RBE SSC CGL 2025 Live Mock-31 August 31,2025

Q. 1 In a certain code language, 'PDU' is written as '43' and 'HXO' is written as '37'. How will 'AUDI' be written in the same code language?

a) 66 ✗

b) 78 ✗

c) 69 ✗

d) 77 ✓

Explanation:

Logic: **Sum of opposite letters' positions + number of alphabets in the word.**

PDU → K(11)+W(23)+F(6) = 40+3 = **43**

AUDI → Z(26)+F(6)+W(23)+R(18) = 73 +4 = **77**

Q. 2 Two adjacent faces of a cube are painted blue, and the face opposite to the blue face is painted black. The remaining faces are painted green. The cube is then cut into 216 smaller cubes of equal size. Find the number of smaller cubes which have no face painted.

a) 48 ✗

b) 96 ✗

c) 8 ✗

d) 64 ✓

Explanation:

- **Total small cubes**= n^3
- **0 face painted (completely inside cubes)**= $(n-2)^3$
- **Exactly 1 face painted (face-centre cubes)**= $6 \times (n-2)^2$
- **Exactly 2 faces painted (edge cubes)**= $12 \times (n-2)$
- **Exactly 3 faces painted (corner cubes)**= 8
- **At least 1 face painted**= $n^3 - (n-2)^3$

Given: 216 small cubes → $n^3 = 216 \rightarrow n = 6$

So, No face painted = $(6-2)^3 = 4^3 =$ **64**

Q. 3 Select the option that represents the letters that, when placed from left to right in the following blanks, will complete the letter-series.
C L _ V E C _ _ W E C L O _ _ C _ O _ E

a) O L O X E L Y ✓

b) O L P X E L Y ✗

c) O L O Y E L Z ✗

d) O L O X F M Y ✗

Explanation:

Series → C L _ V E C _ _ W E C L O _ _ C _ O _ E

By inserting option (a):
C L **O** V E C **L O** W E C L O **X E** C **L O** Y E

👉 The pattern fits correctly.

Answer: (a) O L O X E L Y

Q. 4	**Which of the following numbers will replace the question mark (?) in the given series?** **8, 15, 26, ? , 56, 75** **a) 35** ✗ **b) 43** ✗ **c) 41** ✗ **d) 39** ✓
Explanation:	Series: 8, 15, 26, ? , 56, 75 Differences = 7, 11, ? , ? , 19 These are consecutive prime numbers: 7, 11, 13, 17, 19 So missing term = 26 + 13 = **39**

Q. 5	**Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.** **7183 : 3850 :: 6957 : ? :: 8972 : 5639** **a) 3324** ✗ **b) 3789** ✗ **c) 3223** ✗ **d) 3624** ✓
Explanation:	7183 – 3850 = **3333** 8972 – 5639 = **3333** 6957 – ? = **3333** → ? = 3624

Q. 6	**If exactly 1 year and 2 days later it is Tuesday, then what day is it today? It is not a leap year.** **a) Tuesday** ✗ **b) Monday** ✗ **c) Saturday** ✓ **d) Friday** ✗
Explanation:	1 year (non-leap) = +1 day Extra 2 days = +2 Total = +3 If that day = Tuesday → today = Tuesday – 3 = **Saturday**

Q. 7	**Select the option that represents the correct order of the given words as they would appear in an English dictionary.** **1. Warriors** **2. Warehouse** **3. Warcraft** **4. Warranty** **5. Wardrobe** **6. Wardenship** **a) 3, 6, 5, 2, 1, 4** ✗ **b) 3, 6, 5, 2, 4, 1** ✓ **c) 3, 5, 6, 2, 4, 1** ✗ **d) 3, 5, 6, 2, 1, 4** ✗
Explanation:	3 (Warcraft), 6 (Wardenship), 5 (Wardrobe), 2 (Warehouse), 4 (Warranty), 1 (Warriors) Correct order = **3, 6, 5, 2, 4, 1**

Q. 8

Each vowel in the word "ETHICAL" is changed to the following letter in the English alphabetical series and each consonant is changed to the previous letter in the English alphabetical series. In the newly formed word, how many alphabets are there in the English alphabetical series between the alphabet which is 3rd from the left and 1st from the right?

a) Five ✗

b) Three ✓

c) Two ✗

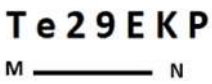
d) Four ✗

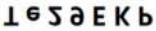
Explanation:

ETHICAL → FSGJBBK
3rd from left = G, last = K
Between G and K = H, I, J = **3**

Q. 9

Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



a)  ✓

b) ✗

c) ✗

d) ✗

Explanation:

Q. 10

Three different positions of the same dice are shown. Find the number on the face opposite to the face showing '5'.

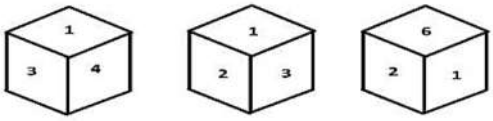


figure 1 figure 2 figure 3

a) 6 ✗

b) 4 ✗

c) 1 ✓

d) 2 ✗

Explanation:

In **Fig. 1 & Fig. 2**, the common numbers are **1 and 3**.
⇒ Thus, the third number (4 in Fig.1 and 2 in Fig.2) must be opposite each other.
So, **4 ↔ 2** are opposite.

In **Fig. 2 & Fig. 3**, the common numbers are **1 and 2**.
⇒ Thus, the third number (3 in Fig.2 and 6 in Fig.3) must be opposite each other.
So, **3 ↔ 6** are opposite.

Remaining numbers

So far opposites are:

- 4 ↔ 2
- 3 ↔ 6

That leaves **1 and 5** as the remaining pair of opposite **Remaining numbers**

That leaves **1 and 5** as the remaining pair of opposites

Q. 11	**Select the option figure which is embedded in the given figure. (Rotation is NOT allowed).** a) ✓ b) ✗ c) ✗ d) ✗
Explanation:	

Q. 12	**Statement:** **Should all the foreign banks be asked to close down their operations in India?** **Arguments:** **I. No. This will have an adverse effect on Indian economy.** **II. Yes. This is the only way to make the Indian banks survive and prosper.** **a) Only Argument I is strong** ✗ **b) Only Argument II is strong** ✗ **c) Either I or II is strong** ✗ **d) Neither I nor II is strong** ✓
Explanation:	Clearly, India has its own nationalised banks to take care of the financial business. So, argument I is vague. Moreover, Indian banks can survive well with the foreign banks also, by providing better facilities and services to their clients. So, argument II also does not hold strong. Thus, none of the arguments holds strong.

Q. 13	**You find that in your office some people do not have much work. You will try** **a) to get rid of them somehow** ✗ **b) not to think much about it as the responsibility lies on others** ✗ **c) to shift them to other sections where there is shortage of people** ✓ **d) to train them and make them fit for promotion to higher grade** ✗
Explanation:	**Explanation:** • Option (a) is negative and impractical; getting rid of people is not a professional solution. • Option (b) shows irresponsibility, as ignoring the issue is not managerial behaviour. • Option (c) is the most practical and balanced choice because it redistributes manpower efficiently, ensuring that employees are productively engaged where they are needed. • Option (d) is also good but training for promotion is a long-term plan, not an immediate solution to the shortage of work. Thus, the best option is **(c)**.

Q. 14	**A shepherd had 17 sheep. All but nine died. How many was he left with?** **a) 8** ✗ **b) 9** ✓ **c) 17** ✗ **d) Nil** ✗
Explanation:	**Explanation:** • The phrase **"All but nine died"** means all sheep died **except nine**. • So, out of 17 sheep, only **9 remained alive**. • It does not mean 17 – 9 = 8, but rather that **9 survived**. Hence, the shepherd was left with **9 sheep**.

Q. 15	**Study the following information and answer the given questions:** **A word arrangement machine, when given an input line of words, rearranges them following a particular rule in each step. The following is an illustration of input and the steps of rearrangement.** **Input: Go for to Though By easy To Access at** **Step I: Access Go for to Though By easy To at** **Step II: Access at Go for to Though By easy To** **Step III: Access at By Go for to Though easy To** **Step IV: Access at By easy Go for to Though To** **Step V: Access at By easy for Go to Though To** **Step VI: Access at By easy for Go Though to To** **Step VII: Access at By easy for Go Though To to** **And Step VII is the last step for this input.** **As per the rules followed in the above steps, find out in the given questions the appropriate step for the given input.** **Input: story For around on was He at** **Which of the following will be Step IV for the given input?** **a) around at For He on was story** ✗ **b) around at For He on story was** ✗ **c) around at For He story on was** ✓ **d) around at He For story on was** ✗
Explanation:	**Solution :** In the given arrangement, the words have been arranged alphabetically in a sequence, altering the position of only one word in each step. Input: story For around on was He at Step I: around story For on was He at Step II: around at story For on was He Step III: around at For story on was He Step IV: around at For He story on was **Answer: (c) around at For He story on was**

Q. 16

Read the following information carefully and answer the questions that follow:

In a village of Bastar district in Madhya Pradesh, only two types of people live who belong to a tribal class. The first type is known as class A, while the other is known as class B. In that village, there is no other type of person except these two. The activities of both types of people are governed by perfectly patterned norms of social behaviour. Each person of the tribe has to obey the norms. They are rigid about this.

As far as marriage is concerned, the following norms are to be followed:
(A) The people of class A cannot marry any other member of their own class, though they can marry members of class B.
(B) After being married, each male member ceases to be a member of that class in which he was born but automatically, he becomes the member of the other class to which his wife belongs.
(C) As far as females are concerned, they remain the members of their own class after being married.
(D) On his birth, the child automatically becomes the member of his mother's class.
(E) When any male member becomes widower or divorcee, then he again belongs to the group in which he was born.
(F) Nobody can marry more than one person according to social laws.

Any class B female can have
(P) Grandfather born in class A
(Q) Grandmother born in class A

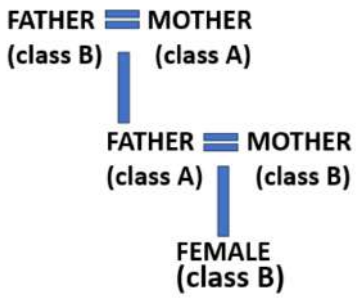
a) Only (P) can be true ✗

b) Only (Q) can be true ✓

c) Either (P) or (Q) can be true ✗

d) Neither (P) nor (Q) can be true ✗

Explanation:



The mother of class B female belongs to class B. So, her father was born in class A. Thus, her father's mother belonged to class A, and father's father was born in class B. So, the grandfather belongs to class B and grandmother belongs to class A.

Q. 17

Loiter is related to Dwindle in the same way as Impugn is related to ...?

a) Challenge ✓

b) Gamble ✗

c) Confiscate ✗

d) Revenge ✗

Explanation:

Explanation:

- *Loiter* means **to move slowly, waste time, linger idly**.
- *Dwindle* means **to gradually become less, waste away**.
  👉 So, both words convey the idea of **wasting time / becoming less gradually**.
- *Impugn* means **to challenge the truth of something, call into question**.
- The closest word to this is **Challenge**.

Other options:

- *Gamble* = to take risky chance (not related).
- *Confiscate* = to take away officially (not related).
- *Revenge* = retaliation (not related).

