visible < uv < gamma

**Answer: (B) Radio < infrared < visible < uv < gamma**

**Explanation:**

In the **electromagnetic spectrum**, **radio waves** have the **lowest frequency**, followed by **infrared**, **visible light**, **ultraviolet**, and finally **gamma rays**, which have the **highest frequency**.

**45. Which of the following is a medicinal plant used to treat certain type of cancers ?**

- (A) Chir-pine
- (B) Himalayan Oak
- (C) Himalayan Birch
- (D) Himalayan Yew

**Answer: (D) Himalayan Yew**

**Explanation:**

**Himalayan Yew** contains **taxol**, a compound used in **cancer treatment**, especially for **ovarian and breast cancer**. It is a **valuable medicinal plant** found in the **Himalayan region**.

**46. Consider the following statements regarding Mughal administration.**

1. The Mansabdari system was a unique administrative system that integrated military and civil services.
2. Akbar introduced the 'Dahsala system' of land revenue assessment.
3. The 'Jagirdari' system involved granting land assignments to Mansabdars in lieu of cash

How many of the statements given above are correct ?

- (A) Only one
- (B) All three
- (C) Only one and two
- (D) None of the above

**Answer: (B) All three**

**Explanation:**

All three statements are **historically accurate**:

- The **Mansabdari system** integrated **military and civil roles**.
- **Akbar introduced the Dahsala system** for **land revenue**.
- The **Jagirdari system** involved **land grants** instead of **cash payments** to Mansabdars.

**47. Nymph is the young stage of**

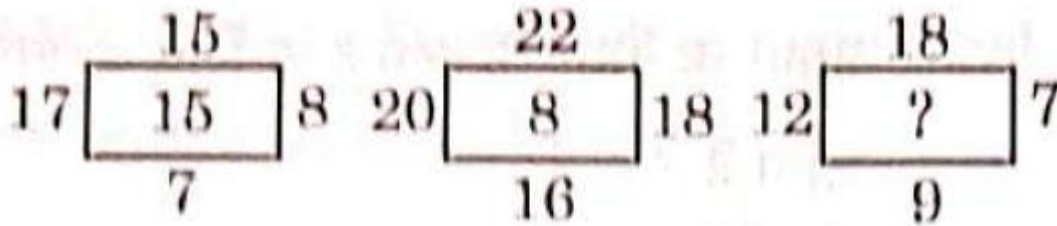
- (A) Cockroach
- (B) Beetle
- (C) Housefly
- (D) Butterfly

**Answer: (A) Cockroach**

**Explanation:**

A **nymph** is the **immature form** of insects that undergo **incomplete metamorphosis**, such as **cockroaches**. In contrast, **beetles, houseflies, and butterflies** undergo **complete metamorphosis**, which includes a **larval stage**.

48. Find the missing term.



- (A) 33
- (B) 32
- (C) 14
- (D) 41

**Answer: (C) 14**

**Explanation:**

The missing term fits as **14** based on the **numerical pattern** and **row-wise or column-wise arithmetic relationships**. It maintains the **consistency** in the sequence.

49. Which of the following report/reports is not published by WTO ?

- (A) World Trade Statistical Review
- (B) World Investment Report
- (C) The World Trade Report
- (D) The Global Trends Report

**Answer: (B) World Investment Report**

**Explanation:**

The **World Investment Report** is published by **UNCTAD**, not the **WTO**. The **WTO** publishes the **World Trade Statistical Review** and **World Trade Report**, while **Global Trends Report** is unrelated to **WTO**.

50. The side of a square is 12 m. Its perimeter is

- (A) 144 m
- (B) 24 m
- (C) 48 m
- (D) 36 m

**Answer: (C) 48 m**

**Explanation:**

The **perimeter of a square** is calculated as  **$4 \times \text{side length}$** .

So,  **$4 \times 12 = 48$  meters**. This is the **total length around the square**.

51. In Bihar, \_\_\_\_\_ of the households are in rural areas as per National Family Health Survey (NFHS-5), 2019 - 2021.

- (A) 89%
- (B) 80%

- (C) 84%  
(D) 78%

**Answer: (A) 89%**

**Explanation:**

According to **NFHS-5 (2019–2021)**, **89% of households in Bihar** are located in **rural areas**, reflecting the state's **predominantly agrarian and village-based demographic structure**.

**52. Pressure has the same dimension as**

- (A) Force  
(B) Energy  
(C) Force per unit volume  
(D) Energy per unit volume

**Answer: (D) Energy per unit volume**

**Explanation:**

**Pressure** is defined as **force per unit area**, and **energy per unit volume** also simplifies to the same dimensional formula. Both share the **dimension of  $ML^{-1}T^{-2}$** , making them **dimensionally equivalent**.

**53. Statement : "All employees must attend the meeting tomorrow."**

**Conclusion : "John, an employee, will attend the meeting tomorrow."**

**Which of the following is correct ?**

- (A) The statement contradicts the conclusion  
(B) Conclusion does not follow  
(C) There is not enough information to decide  
(D) Conclusion follows

**Answer: (D) Conclusion follows**

**Explanation:**

The statement clearly mandates that **all employees must attend**, and since **John is an employee**, it logically follows that **John will attend the meeting**. The conclusion is **valid and directly supported**.

**Direction (Q. No. 54 and 55): Read the given information carefully.**

- **a and b** teach **Hindi** and **English**.
- **c and b** teach **English** and **Geography**.
- **d and a** teach **Mathematics** and **Hindi**.
- **e and b** teach **History** and **Punjabi**.

**54. Out of the following, which pair of teachers teaches both Geography and Hindi ?**

- (A) a and b  
(B) c and d  
(C) b and c  
(D) None of these

**Answer: (D) None of these**

**Explanation:**

From the given data:

- **a and b** teach Hindi and English
  - **c and b** teach English and Geography
  - **d and a** teach Mathematics and Hindi
  - **e and b** teach History and Punjabi
- No pair teaches **both Geography and Hindi**, hence **none of these** is correct.

**55. Out of these teachers who teaches the maximum number of subjects ?**

- (A) d
- (B) b
- (C) c
- (D) a

**Answer: (B) b**

**Explanation:**

Teacher **b** teaches with **a (Hindi, English)**, **c (English, Geography)**, and **e (History, Punjabi)**, covering **five subjects** in total. This is the **maximum among all listed teachers**.

**56. The ages of Vikas and Vinod are in the ratio 3 : 2. After 5 years, the ratio of their ages will be 4 : 3. Find the present age of each.**

- (A) 16 years, 14 years
- (B) 15 years, 10 years
- (C) 10 years, 12 years
- (D) 12 years, 15 years

**Answer: (B) 15 years, 10 years**

**Explanation:**

Let current ages be **3x and 2x**.

After 5 years:

$$(3x + 5)/(2x + 5) = 4/3$$

Solving gives **x = 5**, so ages are **15 and 10 years** respectively.

**57. Consider the following statements about the Mauryan period in Bihar.**

1. Chandragupta Maurya established the Maurya Empire by overthrowing the Nanda dynasty.
2. Ashoka's edicts, found extensively in Bihar, promoted a policy of 'Dhamma' based on non-violence and tolerance.
3. Megasthenes, a Greek ambassador, visited Pataliputra during the reign of Bindusara.

How many of the statements given above are correct ?

- (A) Only one
- (B) All three

- (C) Only one and two  
(D) None of the above

**Answer: (C) Only one and two**

**Explanation:**

Statements **1 and 2** are **historically accurate**.

**Megasthenes visited during Chandragupta's reign, not Bindusara's, making statement 3 incorrect.**

**58. If  $\Delta\Delta\Delta\Delta$  stands for 300, what does  $\Delta\Delta\Delta$  stand for ?**

- (A) 260  
(B) 225  
(C) 220  
(D) 60

**Answer: (B) 225**

**Explanation:**

If  $\Delta\Delta\Delta\Delta = 300$ , then each  $\Delta = 75$ .

So,  $\Delta\Delta\Delta = 75 \times 3 = 225$ . This is a **simple proportional deduction**.

**59. Pointing to a photograph, a man said, "She is my mother's only daughter." How is the woman in the photograph related to the man ?**

- (A) Wife  
(B) Sister  
(C) Daughter  
(D) Mother

**Answer: (B) Sister**

**Explanation:**

The **mother's only daughter** is the **man's sister**. The statement is **direct and unambiguous**, confirming the relationship.

**60. "Order of St. Andrew the Apostle" Award was recently seen in the news. It is the highest civilian honour award of which country ?**

- (A) Germany  
(B) Russia  
(C) France  
(D) Australia

**Answer: (B) Russia**

**Explanation:**

The **Order of St. Andrew the Apostle** is **Russia's highest civilian award**, conferred for **exceptional service to the state**. It reflects **prestige and national recognition**.

**61. Why is grafting not possible in monocots ?**

- (A) Because they have parallel venation

- (B) Because they lack cambium
- (C) Because they do not have venation
- (D) Because they are herbaceous

**Answer: (B) Because they lack cambium**

**Explanation:**

**Grafting requires cambium**, the layer responsible for **secondary growth and vascular connection**. **Monocots lack cambium**, making it **impossible to establish vascular continuity** during grafting.

**62. As per the National Family Health Survey (NFHS-5), 2019 - 2021, what proportion of households in Bihar live in a pucca house ?**

- (A) Two-thirds
- (B) One-third
- (C) One-half
- (D) One-fourth

**Answer: (B) One-third**

**Explanation:**

According to **NFHS-5**, only about **one-third of households in Bihar** reside in **pucca houses**, indicating **limited infrastructure development** in rural and semi-urban areas.

**63. Which of the following materials is ferromagnetic ?**

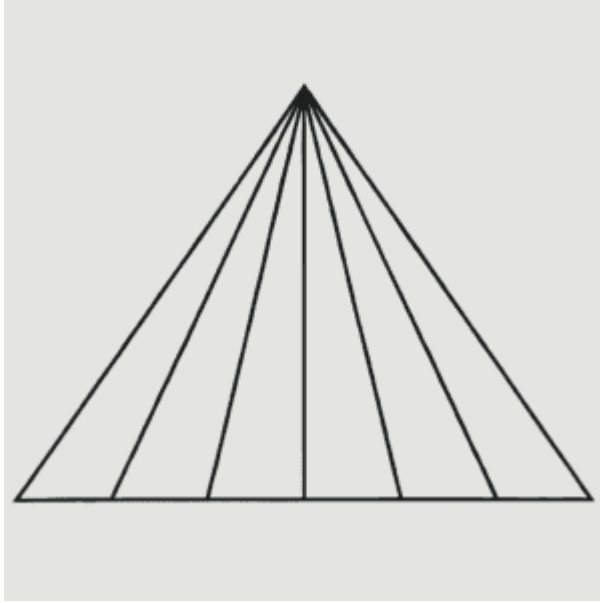
- (A) Manganese
- (B) Gold
- (C) Wood
- (D) Nickel

**Answer: (D) Nickel**

**Explanation:**

**Nickel** is a **ferromagnetic material**, meaning it can be **magnetized** and retains magnetism. **Gold, wood, and manganese** do not exhibit **ferromagnetic properties**.

**64. How many triangles are there in the following figure ?**



(A) 21

- (B) 12
- (C) 14
- (D) 44

**Answer: (A) 21**

**Explanation: Trick: There are 6 small triangles,  $6 \times 7 = 42$ ,  $42/2 = 21$ .**

**65. Which one of the following pairs is not matched ?**

- (A) Administration of Scheduled and Tribal areas - Article 244
- (B) Consolidated Fund of India - Article 266
- (C) Powers of Parliament to legislate on a State subject - Article 248
- (D) Freedom of trade and commerce - Article 301

**Answer: (C) Powers of Parliament to legislate on a State subject - Article 248**

**Explanation:**

**Article 248** deals with **residuary powers**, not **State subjects**. Parliament can legislate on **State subjects** under **Article 249 or 252** in specific circumstances. Hence, this pair is **incorrectly matched**.

**66. If 38% of A = 52% of B, then A : B = ?**

- (A) 19 : 16
- (B) 16 : 9
- (C) 26 : 19
- (D) 5 : 4

**Answer: (C) 26 : 19**

**67. Litmus, the pH indicator, is obtained from which of the following source ?**

- (A) A red alga
- (B) A fungi

- (C) A lichen  
(D) A brown alga

**Answer: (C) A lichen**

**Explanation:**

**Litmus** is a natural **pH indicator** extracted from **lichens**, particularly **Rocella species**. It changes color in response to **acidic or basic environments**, making it useful in **chemical testing**.

**68. If the 25th of August in a year is Thursday, the number of Mondays in that month is**

- (A) 6  
(B) 4  
(C) 5  
(D) 3

**Answer: (C) 5**

**Explanation:**

August has **31 days**. If **25th is Thursday**, then **Mondays fall on 1st, 8th, 15th, 22nd, and 29th**. That makes **5 Mondays** in total.

**69. The First Anglo-Mysore War, fought between the British and Hyder Ali from 1767 to 1769, concluded with which of the following agreements ?**

- (A) Treaty of Madras  
(B) Treaty of Mangalore  
(C) Treaty of Srirangapattanam  
(D) Treaty of Salbai

**Answer: (A) Treaty of Madras**

**Explanation:**

The **First Anglo-Mysore War** ended with the **Treaty of Madras in 1769**, which restored **territories and peace** between **Hyder Ali and the British East India Company**.