Q. 18	Read the following information carefully and answer the questions given below it: In a car exhibition, seven cars of seven different companies viz. Cardilac, Ambassador, Fiat, Maruti, Mercedes, Bedford and Fargo were displayed in a row, facing east such that: **1. Cardilac car was to the immediate right of Fargo.** **2. Fargo was fourth to the right of Fiat.** **3. Maruti car was between Ambassador and Bedford.** **4. Fiat, which was third to the left of Ambassador car, was at one of the ends.** Which of the following was the correct position of the Mercedes? a) Immediate left of Cardilac ✗ b) Immediate left of Bedford ✗ c) Between Bedford and Fargo ✗ d) Fourth to the right of Maruti ✓
Explanation:	We analyse the given information as follows: • Fargo and Cardilac are together (Cardilac to the immediate right of Fargo). • Fiat, Car, Car, Car, Fargo (Fargo is 4th to the right of Fiat). • Maruti is between Ambassador and Bedford. • Fiat, Car, Car, Ambassador (Fiat is 3rd to the left of Ambassador). Knowing that Fiat lies at one of the ends, arrangement from left to right is: 1. Fiat 2. Bedford 3. Maruti 4. Ambassador 5. Fargo 6. Cardilac 7. Mercedes Clearly, **Maruti is in the 3rd place and Mercedes is in the 7th place.** So, **Mercedes is fourth to the right of Maruti.**

Q. 19	Disease : Medicine :: Famine : ? a) Clouds ✗ b) Rainfall ✓ c) Drought ✗ d) River ✗
Explanation:	**Explanation:** • *Disease* is cured by *Medicine*. • Similarly, *Famine* (अकाल/भुखमरी) is cured/removed by *Rainfall*. **Other options:** • *Clouds* → do not guarantee rain. • *Drought* → actually causes famine, so not correct. • *River* → is a water source but not directly the remedy for famine.

Q. 20	**Find the address which is exactly the same as the one given below:** **Given Address:** **Mr. Rajesh Kumar** **C-24, Green Park Colony** **New Delhi - 110016** **a) Mr. Rajesh Kumar, C-42, Green Park Colony, New Delhi - 110016** ✗ **b) Mr. Rajesh Kumar, C-24, Green Park Colony, New Delhi - 110061** ✗ **c) Mr. Rajesh Kumar, C-24, Green Park Colony, New Delhi - 110016** ✓ **d) Mr. Rajesh Kumar, C-24, Green Colony Park, New Delhi - 110016** ✗
Explanation:	**Explanation:** • Option (a) – House number wrong (42 instead of 24). • Option (b) – PIN code wrong (110061 instead of 110016). • **Option (c) – Exactly same as given address.** • Option (d) – Colony name wrong ("Green Colony Park" instead of "Green Park Colony").

Q. 21	**If the numbers from 5 to 85 which are exactly divisible by 5 are arranged in descending order, which would come at the eleventh place from the bottom?** **a) 35** ✗ **b) 45** ✗ **c) 50** ✗ **d) 55** ✓
Explanation:	**Solution:** The numbers divisible by 5 from 5 to 85 are: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85 Arranged in **descending order**: 85, 80, 75, 70, 65, 60, 55, 50, 45, 40, 35, 30, 25, 20, 15, 10, 5 Now, counting **11th from the bottom**: Bottom (1st) → 5 2nd → 10 3rd → 15 4th → 20 5th → 25 6th → 30 7th → 35 8th → 40 9th → 45 10th → 50 11th → **55** So, the required number = **55**

Q. 22	**Statement:** **"The government has decided to increase the number of schools in rural areas."** **Assumptions:** **(I) More schools are required in rural areas.** **(II) Children in rural areas are keen to study.** **a) Only I is implicit** ✗ **b) Only II is implicit** ✗ **c) Both I and II are implicit** ✓ **d) Neither I nor II is implicit** ✗
Explanation:	**Explanation:** • When the government decides to **open more schools in rural areas**, it clearly means that the **existing number of schools is not sufficient** and there is a **requirement for more schools**. 👉 Therefore, **Assumption I is implicit**. • If children in rural areas were **not interested in studying**, the government would not invest resources in opening more schools. The decision itself indicates that the government assumes **children are willing to study if facilities are provided**. 👉 Therefore, **Assumption II is also implicit**.

Q. 23	**If LAKSHMI = 58 and FAIZ = 27, then what will be the code for SHUBHAM?** **a) 57** ✓ **b) 59** ✗ **c) 61** ✗ **d) 63** ✗
Explanation:	**Lakshmi** L=12, A=1, K=11, S=19, H=8, M=13, I=9 Sum = 73 → 73 – 15 = **58** ✅ (matches given) **Faiz** F=6, A=1, I=9, Z=26 Sum = 42 → 42 – 15 = **27** ✅ (matches given) **Shubham** S=19, H=8, U=21, B=2, H=8, A=1, M=13 Sum = 72 → 72 – 15 = **57**

Q. 24	**If A + B means A × B,** **A – B means A ÷ B,** **A × B means A – B, and** **A ÷ B means A + B,** **then find the value of 12 – 4 + 2 × 3 ÷ 5.** **a) 18** ✗ **b) 8** ✓ **c) 28** ✗ **d) 38** ✗
Explanation:	Expression = 12 – 4 + 2 × 3 ÷ 5 = 12 ÷ 4 × 2 – 3 + 5 = 3 × 2 – 3 + 5 = 6 – 3 + 5 = 8

Q. 25	**Find the odd one out.** **Amethyst** **Ruby** **Marble** **Sapphire** **Diamond** **a) Marble** ✔ **b) Ruby** ✘ **c) Sapphire** ✘ **d) Diamond** ✘
Explanation:	**Explanation:** • Amethyst, Ruby, Sapphire, and Diamond are all **precious gemstones**. • Marble is not a gemstone; it is a **building material**. Hence, Marble is the odd one.

Q. 26	**With reference to the Delhi Sultanate in medieval India, consider the following statements:** **1. The Sultan was considered a representative of the Caliph but held independent power.** **2. The Iqta system involved granting land revenue rights to nobles in return for service.** **3. Alauddin Khalji abolished market control measures to encourage free trade.** **Which statement is correct?** **a)** 1 & 2 only ✔ **b)** 2 & 3 only ✘ **c)** 1 & 3 only ✘ **d)** All of these ✘
Explanation:	✅ **Correct Answer: 1 & 2 only** 🔍 **Explanation:** **Statement 1: The Sultan was considered a representative of the Caliph but held independent power** ✔️ **Correct** • Delhi Sultans often sought symbolic legitimacy by acknowledging the Caliph of Baghdad. • However, they exercised full sovereign authority in India and were not bound by the Caliph's decisions. **Statement 2: The Iqta system involved granting land revenue rights to nobles in return for service** ✔️ **Correct** • Under the **Iqta system**, land revenue rights were assigned to nobles (Iqta-holders) in exchange for military or administrative service. • These nobles collected taxes but did not own the land. **Statement 3: Alauddin Khalji abolished market control measures to encourage free trade** ❌ **Incorrect** • Alauddin Khalji **introduced** strict market control measures, not abolished them. • He regulated prices, fixed wages, and monitored grain supply to support his large army and prevent inflation. ✅ **Final Answer: 1 & 2 only**

Q. 27	**Consider the following statements about the Pradhan Mantri Jan Dhan Yojana (PMJDY):** **1. It was launched in 2014 to ensure financial inclusion of every household.** **2. It provides an overdraft facility of ₹10,000 after satisfactory operation of the account.** **3. Life insurance cover is also provided to eligible account holders.** **Which of the above statements is/are correct?** **a)** Only 1 & 3 ✗ **b)** Only 2 & 3 ✗ **c)** Only 1 & 2 ✗ **d)** All of these ✓
Explanation:	✅ **Correct Answer: All of the above statements are correct** 🔍 **Explanation:** **Statement 1: It was launched in 2014 to ensure financial inclusion of every household** ✔️ **Correct** • **Pradhan Mantri Jan Dhan Yojana (PMJDY)** was launched on **28 August 2014**. • Its goal was to provide **universal access to banking facilities**, especially for the unbanked population. **Statement 2: It provides an overdraft facility of ₹10,000 after satisfactory operation of the account** ✔️ **Correct** • Account holders who operate their accounts satisfactorily for **at least six months** are eligible for an **overdraft facility up to ₹5000**. • This helps in meeting emergency financial needs. **Statement 3: Life insurance cover is also provided to eligible account holders** ✔️ **Correct** • PMJDY offers a **life insurance cover of ₹30,000** to eligible beneficiaries who opened their accounts between **15 August 2014 and 26 January 2015**. • Additionally, a **₹1 lakh accident insurance cover** is also provided. (Pradhan Mantri Suraksha Bima Yojana – PMSBY) ✅ **Final Answer: All of these**

Q. 28	**Consider the following statements about Kathak dance:** **1. Kathak originated in North India and is associated with storytelling traditions.** **2. The Lucknow and Jaipur gharanas are famous styles of Kathak.** **3. Rukmini Devi Arundale is credited with reviving Kathak in the modern age.** **Which of the above statements is/are INCORRECT?** **a)** Only 2 ✗ **b)** Only 3 ✓ **c)** Only 2 & 3 ✗ **d)** None of these ✗
Explanation:	✅ **Correct Answer: Only 3** 🔍 **Explanation:** **Statement 1: Kathak originated in North India and is associated with storytelling traditions** ✔️ **Correct** • The word *Kathak* comes from *Katha*, meaning story. • It began with temple storytellers in North India who used expressive gestures and rhythmic footwork to narrate epics. **Statement 2: The Lucknow and Jaipur gharanas are famous styles of Kathak** ✔️ **Correct** • These are two of the most prominent Kathak gharanas: ◦ **Lucknow Gharana** emphasizes grace and expression ◦ **Jaipur Gharana** focuses on strong rhythm and footwork **Statement 3: Rukmini Devi Arundale is credited with reviving Kathak in the modern age** ❌ **Incorrect** • Rukmini Devi Arundale is known for reviving **Bharatanatyam**, not Kathak. • The revival of Kathak is credited to artists like **Birju Maharaj**, **Shambhu Maharaj**, and others. ✅ **Final Answer: Only 3 is incorrect.**

Q. 29	**Which country became the 107th member of the International Solar Alliance (ISA) in 2025?** **a)** Panama ✗ **b)** Moldova ✓ **c)** Paraguay ✗ **d)** Serbia ✗
Explanation:	**Explanation:** In **August 2025**, the **Republic of Moldova** officially joined the **International Solar Alliance (ISA)** as its **107th member**. • The ceremonial ratification took place in **New Delhi**, where Moldova's Ambassador handed over the instrument of accession. • ISA, co-founded by **India and France** in 2015 at the **COP21 Paris Summit**, aims to promote solar energy globally, especially in developing nations. Moldova's entry strengthens its commitment to clean energy and aligns with ISA's mission to mobilize solar investments and foster sustainable development.

Q. 30	**Regarding the functions of the Finance Commission, which of the following is NOT a function?** **a)** Suggesting principles for grants-in-aid to States ✗ **b)** Recommending distribution of tax revenues between Centre and States ✗ **c)** Advising measures to augment resources of local governments ✗ **d)** Preparing the union budget ✓
Explanation:	**Explanation:** The **Finance Commission** is a constitutional body established under **Article 280** of the Indian Constitution. Its key functions include: • **Suggesting principles for grants-in-aid to States** ✔️ • **Recommending distribution of tax revenues between Centre and States** ✔️ • **Advising measures to augment resources of local governments (Panchayats and Municipalities)** ✔️ However: • **Preparing the union budget** ❌ • This is **not** the function of the Finance Commission. • The **Union Budget** is prepared by the **Ministry of Finance**, specifically the **Department of Economic Affairs**, under the guidance of the **Finance Minister**.

Q. 31	Consider the statements about the Gupta Empire: **1. Shri Gupta established the Gupta dynasty.** **2. Samudragupta is known as the "Napoleon of India."** **3. The Gupta period is often called the Classical Age of India.** Which of the above statements is/are correct? **a)** 1 & 3 only ✗ **b)** All of these ✓ **c)** 2 & 3 only ✗ **d)** 1 & 2 only ✗
Explanation:	✅ **Correct Answer: All of the above statements are correct** 🔍 **Explanation:** **Statement 1: Shri gupta established the Gupta dynasty** ✔️ **Correct** • Shri gupta is credited with founding the **Gupta dynasty** around **320 CE**. • **Chandragupta I** marriage to **Kumaradevi** of the Lichchhavi clan helped expand his political influence. **Statement 2: Samudragupta is known as the "Napoleon of India"** ✔️ **Correct** • The title was given by historian **Vincent Smith** due to Samudragupta's extensive military conquests and strategic brilliance. • His **Allahabad Pillar inscription** details his campaigns across India. **Statement 3: The Gupta period is often called the Classical Age of India** ✔️ **Correct** • The Gupta era (4th–6th century CE) is known for its **Classical age or golden age of art, literature, science, and culture**. • Great scholars like **Kalidasa**, **Aryabhata**, and **Varahamihira** flourished during this time. ✅ **Final Answer: All of the above statements are correct**

Q. 32	With reference to the human circulatory system, consider the following statements: **1. The human heart has four chambers – two atria and two ventricles.** **2. The pulmonary artery carries oxygenated blood from the lungs to the heart.** **3. Blood clotting is mainly facilitated by platelets.** Which of the above statements is/are Incorrect? **a) Only Statement 1** ✗ **b) Only Statement 2** ✓ **c) Only Statement 3** ✗ **d) None of these** ✗
Explanation:	✅ **Correct Answer: Statement 2 is incorrect** 🔍 **Explanation:** **Statement 1: The human heart has four chambers – two atria and two ventricles** ✔️ **Correct** • The heart consists of **four chambers**: ◦ **Right atrium** and **left atrium** (upper chambers) ◦ **Right ventricle** and **left ventricle** (lower chambers) • This structure allows for efficient separation of oxygenated and deoxygenated blood. **Statement 2: The pulmonary artery carries oxygenated blood from the lungs to the heart** ❌ **Incorrect** • The **pulmonary artery** carries **deoxygenated blood** from the **right ventricle** to the **lungs** for oxygenation. • It is the **only artery** that carries deoxygenated blood. • The **pulmonary vein**, not the artery, carries **oxygenated blood** from the lungs to the **left atrium** of the heart. **Statement 3: Blood clotting is mainly facilitated by platelets** ✔️ **Correct** • **Platelets (thrombocytes)** are small blood cells that play a crucial role in **blood clotting**. • They gather at the site of injury and help form a clot to stop bleeding. ✅ **Final Answer: Only Statement 2 is incorrect**

Q. 33	Consider the following statements related to the classification of Directive Principles of State Policy: **1. DPSPs can be broadly classified into Socialistic, Gandhian, and Liberal-Intellectual Principles.** **2. DPSPs are primarily punitive provisions to enforce social justice.** **3. The State is supposed to apply DPSPs in making laws but failure to do so is not legally punishable.** Which of the above statements is/are correct? **a)** 1 & 3 only ✔ **b)** 1 only ✘ **c)** 3 only ✘ **d)** 1 & 2 only ✘
Explanation:	✅ **Correct Answer: 1 & 3 only** 🔍 **Explanation:** **Statement 1: DPSPs can be broadly classified into Socialistic, Gandhian, and Liberal-Intellectual Principles** ✔️ **Correct** • The **Directive Principles of State Policy (DPSPs)** in Part IV of the Constitution are grouped into three categories: ◦ **Socialistic principles** – focus on welfare, equality, and economic justice ◦ **Gandhian principles** – reflect Mahatma Gandhi's ideals like village panchayats, cottage industries, and prohibition ◦ **Liberal-Intellectual principles** – promote individual rights, international peace, and uniform civil code **Statement 2: DPSPs are primarily punitive provisions to enforce social justice** ❌ **Incorrect** • DPSPs are **non-justiciable**, meaning they **cannot be enforced by any court**. • They are **guiding principles**, not punitive provisions. • Their purpose is to **direct the State** toward creating a just and equitable society. **Statement 3: The State is supposed to apply DPSPs in making laws but failure to do so is not legally punishable** ✔️ **Correct** • Article 37 of the Constitution states that DPSPs are **fundamental in governance**, and the State **shall apply them** in law-making. • However, **non-compliance is not legally punishable**, as they are not enforceable by courts. ✅ **Final Answer: 1 & 3 only**

Q. 34	**How many pairs are correct of Famous monuments with their Builders:** **Taj Mahal – Shah Jahan** **Qutub Minar – Alauddin Khilji** **Red Fort – Shah Jahan** **Humayun's Tomb – Jahangir** **a)** Only 2 ✔ **b)** Only 1 ✘ **c)** Only 3 ✘ **d)** All of these ✘
Explanation:	Let's evaluate each monument-builder pair: 🏛️ **1. Taj Mahal – Shah Jahan** ✅ **Correct** • Built by **Mughal Emperor Shah Jahan** in memory of his wife **Mumtaz Mahal**. • Located in **Agra**, completed around **1653**. 🏛️ **2. Qutub Minar – Alauddin Khilji** ❌ **Incorrect** • **Qutub Minar** was started by **Qutb-ud-din Aibak** and completed by **Iltutmish**. • **Alauddin Khilji** did not build it, though he added structures nearby like the **Alai Darwaza**. 🏛️ **3. Red Fort – Shah Jahan** ✅ **Correct** • Built by **Shah Jahan** in **Delhi** as the new imperial capital **Shahjahanabad**. • Construction began in **1638** and completed in **1648**. 🏛️ **4. Humayun's Tomb – Jahangir** ❌ **Incorrect** • It was built by **Emperor Akbar** in memory of his father **Humayun**, commissioned by **Humayun's widow Bega Begum**. • Completed around **1572**, designed by Persian architect **Mirak Mirza Ghiyas**. ✅ **Final Count: 2 pairs are correct** • **Correct pairs:** Taj Mahal – Shah Jahan, Red Fort – Shah Jahan • **Incorrect pairs:** Qutub Minar – Alauddin Khilji, Humayun's Tomb – Humayun

Q. 35	**Match the Vitamin with its Chemical Name:** **1. Vitamin B1 A. Thiamine** **2. Vitamin A B. Retinol** **3. Vitamin C C. Ascorbic Acid** **4. Vitamin D D. Calciferol** **a)** 1–A, 2–B, 3–C, 4–D ✔ **b)** 1–B, 2–C, 3–D, 4–A ✘ **c)** 1–C, 2–B, 3–D, 4–B ✘ **d)** 1–D, 2–B, 3–A, 4–C ✘
Explanation:	✅ **Correct Answer: A) 1–A, 2–B, 3–C, 4–D** 🔍 **Solution:** • **Vitamin B1 → Thiamine** Essential for nerve function and carbohydrate metabolism. • **Vitamin A → Retinol** Important for vision, immune function, and skin health. • **Vitamin C → Ascorbic Acid** A powerful antioxidant; helps in collagen synthesis and immunity. • **Vitamin D → Calciferol** Regulates calcium and phosphate; vital for bone health.

Q. 36	**Consider the following statements about Demand and Supply:** **1. The law of demand states that with an increase in price, demand decreases.** **2. The law of supply states that with an increase in price, supply decreases.** **3. Equilibrium price is where demand equals supply.** **Which of the above statements is/are correct?** **a)** 1 & 3 Only ✔ **b)** 2 & 3 only ✘ **c)** 1 & 2 only ✘ **d)** All of these ✘
Explanation:	✅ **Correct Answer: Statements 1 and 3 are correct** 🔍 **Explanation:** **Statement 1: The law of demand states that with an increase in price, demand decreases** ✔️ **Correct** • This is the fundamental principle of the **law of demand**. • As the **price of a good increases**, consumers tend to **buy less**, assuming other factors remain constant (*ceteris paribus*). **Statement 2: The law of supply states that with an increase in price, supply decreases** ❌ **Incorrect** • The **law of supply** actually states the **opposite**: • As **price increases**, **supply increases**, because producers are more willing to produce and sell at higher prices. **Statement 3: Equilibrium price is where demand equals supply** ✔️ **Correct** • The **equilibrium price** is the point at which the **quantity demanded equals the quantity supplied**. • At this price, the market is in balance, and there is no surplus or shortage. ✅ **Final Answer: Statements 1 and 3 are correct**

Q. 37	**Consider the following about the 1929 Lahore Session of the Indian National Congress:** **1. The session declared "Purna Swaraj" or complete independence as the Congress objective.** **2. The session was presided over by Jawaharlal Nehru.** **3. The historic decision to observe 26 January as Independence Day was taken in this session.** **Which of the above statements is/are correct?** **a)** Only 1 ✘ **b)** 1 & 2 Only ✘ **c)** 1, 2 & 3 Only ✔ **d)** 1 & 3 Only ✘
Explanation:	All three statements are **correct** regarding the 1929 Lahore Session of the Indian National Congress: 1. ✅ **Purna Swaraj declared**: The Congress officially adopted **"Purna Swaraj" (complete independence)** as its goal during this session, rejecting dominion status under British rule. 2. ✅ **Presided by Jawaharlal Nehru**: Jawaharlal Nehru was elected as the **President of the Congress** for this session, symbolizing the rise of youth leadership and radical nationalism. 3. ✅ **26 January as Independence Day**: The Congress resolved to **celebrate 26 January 1930 as Independence Day**, marking the public declaration of Purna Swaraj. This date was later chosen as **Republic Day** in 1950 to honor that historic decision. This session was a turning point in India's freedom movement, setting the stage for civil disobedience and a more assertive push for full independence.

Q. 38	Consider the following statements about the 76th Republic Day 2025 of India: **1. The theme for the tableaux was "Swarnim Bharat - Virasat aur Vikas."** **2. The chief guest was the President of Indonesia, Prabowo Subianto.** **3. First-ever combined display by the Army, Navy, and Air Force under the theme "Shashakt aur Surakshit Bharat" (Strong and Secure India)** Which of the above statements is/are correct? a) 1 and 2 only ✗ b) 2 and 3 only ✗ c) 1 and 3 only ✗ d) 1, 2 and 3 ✓
Explanation:	✅ Correct answer: 1, 2 and 3 All three statements about the **76th Republic Day of India (2025)** are accurate: 1. **Theme for the tableaux – "Swarnim Bharat: Virasat aur Vikas"** ✔️ Confirmed as the official theme, highlighting India's cultural heritage and developmental strides. 2. **Chief Guest – President of Indonesia, Prabowo Subianto** ✔️ He attended the celebrations as the **Chief Guest**, marking his first visit to India since assuming office in October 2024. 3. **First-ever combined display by Army, Navy, and Air Force – "Shashakt aur Surakshit Bharat"** ✔️ A **Tri-services tableau** was showcased for the first time, symbolizing jointness and integration among the armed forces under the theme "Shashakt aur Surakshit Bharat".

Q. 39	Consider the following statements about the Partition of India in 1947: **1. The Indian National Congress accepted the Mountbatten Plan for partition.** **2. Khan Abdul Ghaffar Khan was a strong supporter of Partition.** **3. The Partition led to mass migration and communal violence.** Which of the above statements is/are correct? a) 1 and 2 only ✗ b) 2 and 3 only ✗ c) 1 and 3 only ✓ d) 1, 2 and 3 ✗
Explanation:	✅ Correct answer: 1 and 3 only Here's a detailed breakdown of each statement: 1. **The Indian National Congress accepted the Mountbatten Plan for partition** ✔️ **Correct.** The Congress reluctantly accepted the **Mountbatten Plan**, announced on **3 June 1947**, which proposed the partition of British India into India and Pakistan. Though leaders like Gandhi were deeply opposed, the Congress agreed to the plan to ensure a peaceful and swift transfer of power. 2. **Khan Abdul Ghaffar Khan was a strong supporter of Partition** ❌ **Incorrect.** Known as the **"Frontier Gandhi,"** Khan Abdul Ghaffar Khan was a staunch opponent of Partition. He felt betrayed by the Congress's acceptance of the plan and lamented the division of India. His region, the **North-West Frontier Province (NWFP)**, was later merged with Pakistan after a controversial referendum. 3. **The Partition led to mass migration and communal violence** ✔️ **Correct.** The Partition triggered one of the largest mass migrations in history, displacing **12–20 million people**. It also unleashed horrific **communal violence**, with estimated deaths ranging from **200,000 to 2 million**.