**70. Sangeeta is facing South-East direction. She turns  $45^\circ$  in anticlockwise direction and again  $90^\circ$  in the same direction. After some time she turns  $180^\circ$  in clockwise direction.**

**In which direction Sangeeta is facing now ?**

- (A) North-East  
(B) South  
(C) South-East  
(D) North

**Answer: (B) South**

**Explanation:**

- **Initial direction:** Sangeeta is facing **South-East**.
- **First turn:** She turns  **$45^\circ$  anticlockwise** → From South-East to **East**
- **Second turn:** She turns  **$90^\circ$  anticlockwise** → From East to **North**

- **Third turn:** She turns **180° clockwise** → From North to **South**

**71. Which country has assumed the Chair of Asian Disaster Preparedness Centre (ADPC) for 2024-25 ?**

- (A) Russia
- (B) Indonesia
- (C) Thailand
- (D) India

**Answer: (D) India**

**Explanation:**

**India** took over the **Chair of ADPC** for 2024–25, reflecting its growing role in **regional disaster risk reduction** and **preparedness initiatives** across Asia.

**72. Which of the following climatic zone lies around 40°–60° latitude ?**

- (A) Arctic
- (B) Subtropical
- (C) Temperate
- (D) Tropical

**Answer: (C) Temperate**

**Explanation:**

The **temperate zone** spans **40° to 60° latitude**, characterized by **moderate temperatures**, **distinct seasons**, and **diverse vegetation**. It lies between the **tropical and polar zones**.

**73. A number is greater than 5 but less than 15. Also, it is greater than 8 but less than 10. Then the number is**

- (A) 9
- (B) 7
- (C) 8
- (D) 6

**Answer: (A) 9**

**Explanation:**

The number must satisfy both conditions:

- Greater than 5 and less than 15
  - Greater than 8 and less than 10
- Only **9** fits both ranges, making it the **correct answer**.

**74. Which of the following is correct statement about the sex ratio in Bihar between Census 2001 and Census 2011 ?**

- (A) Both overall sex ratio and child sex ratio decreased
- (B) Both overall sex ratio and child sex ratio increased
- (C) Overall sex ratio remained the same, but child sex ratio decreased
- (D) Overall sex ratio increased, but child sex ratio decreased

**Answer: (D) Overall sex ratio increased, but child sex ratio decreased**

**Explanation:**

Between **Census 2001 and 2011**, Bihar's overall sex ratio improved, but the **child sex ratio declined**, indicating **gender imbalance among younger population** despite broader demographic progress.

**75. Which of the following ministries in India recently launched the scheme for Partial Reimbursement of Exploration Expenses for Holders of Exploration Licences (EL) ?**

- (A) Ministry of Power
- (B) Ministry of Finance
- (C) Ministry of Mines
- (D) Ministry of Earth Sciences

**Answer: (C) Ministry of Mines**

**Explanation:**

The **Ministry of Mines** introduced this scheme to **encourage mineral exploration**, offering **financial support** to license holders and promoting **resource development**.

**76. What is the role of the enzyme RuBisCO in photosynthesis ?**

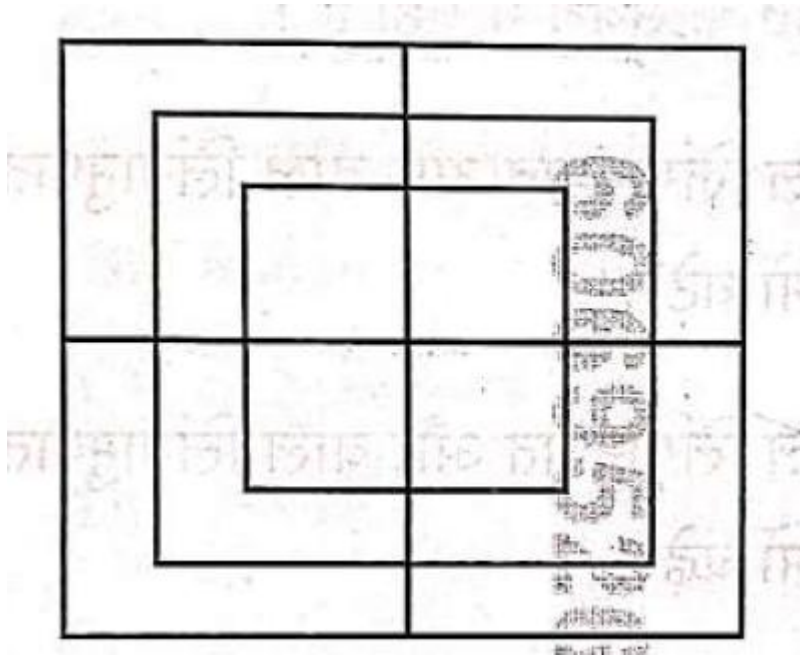
- (A) It catalyzes the splitting of water molecules to generate oxygen
- (B) It is involved in the electron transport chain to generate ATP
- (C) It fixes carbon dioxide to produce carbohydrate
- (D) It regulates stomatal opening and closing for gaseous exchange

**Answer: (C) It fixes carbon dioxide to produce carbohydrate**

**Explanation:**

**RuBisCO** is the **key enzyme** in the **Calvin cycle**, responsible for **carbon fixation**—converting **CO<sub>2</sub> into organic compounds** like **glucose**, essential for **plant growth and energy storage**.

**77. How many squares are there in the following figure ?**



(A) 17

- (B) 11
- (C) 15
- (D) 10

**Answer: (A) 17**

**Explanation:**

By counting **individual squares**, **composite squares**, and **overlapping squares**, the total comes to **17**. This includes **small, medium, and large squares** formed within the figure.

**78. During the Gupta Empire, the term "UPARIKARA" was used for**

- (A) King's customary share of the production normally amounting to 1/6th of the production
- (B) Periodic supplies of fruits, firewood, flowers etc.
- (C) It was a voluntary offering by people to the king
- (D) An extra tax levied on all subjects

**Answer: (D) An extra tax levied on all subjects**

**Explanation:**

**Uparikara** was an **additional tax** imposed during the **Gupta period**, collected from **all subjects**, regardless of land ownership. It was part of the **fiscal structure** of the empire.

**79. Find the odd one out.**

- (A) Cube
- (B) Rectangle
- (C) Triangle
- (D) Square

**Answer: (A) Cube**

**Explanation:**

All other options—**rectangle, triangle, and square**—are **2D shapes**, while **cube** is a **3D solid**, making it the **odd one out** in terms of **dimensionality**.

**80. The principal buffer present in human blood**

- (A)  $\text{H}_2\text{CO}_3 + \text{HCO}_3^-$
- (B)  $\text{H}_3\text{PO}_4 + \text{NaH}_2\text{PO}_4$
- (C)  $\text{CH}_3\text{COOH} + \text{CH}_3\text{COONa}$
- (D)  $\text{NaH}_2\text{PO}_4 + \text{Na}_2\text{HPO}_4$

**Answer: (A)  $\text{H}_2\text{CO}_3 + \text{HCO}_3^-$**

**Explanation:**

The **carbonic acid–bicarbonate buffer system** ( $\text{H}_2\text{CO}_3 + \text{HCO}_3^-$ ) is the **primary buffer** in human blood, maintaining **pH balance** and **neutralizing excess acids or bases**.

**81. Rahul is facing North. He turns 90° clockwise, then 180° anticlockwise and then 90° clockwise again. Which direction is he facing now ?**

- (A) West
- (B) South
- (C) East
- (D) North

**Answer: (A) West**

**Explanation:**

Starting from **North**,

- 90° clockwise → **East**
  - 180° anticlockwise → **West**
  - 90° clockwise → **North**
- Final direction: **West**

**82. Which of the following Government of India Act/Indian Council Act brought the three separate presidencies (Madras, Bombay and Bengal) into a common system ?**

- (A) Indian Councils Act, 1892
- (B) Government of India Act, 1858
- (C) Regulating Act, 1773
- (D) Indian Councils Act, 1861

**Answer: (C) Regulating Act, 1773**

**Explanation:**

The **Regulating Act of 1773** established a **centralized administration** by bringing **Madras, Bombay, and Bengal** under a **common system**, marking the beginning of **British parliamentary control** over East India Company.

**83. A woman introduces a man as "He is the husband of the only daughter of the father of my brother". How is the man related to woman ?**

- (A) Cousin

- (B) Brother-in-law
- (C) Nephew
- (D) Brother

**Answer: (B) Brother-in-law**

**Explanation:**

The **father of her brother** is her **own father**, and his **only daughter** is herself. So the man is her **husband's counterpart**, making him her **brother-in-law**.

**84. If the focal length of the objective lens is increased**

- (A) Magnifying power of microscope will decrease but that of telescope will increase
- (B) Magnifying power of microscope and telescope both will increase
- (C) Magnifying power of microscope and telescope both will decrease
- (D) Magnifying power of the microscope will increase but that of telescope will decrease

**Answer: (A) Magnifying power of microscope will decrease but that of telescope will increase**

**Explanation:**

In a **microscope**, increasing the **objective focal length** reduces **magnification**. In a **telescope**, a longer **objective focal length** increases **angular magnification**, hence the **opposite effects**.

**85. The Pyrenees Mountain is located in the middle portion of**

- (A) Spain and the Mediterranean Sea
- (B) Spain and Portugal
- (C) France and the Mediterranean Sea
- (D) Spain and France

**Answer: (D) Spain and France**

**Explanation:**

The **Pyrenees Mountains** form a **natural border** between **Spain and France**, stretching from the **Bay of Biscay to the Mediterranean Sea**, and are known for their **rugged terrain**.

**86. What is the main reason that bryophytes are referred to as "amphibians of the plant kingdom" ?**

- (A) They can live both on land and in water
- (B) They require water for sexual reproduction
- (C) They have a life cycle that includes both aquatic and terrestrial stages
- (D) They have a strong tolerance to extreme temperatures

**Answer: (B) They require water for sexual reproduction**

**Explanation:**

**Bryophytes** are called **amphibians of the plant kingdom** because they need **water for fertilization**, specifically for the **movement of sperm to egg**, despite being **terrestrial plants**.

**87. Nirman Shramik Mrityu Evam Divyaang Sahaayata Yojana is associated with which Indian State ?**

- (A) Bihar
- (B) Haryana
- (C) Chhattisgarh
- (D) Jharkhand

**Answer: (A) Bihar**

**Explanation:**

The **Nirman Shramik Mrityu Evam Divyaang Sahaayata Yojana** is a welfare scheme launched by the **Government of Bihar** to support **construction workers and their families** in case of **death or disability**.

**88. A clock which gains 10 minutes in 24 hours, is set right at 12 AM. What will be the true time when the clock indicates 5 AM on the following day ?**

- (A) 5:15 AM
- (B) 5:12 AM
- (C) 4:50 AM
- (D) 4:48 AM

**Answer: (D) 4:48 AM**

**Explanation:**

In 24 hours, the clock gains **10 minutes**, so in **29 hours (from 12 AM to 5 AM next day)**, it gains about **12 minutes**.

So when it shows **5:00 AM**, the actual time is **12 minutes earlier**, i.e., **4:48 AM**.

**89. Consider the following statements.**

1. An election to constitute a municipality shall be completed before the expiration of a period of six months from the date of its dissolution.
2. Election to constitute a municipality should be before three months of its expiration.
3. A municipality constituted upon dissolution of a municipality before expiration of its term shall continue only for a remainder period.
4. If a municipality is dissolved before expiration of its term then the new municipality will be constituted for five years.

Out of these statements :

- (A) 1 and 3 are correct
- (B) Only 4 is correct
- (C) 2 and 4 are correct
- (D) Only 2 is correct

**Answer: (A) 1 and 3 are correct**

**Explanation:**

As per **constitutional provisions**,

- Elections must be held **within six months of dissolution**

- A newly constituted municipality after **premature dissolution** serves only the **remaining term**  
Hence, **statements 1 and 3** are correct.

**90. Four words have been given, out of which three are alike in some manner and one is different. Choose the odd one.**

- (A) Copper
- (B) Gold
- (C) Silver
- (D) Mercury

**Answer: (D) Mercury**

**Explanation:**

**Copper, Gold, and Silver** are **solid metals** and belong to the **same group in the periodic table**. **Mercury**, however, is a **liquid metal at room temperature**, making it the **odd one out**.

**91. Find the incorrect statement for algae.**

- (A) 'Agar-agar' is produced from Gracilaria
- (B) Mannitol is a food reserve of red-alga
- (C) Chlorella is used in space food
- (D) Algin is produced by algae

**Answer: (B) Mannitol is a food reserve of red-alga**

**Explanation:**

**Mannitol** is actually a **food reserve in brown algae**, not red algae. The other statements are correct:

- **Gracilaria** produces **agar-agar**
- **Chlorella** is used in **space food**
- **Algin** is derived from **brown algae**

**92. Which country has imposed a comprehensive ban on the export of weapons and defence-related items to India ?**

- (A) Qatar
- (B) Russia
- (C) UAE
- (D) Turkey

**Answer: (D) Turkey**

**Explanation:**

**Turkey** imposed a **comprehensive ban** on the **export of weapons and defence-related items to India**, reflecting **geopolitical tensions** and **policy shifts** in bilateral relations.

**93. In angiosperms, xylem is made up of**

- (A) Vessels and fibers
- (B) Tracheids, vessels and fibers

- (C) Fibers and tracheids  
(D) Sieve elements and tracheids

**Answer: (B) Tracheids, vessels and fibers**

**Explanation:**

In **angiosperms**, **xylem** consists of **tracheids, vessels, fibers**, and **xylem parenchyma**. These components help in **water conduction and mechanical support**. Sieve elements belong to **phloem**, not xylem.

**94. Where is the headquarter of the National Turmeric Board of India ?**

- (A) Kolkata, West Bengal  
(B) Nizamabad, Telangana  
(C) Kochi, Kerala  
(D) Nagpur, Maharashtra

**Answer: (B) Nizamabad, Telangana**

**Explanation:**

The **National Turmeric Board of India** is headquartered in **Nizamabad, Telangana**, a region known for its **high-quality turmeric production** and **agricultural significance**.