Q. 40	Regarding Money and Banking: **1. The Reserve Bank of India regulates monetary policy in India.** **2. CRR (Cash Reserve Ratio) is the minimum reserves banks must hold with the RBI.** **3. Bank Rate is the rate at which commercial banks lend to the public.** Which of the above statements is/are correct? **a)** 1 and 2 only ✔ **b)** 2 and 3 only ✘ **c)** 1 and 3 only ✘ **d)** 1, 2 and 3 ✘
Explanation:	✅ Correct answer: 1 and 2 only Let's break it down: 1. **The Reserve Bank of India regulates monetary policy in India** ✔️ **Correct.** The **RBI** is India's central bank and is responsible for formulating and implementing **monetary policy** to maintain price stability and ensure economic growth. 2. **CRR (Cash Reserve Ratio) is the minimum reserves banks must hold with the RBI** ✔️ **Correct.** CRR is the **percentage of a bank's total deposits** that must be maintained as **liquid cash with the RBI**. This tool helps the RBI control liquidity in the banking system. 3. **Bank Rate is the rate at which commercial banks lend to the public** ❌ **Incorrect.** The **Bank Rate** is the rate at which the **RBI lends to commercial banks**, not the rate at which banks lend to the public. It's a tool used to influence long-term interest rates and credit availability.

Q. 41	With respect to the history of BIMSTEC: **1. The organization was initially known as BIST-EC, formed by four nations.** **2. The addition of Myanmar changed its name to BIMST-EC.** **3. Nepal and Bhutan joined BIMSTEC in 2004, leading to its present designation.** Which of the above statements is/are correct? **a)** 1 and 2 only ✘ **b)** 2 and 3 only ✘ **c)** 1, 2 and 3 ✔ **d)** 1 and 3 only ✘
Explanation:	✅ Correct answer: 1, 2 and 3 All three statements about the history of **BIMSTEC** are factually accurate: 1. **Initially known as BIST-EC, formed by four nations** ✔️ **Correct.** The organization was established on **6 June 1997** as **BIST-EC** (Bangladesh, India, Sri Lanka, and Thailand Economic Cooperation) through the **Bangkok Declaration**. 2. **Addition of Myanmar changed its name to BIMST-EC** ✔️ **Correct. Myanmar joined** the grouping on **22 December 1997**, prompting a name change to **BIMST-EC** (Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation). 3. **Nepal and Bhutan joined in 2004, leading to its present designation** ✔️ **Correct. Nepal and Bhutan** became full members during the **6th Ministerial Meeting in July 2004**, and the group was renamed **BIMSTEC** – *Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation* – during the **First Summit on 31 July 2004**.

Q. 42	How many pair is correct about the ingredient and the color it imparts? 1. Curcumin – Yellow 2. Lycopene – Blue 3. Chlorophyll - Red a) Only one ✔ b) Only two ✘ c) All of these ✘ d) None of these ✘
Explanation:	✅ Correct answer: Only one Let's evaluate each pair: 1. **Curcumin – Yellow** ✔️ **Correct.** Curcumin, the active compound in turmeric, imparts a **bright yellow** color. It's widely used in food coloring and traditional medicine. 2. **Lycopene – Blue** ❌ **Incorrect.** Lycopene is a **red pigment**, found abundantly in tomatoes, watermelon, and pink guava. It belongs to the carotenoid family and is known for its antioxidant properties. 3. **Chlorophyll – Red** ❌ **Incorrect.** Chlorophyll is the **green pigment** responsible for photosynthesis in plants. It gives leaves and many vegetables their green color. 🔍 So, **only Curcumin–Yellow** is a correct pair.

Q. 43	Consider the following statements about the Eleventh and Twelfth Schedules: **1. The Eleventh Schedule gives powers and responsibilities to Panchayats.** **2. The Twelfth Schedule confers powers on Municipalities.** **3. Both schedules were added by the 73rd and 74th amendment acts, respectively.** Which of the above statements is/are INCORRECT? a) Only Statement 1 ✘ b) Only Statement 2 ✘ c) Only Statement 3 ✘ d) None of these ✔
Explanation:	✅ Correct answer: None of these All three statements are **factually correct**, so **none** is incorrect: 1. **Eleventh Schedule – Panchayats** ✔️ Added by the **73rd Constitutional Amendment Act, 1992**, the Eleventh Schedule outlines **29 subjects** under the jurisdiction of **Panchayati Raj Institutions** (PRIs), such as agriculture, rural housing, and sanitation. 2. **Twelfth Schedule – Municipalities** ✔️ Introduced through the **74th Constitutional Amendment Act, 1992**, the Twelfth Schedule contains **18 subjects** for **Urban Local Bodies**, including urban planning, public health, and fire services. 3. **Added by 73rd and 74th Amendments** ✔️ Absolutely correct. These amendments came into force in **1993**, institutionalizing **local self-governance** in rural and urban areas respectively.

Q. 44	According to August 2025, Who has been elected as the President of the International Big Cat Alliance (IBCA)? a) Bhupendra Yadav ✔ b) Suman Kumar Bery ✘ c) Ravi Gosain ✘ d) Rajiv Gauba ✘
Explanation:	Correct answer: Bhupendra Yadav Union Environment Minister **Bhupender Yadav** was unanimously elected as the **President of the International Big Cat Alliance (IBCA)** during its **first Assembly held in New Delhi in June 2025**. The IBCA is a global coalition launched by **Prime Minister Narendra Modi** in April 2023 to promote conservation of seven major big cat species: **Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma**.

Q. 45	Consider the following statements about the advent of Europeans during the medieval period: **1. The Portuguese were the first Europeans to establish direct sea trade links with India in the late 15th century.** **2. Vasco da Gama reached the Indian coast by sailing around the Cape of Good Hope in 1498.** **3. The fall of Constantinople in 1453 was one factor that encouraged Europeans to find new trade routes.** Which of the above statements is/are correct? a) 2 and 3 only ✗ b) 1 and 3 only ✗ c) 1, 2, and 3 ✓ d) 1 and 2 only ✗
Explanation:	✅ **Correct answer: 1, 2, and 3** All three statements are **historically accurate** regarding the advent of Europeans in India during the medieval period: 1. **Portuguese were the first Europeans to establish direct sea trade links with India in the late 15th century** ✔️ **Correct.** The Portuguese pioneered maritime exploration and were the **first Europeans to reach India by sea**, initiating direct trade links and colonial ambitions. 2. **Vasco da Gama reached the Indian coast by sailing around the Cape of Good Hope in 1498** ✔️ **Correct.** He arrived at **Calicut (Kozhikode)** on the **Malabar Coast** in **May 1498**, completing a historic voyage that opened the sea route from Europe to India. 3. **The fall of Constantinople in 1453 was one factor that encouraged Europeans to find new trade routes** ✔️ **Correct.** After the **Ottoman Turks captured Constantinople**, traditional land routes to Asia were disrupted. This pushed European powers to seek **alternative sea routes** to access the lucrative spice trade.

Q. 46	Which of the following statements about the retreating (Northeast) monsoon is incorrect? a) The Northeast monsoon primarily affects Tamil Nadu and parts of Andhra Pradesh. ✗ b) The retreating monsoon brings most of the rainfall to western coastal India. ✓ c) The retreating monsoon occurs from October to December. ✗ d) The retreating monsoon is caused by winds flowing from land to sea due to a high-pressure area over the land. ✗
Explanation:	✅ **Correct answer: The retreating monsoon brings most of the rainfall to western coastal India.** This statement is **incorrect**. Here's why: • ✔️ **The Northeast monsoon primarily affects Tamil Nadu and parts of Andhra Pradesh** True. This monsoon is crucial for **southeastern India**, especially **Tamil Nadu**, which receives **over 50% of its annual rainfall** during this season. • ❌ **The retreating monsoon brings most of the rainfall to western coastal India** False. The **western coast** (like Kerala, Goa, and coastal Karnataka) receives **most of its rainfall during the Southwest monsoon (June–September)**. The **retreating monsoon (October–December)** mainly affects the **eastern coast**, especially **Tamil Nadu and coastal Andhra Pradesh**. • ✔️ **The retreating monsoon occurs from October to December** Correct. It marks the **transition from the rainy season to winter**, typically spanning **October to December**. • ✔️ **The retreating monsoon is caused by winds flowing from land to sea due to a high-pressure area over the land** Correct. As the Southwest monsoon withdraws, **high-pressure systems form over the land**, causing **dry, cool winds to blow from land to sea**, which pick up moisture over the Bay of Bengal and bring rain to the eastern coast.

Q. 47

Consider the following about the pupil and iris of the human eye:

1. The iris controls the size of the pupil to regulate the amount of light entering the eye.
2. The pupil dilates in bright light and contracts in dim light.
3. The iris functions similarly to the aperture of a camera.

Which of the above statements is/are correct?

a) 1 and 3 only ✔

b) Only 1 ✘

c) 2 & 3 only ✘

d) All of these ✘

Explanation:

Correct answer: 1 and 3 only

Let's analyze each statement carefully:

1. **The iris controls the size of the pupil to regulate the amount of light entering the eye**
   ✔ **Correct.** The **iris** is the colored muscular structure surrounding the **pupil**, and it adjusts the pupil's size to control how much light reaches the retina. This is a key part of the eye's light regulation system.
2. **The pupil dilates in bright light and contracts in dim light**
   ❌ **Incorrect.** It's actually the **opposite**:
   - In **bright light**, the pupil **contracts** to reduce light entry.
   - In **dim light**, the pupil **dilates** to allow more light in.

   This automatic adjustment is known as the **pupillary light reflex**.
3. **The iris functions similarly to the aperture of a camera**
   ✔ **Correct.** Just like a camera's aperture adjusts to control light exposure, the **iris** modulates the pupil's diameter to regulate light intake. This analogy is widely used in biology and optics.

Q. 48

Which state does not share its boundary with Myanmar?

1. Mizoram
2. Meghalaya
3. Sikkim
4. Manipur

a) Only Meghalaya ✘

b) Sikkim & Meghalaya both ✔

c) Only Sikkim ✘

d) Manipur, Mizoram & Sikkim ✘

Explanation:

Correct answer: Sikkim & Meghalaya both

Let's break it down clearly:

- **Mizoram** – ✔ Shares a border with **Myanmar**.
- **Manipur** – ✔ Shares a border with **Myanmar**.
- **Sikkim** – ❌ Does **not** share a border with Myanmar. It borders **China, Bhutan, and Nepal**.
- **Meghalaya** – ❌ Also does **not** share a border with Myanmar. It borders **Assam and Bangladesh**.

📌 The **four Indian states** that share a land boundary with **Myanmar** are:

- **Arunachal Pradesh**
- **Nagaland**
- **Manipur**
- **Mizoram**

Q. 49	With respect to essential nutrients, consider the following: **1. Vitamin C is important for collagen synthesis and immunity.** **2. Iron is essential for haemoglobin formation in animals.** **3. Calcium is important only for animals and has no role in plants.** Which of the above statements is/are correct? **a)** 1 and 2 only ✔ **b)** 2 and 3 only ✘ **c)** 1 and 3 only ✘ **d)** 1, 2 and 3 ✘
Explanation:	Correct answer: 1 and 2 only Let's evaluate each statement carefully: 1. **Vitamin C is important for collagen synthesis and immunity** ✔️ **Correct.** Vitamin C (ascorbic acid) plays a vital role in the **hydroxylation of proline and lysine**, which is essential for **collagen formation**. It also boosts **immune function** and helps in **iron absorption**. 2. **Iron is essential for haemoglobin formation in animals** ✔️ **Correct.** Iron is a key component of **haemoglobin**, the protein in red blood cells that carries oxygen. Iron deficiency leads to anemia and fatigue. 3. **Calcium is important only for animals and has no role in plants** ❌ **Incorrect.** Calcium is crucial for **both animals and plants**. • In **animals**, it supports **bone and teeth formation**, muscle contraction, and nerve signaling. • In **plants**, calcium is vital for **cell wall structure**, **membrane stability**, and **enzyme activity**. Deficiency can lead to disorders like **blossom end rot** in tomatoes.

Q. 50	Which of the following reflects the 'what to produce' decision in economics? **a)** Increasing taxes to raise government revenue ✘ **b)** Choosing between capital and consumer goods ✔ **c)** Choosing method of production ✘ **d)** Deciding on distribution of output ✘
Explanation:	✅ Correct answer: Choosing between capital and consumer goods Let's break it down: • **'What to produce'** is one of the **central problems of an economy**, referring to the decision about **which goods and services** should be produced with limited resources. • ✔️ **Choosing between capital and consumer goods** directly reflects this decision. ◦ **Capital goods** (e.g., machinery, tools) help in future production. ◦ **Consumer goods** (e.g., food, clothing) satisfy immediate needs. ◦ The choice between them determines the **economic priorities**—whether to focus on long-term growth or present consumption. • ❌ **Increasing taxes to raise government revenue** relates to **fiscal policy**, not production decisions. • ❌ **Choosing method of production** reflects the **'how to produce'** decision—whether to use labor-intensive or capital-intensive techniques. • ❌ **Deciding on distribution of output** relates to the **'for whom to produce'** decision—who gets the goods and services.