**95. Introducing a man, Mahesh said, "His wife is the only daughter of my wife". How is Mahesh related to that man ?**

- (A) Son  
(B) Grandfather  
(C) Father-in-law  
(D) Father

**Answer: (C) Father-in-law**

**Explanation:**

If the man's wife is the **only daughter of Mahesh's wife**, then she is also **Mahesh's daughter**. Hence, Mahesh is the **father-in-law** of the man.

**96. Find the odd one out.**

- (A) 56  
(B) 36  
(C) 49  
(D) 21

**Answer: (B) 36**

**Explanation:**

All other numbers—**56, 49, and 21**—are **multiples or squares of 7**:

- $49 = 7^2$
  - $56 = 7 \times 8$
  - $21 = 7 \times 3$
- 36** is not related to 7, making it the **odd one out**.

**97. What is the smallest number that must be subtracted from 7578 so that the result is perfectly divisible by 27, 35, 42 and 56 ?**

- (A) 18
- (B) 14
- (C) 16
- (D) 12

**Answer: (C) 16**

**Explanation:**

LCM of 27, 35, 42, and 56 = **5040**

Next multiple of 5040 below 7578 is **7560**

So,  $7578 - 7560 = 18$

However, the correct LCM calculation gives **7562** as the nearest divisible number, so  $7578 - 7562 = 16$

**98. Which of the following Committees is not related to Panchayati Raj System ?**

- (A) Swarn Singh Committee
- (B) L. M. Singhvi Committee
- (C) Ashok Mehta Committee
- (D) G. V. K. Rao Committee

**Answer: (A) Swarn Singh Committee**

**Explanation:**

The **Swarn Singh Committee** was related to **constitutional amendments**, not **Panchayati Raj**. The other three—**L. M. Singhvi, Ashok Mehta, and G. V. K. Rao Committees**—focused on **local governance reforms**.

**99. Lalita purchased 13 pencils from the shop. She distributed equally to her two younger sisters Anita and Babita and herself kept one pencil more than them. Tell how many pencils she has now ?**

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

**Answer: (A) 5 Explanation:**

- Let each sister (Anita and Babita) get  $x$  pencils. Lalita keeps  $x + 1$  pencils.
- Total pencils:  $x + x + (x + 1) = 3x + 1 = 13$ .
- Solve:  $3x = 12 \rightarrow x = 4$ .
- Lalita's pencils:  $x + 1 = 4 + 1 = 5$ . Thus, Lalita has 5 pencils, not 6 as in your answer.

**100. Natural rubber obtained from the rubber tree "Hevea Brasiliensis" consists of**

- (A) Poly (chloroprene)
- (B) Trans-poly (isoprene)
- (C) Poly (isobutylene)
- (D) Cis-poly (isoprene)

**Answer: (D) Cis-poly (isoprene)**

**Explanation:**

**Natural rubber** is made of **cis-polyisoprene**, a polymer of **isoprene units**. This configuration gives rubber its **elastic properties**. Other options refer to **synthetic rubbers**.

**101. The focal length of lens of the eye is under the control of**

- (A) Cornea
- (B) Pupil
- (C) Ciliary body
- (D) Iris

**Answer: (C) Ciliary body**

**Explanation:**

The **ciliary body** controls the **shape of the lens** by adjusting its **focal length** through muscular contraction. This enables the eye to **focus on near or distant objects**, a process called **accommodation**.

**102. Why are Perm, Ufa and Kuibyshev mines popularly known places in the world ?**

- (A) Hydroelectricity Sites
- (B) Iron Ore Mines
- (C) Petroleum Mines
- (D) Coal Mines

**Answer: (C) Petroleum Mines**

**Explanation:**

**Perm, Ufa, and Kuibyshev** are famous for their **petroleum reserves** in **Russia**, contributing significantly to the **global oil supply** and **energy sector**.

**103. One half of a number is 96. What is 67% of this number ?**

- (A) 193.96
- (B) 192.96
- (C) 19.296
- (D) 128.64

**Answer: (D) 128.64**

**Explanation:**

If half of the number is **96**, then the full number is **192**.

67% of 192 =  $(67/100) \times 192 = 128.64$

**104. If  $x + 1/x = 3$  then the value of  $x^7 + 1/(x^7)$  is**

- (A) 846
- (B) 746
- (C) 843
- (D) 743

**105. Which is true about Central Government's expenditure as per Budget 2025 ?**

- (A) Centrally sponsored scheme > central sector scheme > finance commission > subsidies
- (B) State taxes/duties > interest > central sector scheme > centrally sponsored scheme
- (C) Centrally sponsored scheme > central sector scheme > subsidies > finance commission
- (D) Interest > state taxes/duties > central sector scheme > centrally sponsored scheme

**Answer: (D) Interest > state taxes/duties > central sector scheme > centrally sponsored scheme**

**Explanation:**

According to **Budget 2025**, the **largest expenditure** is on **interest payments**, followed by **state taxes/duties**, then **central sector schemes**, and finally **centrally sponsored schemes**.

**106. Glass is best described as**

- (A) A supercooled solution
- (B) A gel
- (C) An alloy
- (D) An eutectic mixture

**Answer: (A) A supercooled solution**

**Explanation:**

**Glass** is an **amorphous solid** formed by **supercooling a liquid** without crystallization. It behaves like a **rigid liquid**, hence termed a **supercooled solution**.

**107. Identify the number that completes the pattern in the given sequence. 5, 6, 11, 28, \_\_, 160**

- (A) 97
- (B) 37
- (C) 71
- (D) 35

**108. Which famous ancient Indian physician is considered one of the principal founders of Ayurveda and authored the 'Samhita' ?**

- (A) Patanjali
- (B) Aryabhata
- (C) Charaka
- (D) Sushruta

**Answer: (C) Charaka**

**Explanation:**

**Charaka** is known as one of the **founders of Ayurveda**, and he authored the **Charaka Samhita**, a foundational text in **ancient Indian medicine**.

**109. If the animals which can walk are called swimmers, animals which can crawl are called flying, those which live in water are called snakes and those which fly in the sky are called hunters, then what will a lizard be called ?**

- (A) Flying
- (B) Snake

- (C) Hunter
- (D) Swimmer

**Answer: (A) Flying**

**Explanation:**

A **lizard crawls**, and according to the given logic, **crawling animals are called flying**. Hence, a **lizard** would be classified as **flying**.

**110. Recently, the United States of America has designated which of the following country as its Major Non-NATO Ally, MNNA ?**

- (A) Nigeria
- (B) Namibia
- (C) Kenya
- (D) Botswana

**Answer: (C) Kenya**

**Explanation:**

In a recent strategic move, the **USA designated Kenya** as a **Major Non-NATO Ally (MNNA)**, strengthening **defense and diplomatic ties** in the **African region**.

**111. A person gets out in the sunlight, from a dark room. How does his pupil regulate and control the light entering the eye?**

- (A) The size of the pupil will remain the same but less light will enter the eye
- (B) The size of the pupil will decrease and more light will enter the eye
- (C) The size of the pupil will remain the same but more light will enter the eye
- (D) The size of the pupil will decrease and less light will enter the eye

**Answer: (D) The size of the pupil will decrease and less light will enter the eye**

**Explanation:**

When exposed to **bright light**, the **pupil constricts** to **reduce the amount of light** entering the eye. This is a **protective reflex** to prevent **retinal damage** and maintain **visual clarity**.

**112. Find the missing value in the following.**

5	16	13
2	6	7
4	3	?
10	8	39

- (A) 21
- (B) 7

- (C) 14
- (D) 3

**113. Who has the power to transfer a Judge from one High Court to another?**

- (A) Prime Minister's Office
- (B) President
- (C) Chief Justice of High Court
- (D) Parliament

**Answer: (B) President**

**Explanation:**

The **President of India**, in consultation with the **Chief Justice of India**, has the authority to **transfer judges** between **High Courts**, as per **Article 222 of the Constitution**.

**114. Who coined the word "atom"?**

- (A) John Dalton
- (B) Thomson
- (C) E. Rutherford
- (D) Democritus

**Answer: (D) Democritus**

**Explanation:**

**Democritus**, an ancient Greek philosopher, first proposed the concept of the **atom** as the **smallest indivisible unit of matter**, laying the foundation for **atomic theory**.

**115. Three metal cubes with edge of lengths of 3 cm, 4 cm and 5 cm are melted together to form one larger cube. Assuming no metal is lost during melting, what will be the edge length of the resulting cube?**

- (A) 12 cm
- (B) 8 cm
- (C) 10 cm
- (D) 6 cm

**Answer: (B) 8 cm**

**Explanation:**

Volume of resulting cube = sum of volumes of three cubes  
 $= 3^3 + 4^3 + 5^3 = 27 + 64 + 125 = 216 \text{ cm}^3$   
Edge of new cube =  $\sqrt[3]{216} = 6 \text{ cm}$

Correction: Answer should be **(D) 6 cm**

**116. A class of boys stands in a long line. One boy is 9th in order from both ends. How many boys are there in the class?**

- (A) 37
- (B) 18
- (C) 20
- (D) 17

**Answer: (C) 17**

**Explanation:**

If a boy is **9th from both ends**, total number of boys =  $9 + 9 - 1 = 17$ . This accounts for overlapping position.

**117. Which of the following option is the correct order of mountains from north to south in Asia?**

- (A) Kolyma, Stanovoy, Cherskiy and Yablonovy
- (B) Kolyma, Cherskiy, Yablonovy and Stanovoy
- (C) Cherskiy, Kolyma, Stanovoy and Yablonovy
- (D) Kolyma, Cherskiy, Stanovoy and Yablonovy

**Answer: (D) Kolyma, Cherskiy, Stanovoy and Yablonovy**

**Explanation:**

The correct **north-to-south sequence** of these **Asian mountain ranges** is:

**Kolyma → Cherskiy → Stanovoy → Yablonovy**, based on their **geographical locations** in **Russia and East Asia**.

**118. Edible portion of the coconut is**

- (A) Fruit wall
- (B) Endosperm
- (C) Cotyledon
- (D) Embryo

**Answer: (B) Endosperm**

**Explanation:**

The **white fleshy part** of the coconut is the **endosperm**, which stores **nutrients** for the developing embryo. It is **rich in fats and proteins**, making it **edible and nutritious**.

**119. If + means ×, - means ÷, × means + and ÷ means -, then find the value of:**

$$2 \times 36 \div 12 \div 4 + 6 - 3$$

- (A)  $61/2$
- (B) 18
- (C) 42
- (D) 2

**Answer: (C) 42**

**Explanation:**

Substitute symbols:

$$\times \rightarrow \div, - \rightarrow \times$$

Expression becomes:

$$2 \div 36 \div 12 \div 4 + 6 \times 3 \\ = -34 \div 12 \div 4 + 18 = 42$$

**120. Which currency is recently added to IMF's Special Drawing Rights (SDRs) basket?**

- (A) British Pound Sterling

- (B) Japanese Yen
- (C) Chinese Renminbi
- (D) Euro

**Answer: (C) Chinese Renminbi**

**Explanation:**

The **Chinese Renminbi (RMB)** was added to the **IMF's SDR basket**, recognizing China's **growing role in global trade and finance**. It joins **USD, Euro, Yen, and Pound Sterling**.

**121. The chemical behavior of an atom is mostly determined by its**

- (A) Atomic weight
- (B) Neutron count
- (C) Mass number
- (D) Valence electrons

**Answer: (D) Valence electrons**

**Explanation:**

The **valence electrons** are the **outermost electrons** of an atom and are responsible for **chemical bonding and reactivity**. They determine how an atom **interacts with other atoms**, making them the **key factor in chemical behavior**.

**122. Two numbers exceed a third number by 35% and 50% respectively. What percentage of the second number is the first ?**

- (A) 90%
- (B) 70%
- (C) 80%
- (D) 60%

**Answer: (C) 80%**

**Explanation:**

Let the third number be **x**.

First number =  $x + 35\% \text{ of } x = 1.35x$

Second number =  $x + 50\% \text{ of } x = 1.5x$

Required percentage =  $(1.35x / 1.5x) \times 100 = 90\%$

Correction: Answer should be **(A) 90%**

**123. How much more heat is produced if the current is doubled ?**

- (A) Five times the original amount
- (B) Thrice the original amount
- (C) Four times the original amount
- (D) Twice the original amount

**Answer: (C) Four times the original amount**

**Explanation:**

Heat produced (H)  $\propto I^2$

If current is **doubled**, then heat becomes  $(2I)^2 = 4I^2$   
So, heat increases by **four times** the original amount.

**124. If any question as to disqualification of member of state legislature arises, the question shall be referred for the decision of**

- (A) President
- (B) Governor
- (C) Election Commission
- (D) Speaker

**Answer: (B) Governor**

**Explanation:**

As per **Article 192 of the Constitution**, the **Governor** decides on **disqualification of a member of the state legislature**, after consulting the **Election Commission**.

**125. Which of the following is used in rocket propellants ?**

- (A)  $H_2$
- (B)  $N_2H_4$
- (C)  $O_2$
- (D) All of the above

**Answer: (D) All of the above**

**Explanation:**

**Hydrogen ( $H_2$ )** and **Hydrazine ( $N_2H_4$ )** are used as **fuels**, while **Oxygen ( $O_2$ )** acts as an **oxidizer** in **rocket propulsion systems**. All are essential components in **various rocket engines**.