Q. 51	**Choose the most suitable idiom to fill in the blank:** **Despite several warnings from financial experts, the company ignored market signals and now finds itself _____, struggling to pay even basic expenses.** **a)** after a dry run ✗ **b)** cutting a sorry figure ✗ **c)** in dire straits ✓ **d)** hand in glove ✗
Explanation:	**Explanation:** • **In dire straits** means to be in a very difficult or serious situation, especially financially, which fits the context of the sentence perfectly. • **Dry run** means a rehearsal or practice session, not suitable here. • **Cutting a sorry figure** means appearing in a pitiable or embarrassing situation, not focusing on the financial crisis. • **Hand in glove** means in close cooperation, especially in wrongdoing, which doesn't fit the financial hardship described.

Q. 52	**What is the part of speech of the word "barely" as used in the sentence?** **The river overflowed so rapidly during the torrential rainfall that even the emergency teams could barely respond in time.** **a)** Noun ✗ **b)** Pronoun ✗ **c)** Adjective ✗ **d)** Adverb ✓
Explanation:	**Explanation:** • "Barely" modifies the verb "respond," showing to what extent the teams could respond—so it is an **adverb**. • It does not name anything (not a noun), does not replace a noun (not a pronoun), nor does it describe a noun (not an adjective). Therefore, the correct answer is **D) Adverb**.

Q. 53	**Select the correct one-word substitution for the given statement:** **"A person who is skilled in composing, arranging, and directing the performance of music, especially in orchestras or operas, often leading rehearsals and concerts."** **a)** Composer ✗ **b)** Impresario ✗ **c)** Maestro ✓ **d)** Virtuoso ✗
Explanation:	**Explanation:** • **Composer** is someone who writes music, but not necessarily conducts or directs performances. • **Impresario** is an organizer/manager of concerts or operas, not the actual music director. • **Maestro** is a respected title often given to a distinguished conductor or music director who is skilled in composing, conducting, and leading performances. • **Virtuoso** refers to a highly skilled performer, especially instrumentalist, but doesn't imply leadership or composition necessarily. Thus, **Maestro** perfectly encapsulates a skilled person who composes, arranges, and directs musical performances at a high level.

Q. 54	**Choose the pair of words that correctly fill in the blanks with the appropriate homonyms:** **At the royal ceremony, the princess gave a graceful _____ to show respect, while the host welcomed everyone with great _____ and warmth.** **a) curtsy, courtesy** ✔ **b) courtesy, curtsy** ✘ **c) curtsy, curtsy** ✘ **d) courtesy, courtesy** ✘
Explanation:	**Explanation:** • **Curtsy** is a traditional gesture of respect made by bending the knees and lowering the body slightly, usually by women. • **Courtesy** means polite behaviour or gestures shown to others. • The sentence's context about a royal ceremony correctly matches these meanings.

Q. 55	**Read the following sentence carefully and identify the type of the underlined clause:** **"The scientists observed the rare bird, which had been migrating for thousands of miles, before it finally settled in the new habitat."** **a) Adjective (Relative) Clause** ✔ **b) Adverbial Clause** ✘ **c) Noun Clause** ✘ **d) Independent Clause** ✘
Explanation:	**Explanation:** • The underlined clause "which had been migrating for thousands of miles" describes the noun "bird," providing additional information about it. • Such a clause that modifies a noun is an **adjective (relative) clause**. • (B) Adverbial clauses modify verbs, adjectives, or other adverbs and often express time, reason, condition, or place, which this clause does not. • (C) A noun clause acts as a subject or object, not a modifier here. • (D) Independent clauses can stand alone, but the underlined clause depends on the main clause.

Q. 56	**Match the words in Column A with their correct meanings from Column B:** **1. Heretic A. A temporary agreement to stop fighting** **2. Truce B. A person who holds controversial or unorthodox opinions** **3. Epigraph C. An inscription on a building or statue** **4. Pant D. To breathe quickly or heavily** **a) 1-B, 2-A, 3-C, 4-D** ✔ **b) 1-D, 2-C, 3-A, 4-B** ✘ **c) 1-A, 2-B, 3-D, 4-C** ✘ **d) 1-C, 2-D, 3-B, 4-A** ✘
Explanation:	**Explanation:** 1. **Heretic** (1-B) A heretic is a person who holds beliefs or opinions that are contrary to the established or orthodox doctrines, especially in religion. Such a person challenges traditional or accepted views, hence the meaning "a person who holds controversial or unorthodox opinions." 2. **Truce** (2-A) A truce is a temporary agreement between two opposing parties to stop fighting or hostilities. It is usually agreed upon to allow negotiations or humanitarian aid before any further conflict. 3. **Epigraph** (3-C) An epigraph is an inscription, often found on buildings, monuments, statues, or at the beginning of books or chapters. It usually contains a motto, quotation, or short piece of text related to the subject. 4. **Pant** (4-D) To pant means to breathe quickly and heavily, typically after exertion or in response to heat or excitement. It describes a rapid, short-breathed form of breathing.

Q. 57	**Read the following sentence and convert it into indirect speech:** **The professor said to the students, "You were preparing for the competitive examinations diligently for several months before the syllabus had changed."** **a) The professor told the students that they had prepared diligently for the competitive examinations for several months before the syllabus had changed.** ✘ **b) The professor told the students that they had been preparing diligently for the competitive examinations for several months before the syllabus had changed.** ✔ **c) The professor told the students that they were preparing diligently for the competitive examinations for several months before the syllabus had changed.** ✘ **d) The professor told the students that they will be preparing diligently for the competitive examinations for several months before the syllabus was changed.** ✘
Explanation:	**Explanation:** • In indirect speech, the **past continuous** ("were preparing") changes to **past perfect continuous** ("had been preparing") if the reporting verb is in the past. • (A) uses simple past perfect, not perfect continuous. • (C) does not transform tense; stays as past continuous, which is incorrect here. • (D) incorrectly uses "will be preparing," which is future continuous. Therefore, **option B** correctly uses the past perfect continuous in indirect speech.

Q. 58	**Identify the part of the sentence which contains a grammatical error:** **By the time the rescue team arrived, the flood had submerged many villages, and the authorities declared an emergency soon after.** **a) By the time the rescue team arrived** ✗ **b) the flood had submerged many villages** ✗ **c) and the authorities declared an emergency soon after** ✗ **d) No error** ✓
Explanation:	**Explanation:** • **The past perfect tense "had submerged" is** correctly used for the event that happened earlier (flood submerging villages), before the rescue team's arrival (simple past "arrived"). • The authorities' declaration of emergency after that is correctly in simple past "declared." • The sentence's sequence and tense usage are accurate, so there is no error.

Q. 59	**Change the following sentence from passive to active voice without changing its meaning:** **The independence of Eritrea was officially recognized by the United Nations in 1993 after a prolonged struggle for sovereignty.** **a) The United Nations officially recognized the independence of Eritrea in 1993 after a prolonged struggle for sovereignty.** ✓ **b) The United Nations was officially recognizing the independence of Eritrea in 1993 after a prolonged struggle.** ✗ **c) Eritrea officially recognized its independence by the United Nations in 1993 after a prolonged struggle.** ✗ **d) The United Nations is officially recognizing the independence of Eritrea in 1993 after a prolonged struggle for sovereignty.** ✗
Explanation:	**Explanation:** • The original sentence is passive with "was officially recognized." • Converting to active voice makes "The United Nations" the subject performing the action "recognized." • (B) uses past continuous which is inaccurate for the historical event. • (C) wrongly suggests Eritrea recognized its independence by the UN, which is incorrect logically. • (D) uses present continuous tense incompatible with the past date.

Q. 60	**Rearrange the following sentences in the correct order to form a coherent paragraph, placing them between the opening and closing statements:** **Opening Statement (fixed):** **The recent bill passed in parliament has sparked widespread discussions about its impact on the economy and society.** **P. The bill aims to promote sustainable development by encouraging investment in renewable energy sources.** **Q. However, critics argue that certain provisions may adversely affect small businesses and employment rates.** **R. Proponents emphasize the long-term benefits of reducing carbon emissions and fostering green technology innovations.** **S. To address concerns, the government has promised to provide support and incentives to vulnerable sectors during the transition period.** **Closing Statement (fixed):** **The bill's success will depend on effective implementation and ongoing dialogue between all stakeholders.** **a) PQRS** ✗ **b) PRQS** ✓ **c) PSRQ** ✗ **d) QPSR** ✗
Explanation:	**Correct Order:** P. The bill aims to promote sustainable development by encouraging investment in renewable energy sources. R. Proponents emphasize the long-term benefits of reducing carbon emissions and fostering green technology innovations. Q. However, critics argue that certain provisions may adversely affect small businesses and employment rates. S. To address concerns, the government has promised to provide support and incentives to vulnerable sectors during the transition period. 1. P introduces what the bill aims to achieve (main purpose). 2. R adds support from proponents, stressing long-term benefits. 3. Q presents the contrasting viewpoint of critics. 4. S shows how the government responds to concerns raised. **Sequence them logically** P → R → Q → S

Q. 61	**Identify the part of the sentence that contains an error related to the use of conjunctions:** **Although the Valley of Flowers trek is strenuous, but it attracts many nature lovers / who wish to explore the vibrant flora / and enjoy the serene beauty of the Himalayan region.** **a) Although the Valley of Flowers trek is strenuous, but it attracts many nature lovers** ✓ **b) who wish to explore the vibrant flora** ✗ **c) and enjoy the serene beauty of the Himalayan region** ✗ **d) No error** ✗
Explanation:	**Explanation:** • The conjunction "although" introduces a contrast and already implies "but," so using "but" again here is redundant and incorrect. • Correct sentence should be: • "Although the Valley of Flowers trek is strenuous, it attracts many nature lovers…" • The rest of the sentence is grammatically correct.

Q. 62	**Choose the word that most closely matches the meaning of "barren":** **a) Sterile** ✔ **b) Munificent** ✘ **c) Flagrant** ✘ **d) Noisome** ✘
Explanation:	**Explanation:** • **Sterile** means unable to produce offspring or vegetation; infertile, which closely matches "barren." • **Munificent** means very generous or giving. • **Flagrant** means shockingly noticeable or obvious (usually bad behavior). • **Noisome** means offensive or disgusting (usually smell).

Q. 63	**Identify the part of the sentence where the punctuation error occurs:** **The breathtaking views of Ladakh's rugged mountains, serene lakes and expansive valleys, make it a paradise for adventure seekers.** **a) The breathtaking views of Ladakh's** ✘ **b) it a paradise for adventure seekers.** ✘ **c) rugged mountains, serene lakes and expansive valleys, make** ✔ **d) No error** ✘
Explanation:	**Explanation:** The comma before **"make it a paradise"** is incorrect. It wrongly separates the subject from the verb. • **Correct sentence:** The breathtaking views of Ladakh's rugged mountains, serene lakes and expansive valleys make it a paradise for adventure seekers.

Q. 64	**Convert the following sentence into a positive sentence without changing its meaning:** **There is no rose without a thorn.** **a) Every rose has a thorn.** ✔ **b) No rose has a thorn.** ✘ **c) A rose rarely has a thorn.** ✘ **d) Some roses do not have thorns.** ✘
Explanation:	**Explanation:** • The original negative sentence implies that thorns are inseparable from roses, which is positively expressed as "Every rose has a thorn." • Options B, C, and D contradict or weaken the meaning.