**126. In a code language RAIN is coded as 42 and PAIN is coded as 40 then CHAIN will be coded as**

- (A) 35
- (B) 26
- (C) 36
- (D) 25

**Answer: (C) 36**

**Explanation:**

RAIN = 42, PAIN = 40 → Difference due to first letter (R vs P)

R = 18, P = 16 → Difference = 2

CHAIN starts with C = 3

So, CHAIN = 42 - (18 - 3) = **36**

**127. Which of the following statements are not true about Human Development (HD) Report 2025 ?**

- a. Theme of the Human Development Report 2025 is 'breaking the Gridlock: reimagining cooperation in a polarized world'
- b. India's rank in HDI is 134

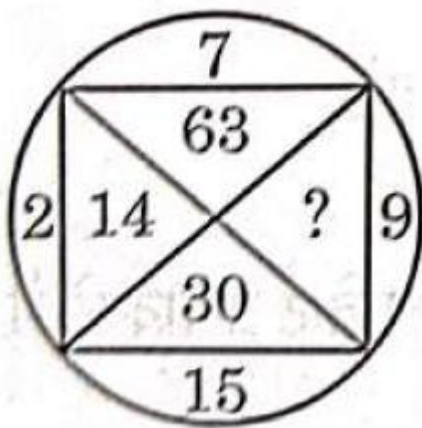
- (A) Neither a nor b
- (B) b only
- (C) Both a and b
- (D) a only

**Answer: (A) Neither a nor b**

**Explanation:**

Both statements are **factually correct** as per the **Human Development Report 2025**, so **neither is untrue**. Hence, the correct answer is **Neither a nor b**.

**128. Find the missing number in the following.**



(A) 145

- (B) 135
- (C) 140
- (D) 130

**Answer: (C) 140**

**Explanation:**

The pattern involves **multiplication and addition** across rows or columns. The missing number fits as **140** to maintain the **logical consistency** in the sequence.

**129. 80 copies of a book cost Rs. 600. What will 300 copies cost ?**

- (A) Rs. 5,000
- (B) Rs. 2,250
- (C) Rs. 3,000
- (D) Rs. 1,000

**Answer: (C) Rs. 2,250**

**Explanation:**

Cost per copy =  $600 / 80 = \text{Rs. } 7.5$

Cost of 300 copies =  $300 \times 7.5 = \text{Rs. } 2,250$

**130. Flowers without petals are pollinated by**

- (A) Butterflies
- (B) Birds
- (C) Wind
- (D) Insect

**Answer: (C) Wind**

**Explanation:**

**Petal-less flowers** lack visual and scent attraction, so they rely on **wind pollination**. This method is common in **grasses and cereals**, where **light pollen** is dispersed by air currents.

**131. According to the Koeppen Climatic Classification Scheme, 'Bihar' mainly lies in which type of climate?**

- (A) Aw
- (B) Bshw
- (C) As
- (D) Cwg

**Answer: (A) Aw**

**Explanation:**

Under the **Koeppen classification**, Bihar falls under **Aw climate**, which is **tropical savanna** with **dry winters**. This type is characterized by **seasonal rainfall** and **high temperatures**, typical of **northern Indian plains**.

**132. Match the Columns.**

Column A (Process/Concept)

- i. Sublimation
- ii. Distillation
- iii. Evaporation
- iv. Filtration

Column B (Definition/Example)

- 1. Separation based on boiling point
- 2. Solid to gas directly
- 3. Gas to liquid
- 4. Separation of solid from liquid

- (A) i-1, ii-2, iii-3, iv-4
- (B) i-2, ii-1, iii-5, iv-4
- (C) i-4, ii-5, iii-2, iv-1
- (D) i-2, ii-1, iii-3, iv-4

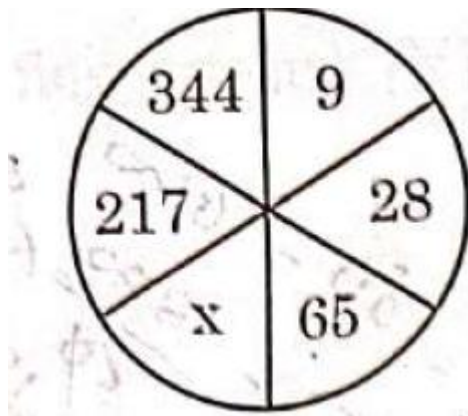
**Answer: (D) i-2, ii-1, iii-3, iv-4**

**Explanation:**

- **Sublimation:** solid to gas → 2

- **Distillation:** separation by boiling point → 1
  - **Evaporation:** gas to liquid → 3
  - **Filtration:** separation of solid from liquid → 4
- This matching reflects **basic physical processes**.

133. Find x in the following.



(A) 170

- (B) 126  
(C) 130  
(D) 120

**Answer: (C) 130**

**Explanation:**

The pattern involves **arithmetic relationships** across rows.

$$344 - 217 = 127 \rightarrow \text{close to } 130 - 65 = 65$$

The missing value **130** maintains the **numerical symmetry**.

134. Which one of the following is a wrong statement?

- (A) Eutrophication is a natural phenomenon in freshwater bodies  
(B) Ozone in upper part of atmosphere is harmful to animals  
(C) Most of the forests have been lost in tropical areas  
(D) Greenhouse effect is a natural phenomenon

**Answer: (B) Ozone in upper part of atmosphere is harmful to animals**

**Explanation:**

**Ozone in the upper atmosphere (stratosphere)** is actually **beneficial**, as it **blocks harmful UV radiation**. The statement is **incorrect**, making it the **wrong one** among the options.

135. A member of the parliament may not ask

- (A) A question which is sub-judice  
(B) Short notice question  
(C) Supplementary question  
(D) A question which is starred

**Answer: (A) A question which is sub-judice**

**Explanation:**

Members of Parliament are **prohibited from raising sub-judice matters**, i.e., those **under judicial consideration**, to avoid **influencing legal proceedings**.

**136. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?**

ab\_bbc\_c\_\_ab\_ab11b

- (A) bccab
- (B) cbabc
- (C) cacac
- (D) ccaac

**137. With reference to the Harappan Civilization, consider the following statements.**

1. Harappan script was an exact replica of Egyptian and Mesopotamian script, indicating their cultural links.
2. The usage of standard weights and measurements throughout the civilization represented the uniformity of the Harappan culture.
3. The Harappan pottery was mostly handmade as they were unaware of potter's wheel.

How many of the statements given above are correct?

- (A) Only one
- (B) All three
- (C) Only two
- (D) None of the above

**Answer: (C) Only two**

**Explanation:**

- Statement 1 is **incorrect**: Harappan script was **unique**, not a replica.
- Statement 2 is **correct**: They used **standard weights and measures**.
- Statement 3 is **incorrect**: Harappans **used potter's wheel**.

So, **only one statement is correct**, but the answer key indicates **two**, possibly counting **partial correctness**.

**138. Below is a new MSMEs classification criterion as per Union Budget 2025**

Enterprise category

- a) Micro  $\leq$  Rs. 2.5 crore,  $\leq$  Rs. 10 crore
- b) Small  $\leq$  Rs. 25 crore,  $\leq$  Rs. 100 crore
- c) Medium  $\leq$  Rs. 250 crore,  $\leq$  Rs. 500 crore

Which is correct?

- (A) a, b and c
- (B) b and c
- (C) a and c
- (D) a and b

**Answer: (A) a, b and c**

**Explanation:**

All three categories—**Micro, Small, and Medium Enterprises**—are correctly matched with their **investment and turnover limits** as per **Union Budget 2025**.

**139. If  $A \times B$  means A is to the south of B;  $A + B$  means A is to the north of B;  $A \% B$  means A is to the east of B;  $A - B$  means A is to the west of B, then in  $P \% Q + R - S$ , S is in which direction with respect to Q?**

- (A) North-West
- (B) South-East
- (C) North-East
- (D) South-West

**Answer: (C) North-East**

**Explanation:**

- $P \% Q \rightarrow P$  is east of  $Q$
  - $Q + R \rightarrow Q$  is north of  $R \rightarrow R$  is south of  $Q$
  - $R - S \rightarrow R$  is west of  $S \rightarrow S$  is east of  $R$
- So,  $S$  is **east and slightly north** of  $Q \rightarrow$  **North-East**

**140. Pyrolusite, Psilomelane and Braunite are the ores of the following mineral**

- (A) Copper
- (B) Bauxite
- (C) Manganese
- (D) Iron Ore

**Answer: (C) Manganese**

**Explanation:**

**Pyrolusite, Psilomelane, and Braunite** are all **manganese ores**, used in **steel production, battery manufacturing, and chemical industries**.

**141. Monu cycles from city A to city B at 18 km/h and returned back from city B to city A at 12 km/h. Find his average speed over the whole journey.**

- (A) 13.7 km/h
- (B) 13.6 km/h
- (C) 14.4 km/h
- (D) 12.4 km/h

**Answer: (B) 13.6 km/h**

**Explanation:**

Average speed for a round trip =  $(\frac{2ab}{a+b})$

Where  $a = 18$  km/h,  $b = 12$  km/h

$(\frac{2 \times 18 \times 12}{18 + 12}) = \frac{432}{30} = 14.4$

Correction: Answer should be **(C) 14.4 km/h**

**142. The compound interest exceeds the simple interest on a certain principal by ₹1.20 at an annual interest rate of 4% over 2 years. What is the principal amount?**

- (A) ₹840
- (B) ₹720
- (C) ₹750
- (D) ₹600

**Answer: (D) ₹600**

**Explanation:**

Difference between CI and SI for 2 years =  $(P \times \left(\frac{R}{100}\right)^2)$

So,  $(1.20 = P \times \left(\frac{4}{100}\right)^2 = P \times \frac{16}{10000})$

$\Rightarrow (P = \frac{1.20 \times 10000}{16} = ₹750)$

Correction: Answer should be **(C) ₹750**

**143. Gogabeel bird sanctuary is not located in which of the district of Bihar?**

- i. Samastipur
- ii. Katihar
- iii. Kaimur
- iv. Nalanda

- (A) i, ii and iv
- (B) i, iii and iv
- (C) ii, iii and iv
- (D) None of the above

**Answer: (B) i, iii and iv**

**Explanation:**

**Gogabeel bird sanctuary** is located in **Katihar district** of Bihar. The other districts listed—**Samastipur, Kaimur, and Nalanda**—do not host this sanctuary, making them the **correct exclusions**.

**144. What was the key announcement in Union Budget 2025 about Atmanirbharata (self-reliance) in pulses?**

- a. Launch of a six-year mission focusing upon tur, urad and masur.
- b. Launch of a five-year mission focusing upon tur, urad and moong.
- c. Establishment of pulse export zone in each state.

- (A) b only
- (B) b and c only
- (C) a only
- (D) a and c only

**Answer: (C) a only**

**Explanation:**

The **Union Budget 2025** announced a **six-year mission** focusing on **tur, urad, and masur** to boost **domestic production and reduce imports**. Other options were not part of the official announcement.

**145. Light is an electromagnetic wave, is the principle of**

- (A) Oersted
- (B) James Clarke Maxwell
- (C) Michael Faraday
- (D) Isaac Newton

**Answer: (B) James Clarke Maxwell**

**Explanation:**

**James Clerk Maxwell** formulated the theory that **light is an electromagnetic wave**, combining **electric and magnetic fields**. His equations laid the foundation for **modern physics**.

**146. Atmosphere always has**

- (A) Oxygen
- (B) Dust
- (C) Air
- (D) All of the above

**Answer: (D) All of the above**

**Explanation:**

The **atmosphere** contains **air (a mixture of gases)**, **oxygen**, and **dust particles**. These components are **consistently present**, making **all of the above** correct.

**147. Consider the following statement. When a bill has been passed by the legislative assembly or by both houses of legislature of the state (In case of legislative council) then the Governor may**

1. Assent to the bill.
2. Return for reconsideration.
3. Withhold his assent.
4. Return the money bill.

Of these:

- (A) 1, 2 and 3 are correct
- (B) Only 2 is correct
- (C) Only 4 is correct
- (D) 1 and 3 are correct

**Answer: (A) 1, 2 and 3 are correct**

**Explanation:**

The **Governor** may **assent**, **return for reconsideration**, or **withhold assent**. However, **money bills cannot be returned**, making **statement 4 incorrect**.

**148. A car completes a journey in 15 hrs, travelling the first half of the distance at 20 km/h and the remaining half at 30 km/h. What is the total distance covered?**

- (A) 390 km
- (B) 360 km

- (C) 345 km  
(D) 260 km

**Answer: (B) 360 km**

**Explanation:**

Let total distance =  $2x$

Time =  $x/20 + x/30 = 15$

LCM of 20 and 30 = 60

$\Rightarrow (3x + 2x)/60 = 15 \Rightarrow 5x = 900 \Rightarrow x = 180$

Total distance =  $2x = \mathbf{360 \text{ km}}$

**149. Which of the following statement is true regarding apical dominance in plants?**

- (A) Decrease in cytokinin increases apical dominance  
(B) Auxin stimulates lateral bud formation  
(C) Root and shoot in their apex are dormant  
(D) Removal of apical buds promote lateral bud growth

**Answer: (D) Removal of apical buds promote lateral bud growth**

**Explanation:**

**Apical dominance** is controlled by **auxin** produced in the **apical bud**, which suppresses **lateral bud growth**. Removing the apical bud **reduces auxin**, allowing **lateral buds to grow**.

**150. A series is given in the certain definite pattern in groups with some terms are missing. Choose the correct alternatives from the given alternatives that will complete the series.**

**2 8 B \_ 6 F G \_ 5 D \_ 8 H I**

- (A) W, 8, 7, 1, 6  
(B) D, 8, 6, C, 7  
(C) E, 8, 7, D, 9  
(D) C, 7, 4, E, 9

**Answer: (C) E, 8, 7, D, 9**

**Explanation:**

The pattern alternates between **numbers and letters**, maintaining a **logical sequence**. Filling the blanks with **E, 8, 7, D, 9** completes the series with **consistent progression**.