Q. 65	**Change the following sentence from active to passive voice without changing its meaning:** **Researchers extensively studied the benefits of meditation on mental health, and the experts published their findings after conducting widespread clinical trials.** **a)** The benefits of meditation on mental health were extensively studied by researchers, and the findings were published by the experts after widespread clinical trials were conducted. ✓ **b)** The benefits of meditation on mental health have been extensively studied by researchers, and the experts published their findings after conducting widespread clinical trials. ✗ **c)** The benefits of meditation on mental health were extensively studied by researchers, and the findings have been published by experts after conducting widespread clinical trials. ✗ **d)** The benefits of meditation on mental health had been extensively studied by researchers, and the findings had been published by experts after conducting widespread clinical trials. ✗
Explanation:	The sentence was changed to passive voice by making the objects of the active verbs ("benefits of meditation" and "findings") the subjects of the passive verbs ("were studied" and "were published"). This keeps the meaning intact while shifting focus from the doers to the actions themselves.

Q. 66	**Which of the following sentences is a complex sentence?** **a)** Jaishankar visited Russia to strengthen diplomatic ties. ✗ **b)** Jaishankar met with Russian officials, and he discussed several bilateral agreements. ✗ **c)** Although the visit was brief, Jaishankar emphasized the importance of strategic cooperation. ✓ **d)** Jaishankar traveled to Russia, and while he attended the summit, he also held private meetings with key policymakers. ✗
Explanation:	**Explanation:** • A **complex sentence** contains one independent clause and at least one dependent (subordinate) clause. The dependent clause cannot stand alone and usually begins with subordinating conjunctions like although, because, since, while, etc. • In the sentence: **"Although the visit was brief, Jaishankar emphasized the importance of strategic cooperation."** ◦ The phrase **"Although the visit was brief"** is a dependent (subordinate) clause—it provides a condition or contrast and cannot stand alone as a sentence. ◦ The phrase **"Jaishankar emphasized the importance of strategic cooperation"** is the independent clause and can stand alone as a sentence. Other sentences in the set: • (A) Simple sentence: Contains a single independent clause. • (B) Compound sentence: Contains two independent clauses joined by a conjunction ("and"). • (D) Compound-complex sentence: Contains two independent clauses plus at least one dependent clause. Thus, sentence (C) is the **complex sentence** because it has one independent clause and one dependent clause.

Q. 67	**Identify the sentence that contains a misspelled word:** **a)** The diplomatic talks were succesful and paved the way for enhanced cooperation. ✓ **b)** Jaishankar emphasized the need for strategic partnerships in various sectors. ✗ **c)** During his visit to Moscow, Jaishankar discussed important bilateral agreements with Russian officials. ✗ **d)** The meeting concluded with a joint statement highlighting mutual interests. ✗
Explanation:	**Explanation:** • The correct spelling is **"successful"** with two "s" after the "c." • All other sentences have correctly spelled words.

Q. 68	**"Akbar's policy of religious tolerance brought great harmony among diverse communities across his empire."** **What type of phrase is "great harmony among diverse communities"?** **a) Prepositional Phrase** ✗ **b) Noun Phrase** ✓ **c) Adjective Phrase** ✗ **d) Adverbial Phrase** ✗
Explanation:	**Explanation:** • The phrase "great harmony among diverse communities" acts as the **object** of the verb "brought," which is a noun phrase consisting of a noun "harmony" with modifiers "great" and "among diverse communities." • (A) Prepositional phrases begin with a preposition, eg. "among diverse communities," which is part of the noun phrase but not the whole phrase. • (C) Adjective phrases modify nouns, which this phrase does not do. • (D) Adverbial phrases modify verbs, adjectives, or other adverbs, which this phrase also does not do.

Q. 69	**Convert the following sentence into indirect speech:** **The scientist said, "We will complete the vaccine trials by next month, but had faced several challenges during the initial phases."** **a) The scientist said that they would complete the vaccine trials by next month but had faced several challenges during the initial phases.** ✓ **b) The scientist said that they will complete the vaccine trials by next month but have faced several challenges in the initial phases.** ✗ **c) The scientist said that they would be completing the vaccine trials by next month and had been facing several challenges during the initial phases.** ✗ **d) The scientist said that they would complete the vaccine trials next month but faced several challenges during the initial phases.** ✗
Explanation:	**Explanation:** • The future tense "will complete" changes to "would complete" in indirect speech when the reporting verb is in the past. • The past perfect "had faced" remains the same as it refers to an action completed before now relative to the reporting. • (B) changes past perfect to present perfect, which is incorrect in indirect speech. • (C) uses continuous tenses unnecessarily and changes nuance. • (D) simplifies past perfect to simple past, which can alter the timeline clarity.

Q. 70	**Choose the word or phrase that is closest in meaning to the idiom "topsy-turvy":** **a) In perfect order** ✗ **b) Upside down** ✓ **c) Smoothly running** ✗ **d) Carefully planned** ✗
Explanation:	**Explanation:** • "Topsy-turvy" means in a state of disorder, confusion, or upside down. • (B) "Upside down" is the closest synonym, conveying disorder or inverted arrangement. • (A), (C), and (D) convey order and smoothness, which are opposite in meaning.

Q. 71	**Read the passage Carefully and answer the following questions:** **The recent bill passed in parliament aims to address the growing concerns surrounding fantasy sports and gaming apps, many of which have been accused of encouraging gambling-like behaviour among users. Recognizing the potential negative impact of these apps on young people and vulnerable sections of society, the government has taken a decisive step to regulate and, in some cases, ban certain fantasy apps that do not comply with stringent guidelines.** **The bill outlines a comprehensive framework for the classification, monitoring, and control of fantasy gaming platforms, emphasizing the distinction between skill-based games and games of chance. It mandates that all operators must obtain proper licenses, adhere to fair play policies, and implement robust age verification processes to protect minors. Those apps found promoting addictive behaviours or failing to meet transparency standards face penalties, including permanent bans.** **Parliamentarians highlighted the need to protect consumers from financial losses and exploitation while ensuring that legitimate skill-based gaming continues to grow within a regulated environment. The bill also proposes collaboration between central and state governments to enforce the rules effectively.** **Experts believe that, if implemented well, the legislation will curb the misuse of fantasy apps and foster a safer digital gaming ecosystem. However, the success of this bill depends heavily on strict enforcement, awareness campaigns, and cooperation from stakeholders including tech companies, regulators, and users alike.** **What are the key measures introduced by the recent bill passed in parliament to regulate and ban certain fantasy sports apps?** **a) Licensing requirements and strict age verification to protect minors** ✔ **b) Promotion of gambling activities to increase revenue** ✘ **c) Complete ban on all digital gaming platforms** ✘ **d) Encouragement of unregulated gaming among minors** ✘
Explanation:	**Explanation:** • The bill requires fantasy app operators to obtain licenses and follow strict age verification to safeguard minors. • It targets apps that promote gambling-like behaviour and imposes penalties or bans on non-compliant platforms. • Legitimate skill-based gaming is regulated, not completely banned.

Q. 72	**Read the passage Carefully and answer the following questions:** **The recent bill passed in parliament aims to address the growing concerns surrounding fantasy sports and gaming apps, many of which have been accused of encouraging gambling-like behaviour among users. Recognizing the potential negative impact of these apps on young people and vulnerable sections of society, the government has taken a decisive step to regulate and, in some cases, ban certain fantasy apps that do not comply with stringent guidelines.** **The bill outlines a comprehensive framework for the classification, monitoring, and control of fantasy gaming platforms, emphasizing the distinction between skill-based games and games of chance. It mandates that all operators must obtain proper licenses, adhere to fair play policies, and implement robust age verification processes to protect minors. Those apps found promoting addictive behaviours or failing to meet transparency standards face penalties, including permanent bans.** **Parliamentarians highlighted the need to protect consumers from financial losses and exploitation while ensuring that legitimate skill-based gaming continues to grow within a regulated environment. The bill also proposes collaboration between central and state governments to enforce the rules effectively.** **Experts believe that, if implemented well, the legislation will curb the misuse of fantasy apps and foster a safer digital gaming ecosystem. However, the success of this bill depends heavily on strict enforcement, awareness campaigns, and cooperation from stakeholders including tech companies, regulators, and users alike.** **Which figure of speech is used in the above passage?** **The recent bill passed in parliament storms the fortress of unregulated fantasy apps, cutting through the haze of addiction and protecting the vulnerable with the shield of strict guidelines.** **a)** Simile ✗ **b)** Personification ✗ **c)** Hyperbole ✗ **d)** Metaphor ✓
Explanation:	**Explanation:** • The passage uses metaphors like “storms the fortress,” “cutting through the haze,” and “shield of strict guidelines” to represent the bill’s impact. • These phrases imply comparison without using “like” or “as,” which rules out simile. • There is no direct personification (giving human qualities to non-human things) or exaggeration typical of hyperbole here.

Q. 73	**Read the passage Carefully and answer the following questions:** **The recent bill passed in parliament aims to address the growing concerns surrounding fantasy sports and gaming apps, many of which have been accused of encouraging gambling-like behaviour among users. Recognizing the potential negative impact of these apps on young people and vulnerable sections of society, the government has taken a decisive step to regulate and, in some cases, ban certain fantasy apps that do not comply with stringent guidelines.** **The bill outlines a comprehensive framework for the classification, monitoring, and control of fantasy gaming platforms, emphasizing the distinction between skill-based games and games of chance. It mandates that all operators must obtain proper licenses, adhere to fair play policies, and implement robust age verification processes to protect minors. Those apps found promoting addictive behaviours or failing to meet transparency standards face penalties, including permanent bans.** **Parliamentarians highlighted the need to protect consumers from financial losses and exploitation while ensuring that legitimate skill-based gaming continues to grow within a regulated environment. The bill also proposes collaboration between central and state governments to enforce the rules effectively.** **Experts believe that, if implemented well, the legislation will curb the misuse of fantasy apps and foster a safer digital gaming ecosystem. However, the success of this bill depends heavily on strict enforcement, awareness campaigns, and cooperation from stakeholders including tech companies, regulators, and users alike.** **What would be the most appropriate title for the passage?** **a) "Government's New Bill to Regulate and Ban Certain Fantasy Apps"** ✔ **b) "The Rise of Fantasy Sports in India"** ✘ **c) "Benefits of Online Gaming Platforms"** ✘ **d) "How to Play Fantasy Sports Safely"** ✘
Explanation:	**Explanation:** • The passage focuses on a recent bill passed in parliament aimed at regulating and banning certain fantasy sports apps. • It discusses the government's efforts to control harmful gaming practices and protect users, especially minors. • Option A clearly reflects the main theme and purpose of the passage. • Options B, C, and D do not capture the regulatory and legislative focus of the passage.

Q. 74	**Read the passage Carefully and answer the following questions:** **The recent bill passed in parliament aims to address the growing concerns surrounding fantasy sports and gaming apps, many of which have been accused of encouraging gambling-like behaviour among users. Recognizing the potential negative impact of these apps on young people and vulnerable sections of society, the government has taken a decisive step to regulate and, in some cases, ban certain fantasy apps that do not comply with stringent guidelines.** **The bill outlines a comprehensive framework for the classification, monitoring, and control of fantasy gaming platforms, emphasizing the distinction between skill-based games and games of chance. It mandates that all operators must obtain proper licenses, adhere to fair play policies, and implement robust age verification processes to protect minors. Those apps found promoting addictive behaviours or failing to meet transparency standards face penalties, including permanent bans.** **Parliamentarians highlighted the need to protect consumers from financial losses and exploitation while ensuring that legitimate skill-based gaming continues to grow within a regulated environment. The bill also proposes collaboration between central and state governments to enforce the rules effectively.** **Experts believe that, if implemented well, the legislation will curb the misuse of fantasy apps and foster a safer digital gaming ecosystem. However, the success of this bill depends heavily on strict enforcement, awareness campaigns, and cooperation from stakeholders including tech companies, regulators, and users alike.** **Choose the word that is closest in meaning to "stringent" as used in the passage:** **a)** Lenient ✗ **b)** Strict ✓ **c)** Flexible ✗ **d)** Casual ✗
Explanation:	**Explanation:** • The word **"stringent"** means very strict or severe, especially in rules or requirements. • In the passage, "stringent guidelines" refers to tough regulations imposed on fantasy sports apps. • Among the options, **"strict"** is the closest synonym. • Other options like "lenient," "flexible," and "casual" mean less strict or relaxed, which is opposite to "stringent."

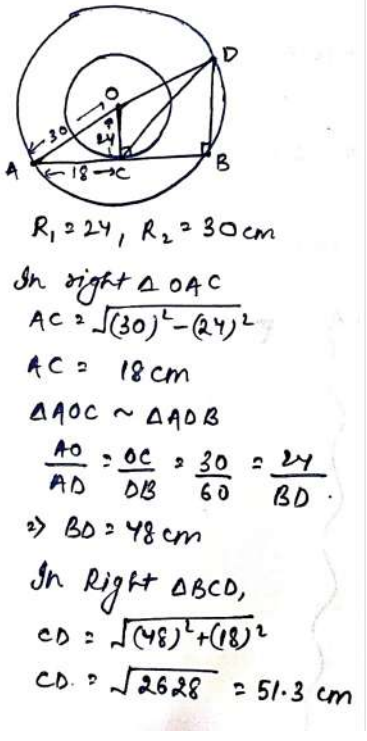
Q. 75	**Read the passage Carefully and answer the following questions:** **The recent bill passed in parliament aims to address the growing concerns surrounding fantasy sports and gaming apps, many of which have been accused of encouraging gambling-like behaviour among users. Recognizing the potential negative impact of these apps on young people and vulnerable sections of society, the government has taken a decisive step to regulate and, in some cases, ban certain fantasy apps that do not comply with stringent guidelines.** **The bill outlines a comprehensive framework for the classification, monitoring, and control of fantasy gaming platforms, emphasizing the distinction between skill-based games and games of chance. It mandates that all operators must obtain proper licenses, adhere to fair play policies, and implement robust age verification processes to protect minors. Those apps found promoting addictive behaviours or failing to meet transparency standards face penalties, including permanent bans.** **Parliamentarians highlighted the need to protect consumers from financial losses and exploitation while ensuring that legitimate skill-based gaming continues to grow within a regulated environment. The bill also proposes collaboration between central and state governments to enforce the rules effectively.** **Experts believe that, if implemented well, the legislation will curb the misuse of fantasy apps and foster a safer digital gaming ecosystem. However, the success of this bill depends heavily on strict enforcement, awareness campaigns, and cooperation from stakeholders including tech companies, regulators, and users alike.** **Which of the following are objectives of the recent bill passed in parliament regarding fantasy sports apps?** **1. To ensure all operators obtain proper licenses.** **2. To ban all digital gaming platforms entirely.** **3. To protect minors through strict age verification.** **4. To promote gambling activities under regulation.** **a) 1 and 3 only** ✔ **b) 2 and 4 only** ✘ **c) 3 only** ✘ **d) 1, 2, and 3 only** ✘
Explanation:	**Explanation:** • The bill's objectives include ensuring all fantasy sports app operators obtain proper licenses (point 1). • It also emphasizes protecting minors through strict age verification processes (point 3). • The bill does not aim to ban all digital gaming platforms entirely (point 2 is incorrect). • It does not promote gambling activities; instead, it seeks to prevent gambling-like behaviour (point 4 is incorrect). Therefore, only points 1 and 3 accurately reflect the bill's objectives.

Q. 76	**A player holds 21 cards of four suits, of which twelve are red and nine are black. The number of diamonds is thrice the number of spades, and the number of hearts is one third to the number of diamonds. How many clubs does he hold?** **a) 5** ✘ **b) 3** ✘ **c) 6** ✔ **d) 4** ✘
Explanation:	**Total cards = 21** **Red cards = 12 → Diamonds + Hearts** **Black cards = 9 → Clubs + Spades** Let: • Spades = S • Diamonds = D = 3S • Hearts = H = D / 3 = S • So, red cards = D + H = 3S + S = 4S ⇒ 4S = 12 ⇒ S = 3 Then D = 9, H = 3 Now black cards = Clubs + Spades = C + S = C + 3 = 9 ⇒ C = 6 **Answer: 6 clubs**

Q. 77	**T can finish a work in 16 days. T works alone for 4 days, then U joins T. The remaining work is completed in 6 more days. In how many days can U alone finish the whole work?** **a)** 16 days ✔ **b)** 130/7 days ✗ **c)** 12 days ✗ **d)** 120/7 days ✗
Explanation:	**Assume total work = LCM of 16 = 16 units** So, T's 1-day work = 16 ÷ 16 = **1 unit/day** **T works alone for 4 days** ⇒ Work done = 4 × 1 = **4 units** Remaining work = 16 − 4 = **12 units** **T and U together finish 12 units in 6 days** ⇒ Combined 1-day work = 12 ÷ 6 = **2 units/day** T's 1-day work = 1 unit So, U's 1-day work = 2 − 1 = **1 unit/day** **Total work = 16 units, U's rate = 1 unit/day** ⇒ U alone can finish in **16 days** **Answer: 16 days**

Q. 78	**Following are the ages (in years) of 5 people in a group:** **15, 18, 25, 32, 40** **What is the standard deviation of their ages (rounded to two decimal places)?** **a)** 9.14 ✔ **b)** 8.23 ✗ **c)** 10.23 ✗ **d)** 7.64 ✗
Explanation:	**Find the mean**: (15 + 18 + 25 + 32 + 40) / 5 => 130 / 5 = 26 **Find squared deviations from mean** $(15 - 26)^2 = 121$ $(18 - 26)^2 = 64$ $(25 - 26)^2 = 1$ $(32 - 26)^2 = 36$ $(40 - 26)^2 = 196$ **Find variance** (121 + 64 + 1 + 36 + 196) / 5 => 418 / 5 = 83.6 **Standard deviation** $\sqrt{83.6} \approx$ **9.14** **Answer: 9.14**

Q. 79	**A sold a mobile phone to B at a gain of 35% and B sold it to C at a loss of 20%. If C paid Rs. 6804 for it, how much did A pay (in Rs) for the phone?** **a)** 6,600 ✗ **b)** 4,800 ✗ **c)** 6,300 ✓ **d)** 7,200 ✗
Explanation:	A sells to B at a gain of 35% ⇒ B's cost price = 1.35x **B sells to C at a loss of 20%** ⇒ C's purchase price = 80% of B's cost price = 0.8 × 1.35x = 1.08x **C paid ₹6804** So, 1.08x = 6804 ⇒ x = 6804 ÷ 1.08 = ₹6300 **Answer: A paid ₹6300 for the phone**

Q. 80	**The radii of two concentric circles, with centre O, are 24 cm and 30 cm. Chord AB of the larger circle is tangent to the smaller circle at point C and AD is the diameter of the larger circle. What is the length of CD?** **a)** 54.8 ✗ **b)** 51.3 ✓ **c)** 56.2 ✗ **d)** 48.6 ✗
Explanation:	 $R_1 = 24,\ R_2 = 30\ cm$ In right $\triangle OAC$ $AC = \sqrt{(30)^2-(24)^2}$ $AC = 18\ cm$ $\triangle AOC \sim \triangle ADB$ $\frac{AO}{AD} = \frac{OC}{DB} = \frac{30}{60} = \frac{24}{BD}$ $\Rightarrow BD = 48\ cm$ In Right $\triangle BCD$, $CD = \sqrt{(48)^2+(18)^2}$ $CD = \sqrt{2628} = 51.3\ cm$

Q. 81	**A sum of ₹48,754 is divided among P, Q and R such that P receives 25% less than Q and Q receives 60% more than R. The difference between P's share and Q's share is:** **a)** ₹5016 ✗ **b)** ₹5264 ✗ **c)** ₹5132 ✓ **d)** ₹5464 ✗
Explanation:	Let R = ₹x ⇒ Q = 1.6x ⇒ P = 0.75 × 1.6x = 1.2x Total = P + Q + R = 1.2x + 1.6x + x = 3.8x ⇒ 3.8x = ₹48,754 ⇒ x = ₹12,830 Q = ₹20,528, P = ₹15,396 **Difference = ₹5,132**

Q. 82	**The graphs of the equations 2x - 3y + 1 = 0 and x + y - 5 = 0 intersect at P(a, b).** **Find the value of $(a^2 + b^2 - ab) / (a^2 - b^2 + ab)$.** **a)** 179 / 261 ✗ **b)** 379 / 187 ✗ **c)** 237 / 453 ✗ **d)** 163 / 229 ✓
Explanation:	**Solve the system to find (a, b)** From equation 2: x + y = 5 ⇒ y = 5 – x Substitute into equation 1: 2x − 3(5 − x) + 1 = 0 ⇒ 2x − 15 + 3x + 1 = 0 ⇒ 5x − 14 = 0 ⇒ x = 14/5 Then y = 5 − 14/5 = 11/5 So, a = 14/5, b = 11/5 **Step 2: Compute the expression** Let's plug into: $(a^2 + b^2 − ab) / (a^2 − b^2 + ab)$ Numerator: $(14^2 + 11^2 − 14×11) / 25 = (196 + 121 − 154) / 25 = 163 / 25$ Denominator: (196 − 121 + 154) / 25 = 229 / 25 Final value: (163 / 25) ÷ (229 / 25) = 163 / 229 **Answer: 163 / 229**

Q. 83	**The ratio of the investments of A and B in a business is 9 : 5, and the ratio of their profits at the end of a year is 3 : 4. If A invested the money for 10 months then for how much time (in months) has B invested his money?** **a)** 12 ✗ **b)** 21 ✗ **c)** 24 ✓ **d)** 18 ✗
Explanation:	(Profit ∝ capital × time) ⇒ 90 / 5x = 3 / 4 ⇒ (90 × 4) = (3 × 5x) ⇒ 360 = 15x ⇒ x = 24

Q. 84

A certain sum of money becomes 81 times of itself in 4 years compounded annually. The rate of interest per annum is:

a) 300% ✗

b) 100% ✗

c) 150% ✗

d) 200% ✓

Explanation:

$A = P\left(1+\frac{R}{100}\right)^n$

$81P = P\left(1+\frac{R}{100}\right)^4$

$\sqrt[4]{(81)} = 1+\frac{R}{100}$

$3-1 = \frac{R}{100}$

$\Rightarrow R = 200\%$

Q. 85

If $\frac{(\cos^6\theta+\sin^6\theta-1)(\tan^2\theta+\cot^2\theta+2)+2}{(\sec\theta+\tan\theta)(\sec\theta-\tan\theta)^2\cos\theta} = \frac{k}{1-k}, 0° < \theta < 90°$, then k = ?

a) sinθ ✗

b) cosθ ✗

c) secθ ✗

d) cosecθ ✓

Explanation:

$\frac{(\cos^6\theta+\sin^6\theta-1)(\tan^2\theta+\cot^2\theta+2)+2}{(\sec\theta+\tan\theta)(\sec\theta-\tan\theta)^2\cos\theta}$

$\frac{(1-3\cos^2\theta\sin^2\theta-1)(\tan\theta+\cot\theta)^2+2}{(\sec^2\theta-\tan^2\theta)(\sec\theta-\tan\theta)\cos\theta}$

$\Rightarrow \frac{(-3\cos^2\theta\sin^2\theta)\left(\frac{\sin\theta}{\cos\theta}+\frac{\cos\theta}{\sin\theta}\right)^2+2}{\sec\theta\times\cos\theta-\tan\theta\times\cos\theta}$

$\Rightarrow \frac{\left(-3\cos^2\theta\sin^2\theta\times\frac{1}{\sin^2\theta\times\cos^2\theta}\right)+2}{1-\sin\theta}$

$\Rightarrow \frac{-1}{1-\sin\theta} \Rightarrow \frac{1}{\sin\theta-1}$

$\Rightarrow \frac{1}{\frac{1}{\operatorname{cosec}\theta}-1}$; $\frac{\operatorname{cosec}\theta}{1-\operatorname{cosec}\theta} = \frac{k}{1-k}$

$\therefore k = \operatorname{cosec}\theta$

Q. 86	**A vendor decided to sell his goods by setting the selling price of 15 mangoes which is same as the cost price of 18 mangoes. The profit percentage on SP is _____.** **a)** 40% ✗ **b)** 20% ✗ **c)** 16.66% ✓ **d)** 10% ✗
Explanation:	=> 15×SP = 18×CP => SP/CP = 6/5 => Profit% on SP = (1/6)×100 => 16.66%

Q. 87	**ABC and PQR are two similar triangles whose areas are, respectively, 48 cm^2 and 64 cm^2. If PQ = 8 cm, then what is the value of AB?** **a)** $4\sqrt{3}$ cm ✓ **b)** $2\sqrt{14}$ cm ✗ **c)** 7 cm ✗ **d)** 9 cm ✗
Explanation:	Given: Area of triangle ABC = 48 cm^2 Area of triangle PQR = 64 cm^2 PQ = 8 cm Triangles are similar with ∠C = ∠R Concept: In similar triangles, $(Area_1 / Area_2) = (Side_1 / Side_2)^2$ So, $(AB / PQ)^2 = 48 / 64$ ⇒ $(AB / 8)^2 = 3 / 4$ ⇒ $AB / 8 = \sqrt{(3/4)} = \sqrt{3} / 2$ ⇒ $AB = 8 \times (\sqrt{3} / 2) = 4\sqrt{3}$ Answer: $4\sqrt{3}$ cm

Q. 88	**In a 1000 metres race between Bhawna and Jugnu, Bhawna starts 275 metres ahead of Jugnu, still, Jugnu wins the race by reaching the final point of the race when Bhawna is 125 metres behind the final point of the race. What is the ratio of the speeds of Jugnu and Bhawna?** **a)** 3 : 4 ✗ **b)** 4 : 3 ✗ **c)** 3 : 5 ✗ **d)** 5 : 3 ✓
Explanation:	Distance covered by Jugnu : Distance covered by Bhawna = 1000 : {1000-(275+125)} Distance covered by Jugnu : Distance covered by Bhawna = 1000 : 600 => 5 : 3 Speed of Jugnu : Speed of Bhawna = 5 : 3 (As time is constant, Distance is directly proportional to speed)

Q. 89	**The average ages of kishore, his wife and their child 7 years ago was 39 years and that of his wife and their child 10 years ago was 31 years. Find the present age of kishore.** **a)** 50 years ✗ **b)** 56 years ✓ **c)** 48 years ✗ **d)** 52 years ✗
Explanation:	Let Kishore's present age = K From the first condition: 7 years ago, total age of Kishore, Wife, Child = 39 × 3 = 117 Present age of Kishore, his wife and children ⇒ K + W + C = 117 + 21 => 138 ...(i) From the second condition: 10 years ago, Wife + Child = 31 × 2 = 62 Present age of wife and the child, ⇒ W + C = 62 + 20 => 82 ...(ii) Subtract (ii) from (i): K = 138 − 82 = **56 years** Therefore, present age of Kishore is 56 years.

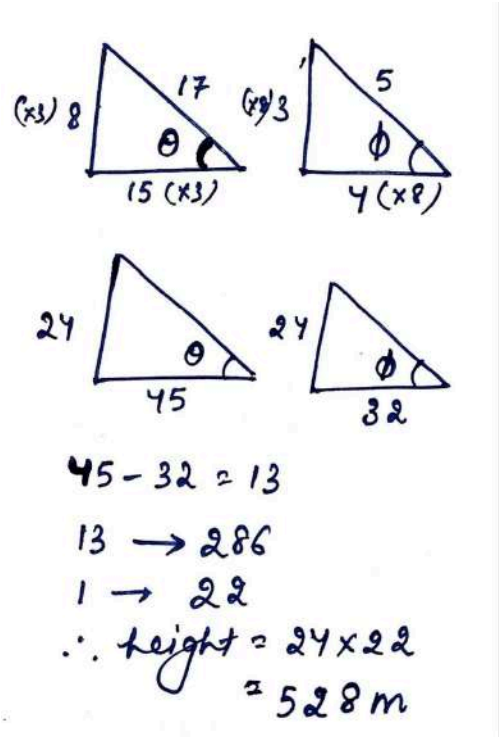
Q. 90	**A can do a piece of work in 8 days of 5 hours each, and B can do it in 7 days of 9 hours each. How long will they take to complete the work, working together 24/5 hours a day?** **a)** $7\frac{10}{103}$ days ✗ **b)** $5\frac{10}{103}$ days ✓ **c)** 525 days ✗ **d)** 455 days ✗
Explanation:	$A \times 8 \times 5 = B \times 7 \times 9$ $\Rightarrow A/B = 63/40$ $63 \times 8 \times 5 = (63+40) \times 24/5 \times x$ $x = \frac{525}{103} \Rightarrow 5\frac{10}{103}$

Q. 91	If $\sqrt{7+\frac{r}{324}}=\frac{19}{18}$, then the value of r = _____. a) -1907 ✔ b) 1907 ✘ c) -1847 ✘ d) 2107 ✘
Explanation:	Given: $\sqrt{(7 + r/324)} = 19/18$ Square both sides $\Rightarrow 7 + r/324 = (19/18)^2 = 361/324$ Subtract 7 from both sides $\Rightarrow r/324 = 361/324 - 7$ $\Rightarrow r/324 = (361 - 2268) / 324 = -1907 / 324$ $\Rightarrow r = -1907$ **Correct answer: −1907**

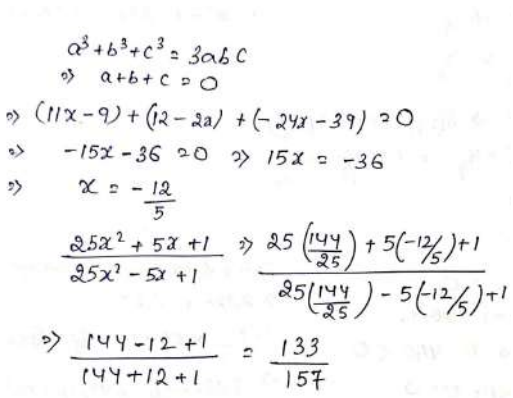
Q. 92	Two years ago, the population of a village was 56200. Due to migration to cities, the population of the village decreased by 20% in the first year. In the following year the population of the village increased by 30% because lots of new job opportunities became available in the village. What is the present population of the village? a) 58448 ✔ b) 52864 ✘ c) 62346 ✘ d) 55068 ✘
Explanation:	Initial population (2 years ago) = 56200 56200 * 4/5 * 13/10 = 58448

Q. 93	The diameter of a sphere is equal to the side of a square of area 784 cm^2. Find the approximate volume (in cm^3) of the sphere. (use π = 22/7) a) 14617.4 cm^3 ✘ b) 15987.8 cm^3 ✘ c) 11498.6 cm^3 ✔ d) 13792.6 cm^3 ✘
Explanation:	Step 1: Side of square = $\sqrt{784}$ = 28 cm ⇒ Diameter of sphere = 28 cm ⇒ Radius = 28 / 2 = 14 cm Step 2: Volume of sphere = $(4/3) \times \pi \times r^3$ $= (4/3) \times (22/7) \times 14^3$ $= (4/3) \times (22/7) \times 2744$ Now simplify: $(4 \times 22 \times 392) / 3$ = 34496 / 21 = 11498.6 cm^3

Q. 94	The radius and the height of a cone are 4.9 cm and 12 cm, respectively. The cone is cut from the middle perpendicular to base into two equal parts. What is the approx. volume (in cm^3) of one such part? (Take $\pi = 22/7$.) **a)** 148.76 ✗ **b)** 150.92 ✓ **c)** 144.18 ✗ **d)** 146.44 ✗
Explanation:	Radius = 4.9 cm Height = 12 cm $\pi = 22/7$ Volume of cone = $(1/3) \times \pi \times r^2 \times h$ $= (1/3) \times (22/7) \times (4.9)^2 \times 12$ $= (1/3) \times (22/7) \times 24.01 \times 12$ $= (1/3) \times (22/7) \times 288.12$ $= 301.84\ cm^3$ (approx) Volume of one part = $301.84 \div 2 =$ **150.92 cm^3** **Answer: 150.92 cm^3**

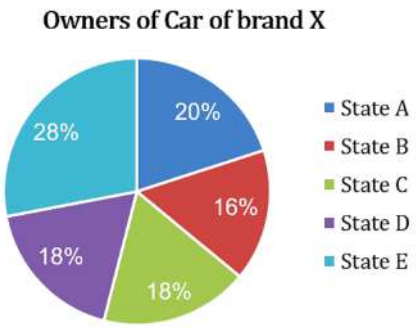
Q. 95	The angle of elevation 'θ' of the top of a tower at a point on the ground is such that $\cos\theta = 15/17$. When the point is moved 286 m towards the tower, the angle of elevation becomes 'ø' in such a way that $\sin\phi = 3/5$. The height (in m) of the tower is: **a)** 462 ✗ **b)** 528 ✓ **c)** 572 ✗ **d)** 616 ✗
Explanation:	

Q. 96	**The smallest positive number that should be subtracted from 10 and 15, so that 20 is the third proportion to them is:** **a)** 3 ✗ **b)** 4 ✗ **c)** 5 ✓ **d)** 2 ✗
Explanation:	$(10-x):(15-x)=(15-x):20$ $\Rightarrow (10-x)(20)=(15-x)^2$ $\Rightarrow 200-20x=225-30x+x^2$ $\Rightarrow 0=x^2-10x+25$ $x^2-10x+25=0$ $(x-5)^2=0 \Rightarrow x=5$

Q. 97	If $(11x-9)^3+8(6-x)^3-27((8x+13))^3$ $=18(9-11x)(6-x)(8x+13)$, then the value of $\frac{25x^2+5x+1}{25x^2-5x+1}$. **a)** 157/133 ✗ **b)** 171/196 ✗ **c)** 133/157 ✓ **d)** 196/171 ✗
Explanation:	

Q. 98

The following pie chart gives the information about the percentage of brand X car owners in five different states out of 4 crore car owners in each of these states.



If the respective ratio of the total number of brand X car owners and the total number of brand P car owners in State E is 10 : 4, then the total number of brand P car owners in State E is what percentage less than the total number of brand X car owners in State A?

a) 63% ✗

b) 65% ✗

c) 44% ✓

d) 59% ✗

Explanation:

Brand X Cars in State E
⇒ 4,00,00,000 × 28 %
= 1,12,00,000
Brand X : Brand P = 10 : 4
10 → 1,12,00,000
4 → 44,80,000
Brand P Cars in state E = 44,80,000
Brand X cars in State A = 4 crore × 20 %
= 80,00,000
44,80,000 : 80,00,000
⇒ 56 : 100
% less = $\frac{100 - 56}{100} \times 100$ = 44 % (Ans)

Q. 99

A man covered 930 km in 15 hours and 30 minutes. During the first 8 hours, his average speed was 45 km/h. The next lap of journey was covered at 60 km/h in 3 hours. To reach the destination on time, he increased his speed to 90 km/h for another 3 hours. What was his speed (in km/h) during the last 1.5 hour?

a) 96 ✗

b) 100 ✗

c) 80 ✓

d) 105 ✗

Explanation:

Total time = 15.5 hours
Distance = 930 km
First 8 hrs @ 45 km/h → 45 × 8 = 360 km
Next 3 hrs @ 60 km/h → 60 × 3 = 180 km
Next 3 hrs @ 90 km/h → 90 × 3 = 270 km
Total covered = 360 + 180 + 270 = 810 km
Remaining = 930 − 810 = 120 km
Time left = 15.5 − (8 + 3 + 3) = 1.5 hrs
Required speed = 120 ÷ 1.5 = **80 km/h**
Answer: 80 km/h

Q. 100

The following table shows the marks obtained by a group of students in a test: Calculate.

Marks (x)	No. of Students (f)
10	2
20	3
30	5
40	4
50	6

Find the following 3rd Quartile.

a) 40 ✗

b) 30 ✗

c) 50 ✓

d) 45 ✗

Explanation:

Total students, n = 2 + 3 + 5 + 4 + 6 = 20

For 3rd quartile we need, 3 *(n+1)/4 th term = 3 * 21/4 = 15.75th term.

15 to 20 all terms are 50.

So 3rd quartile is 50