Zip Preview fo Mapping Id (796167) ENGLISH

Q.1 The term cultural lag was introduced by:

A. Karl Marx
B. W.F. Ogburn
C. Emile Durkheim
D. Max Weber

Answer: B

Sol:
The correct answer is **b) W.F. Ogburn.**
Cultural lag occurs when material culture changes faster than non-material culture (values, beliefs).

Q.2 The Id, Ego, and Superego concepts were proposed by:

A. Jean Piaget
B. Sigmund Freud
C. Alfred Binet
D. John Dewey

Answer: B

Sol:
The correct answer is **b) Sigmund Freud.**
Freud's psychoanalytic theory explains personality through instincts (Id), reality (Ego), and morality (Superego).

Q.3 A baby learns through senses and motor actions like touching, grasping, and looking. This describes which of Piaget's stages?

A. Pre-operational stage
B. Sensorimotor stage
C. Concrete operational stage
D. Formal operational stage

Answer: B

Sol:
The correct answer is **b) Sensorimotor stage.**
Learning happens through trial and error with direct physical interaction with the environment.

Q.4 The relation between education and psychology can be best described as:

A. Independent fields
B. Education applies psychology in practice
C. Psychology depends fully on education
D. No relation

Answer: B

Sol:
The correct answer is **b) Education applies psychology in practice.**
Psychology helps teachers understand learning, motivation, behavior, and development.

Q.5 The relation between education and culture is:

A. Education is an instrument to transmit culture
B. Culture is unrelated to education
C. Education destroys culture
D. Education ignores traditions

Answer: A

Sol:
The correct answer is **a) Education is an instrument to transmit culture.**
Schools pass on cultural values, traditions, and social norms to new generations.

Q.6 **"Man is born free, but everywhere he is in chains" is a famous statement from:**

A. Rousseau's Emile
B. Rousseau's The Social Contract
C. Locke's Essay on Human Understanding
D. Dewey's Democracy and Education

Answer: B

Sol:
The correct answer is **b) Rousseau's The Social Contract.**
Advocated freedom, natural rights, and collective agreements in society.

Q.7 **Which of the following is a group method of teaching?**

A. Brainstorming
B. Silent reading
C. Dictation
D. Individual assignment

Answer: A

Sol:
The correct answer is **a) Brainstorming.**
Involves collaborative idea generation, improving problem-solving and teamwork skills.

Q.8 **Which of the following is most related to logical reasoning in teaching?**

A. Inductive and deductive methods
B. Lecture method
C. Storytelling method
D. Drill method

Answer: A

Sol:
The correct answer is **a) Inductive and deductive methods.**
These methods involve systematic reasoning, moving from examples to rules (inductive) or rules to examples (deductive).

Q.9 **Who is considered the father of modern psychology?**

A. Sigmund Freud
B. Wilhelm Wundt
C. B.F. Skinner
D. William James

Answer: B

Sol:

The correct answer is **b) Wilhelm Wundt.**
Established the first psychology lab (1879) in Leipzig, Germany; focused on introspection.

Q.10 Who is known as the father of progressive education and emphasized "learning by doing"?

A. John Dewey
B. Jean Piaget
C. Rousseau
D. Pestalozzi

Answer: A

Sol:

The correct answer is **a) John Dewey**
Promoted pragmatism; believed education must be practical, democratic, and experience-based.

Q.11 Piaget's first stage of cognitive development is:

A. Pre-operational stage
B. Concrete operational stage
C. Formal operational stage
D. Sensorimotor stage

Answer: D

Sol:

The correct answer is **d) Sensorimotor stage.**
In this stage (0–2 years), infants learn through senses and motor activities like grasping, looking, and touching.

Q.12 Which psychology school believes in "the whole is greater than the sum of its parts"?

A. Structuralism
B. Behaviorism
C. Gestalt psychology
D. Psychoanalysis

Answer: C

Sol:

The correct answer is **c) Gestalt psychology.**
Focuses on patterns and perception, not isolated elements of experience

---

Q.13 The word Psychology is derived from which language?

A. Latin
B. Sanskrit
C. Greek
D. German

Answer: C

Sol:

The correct answer is **c) Greek.**
Derived from Psyche (soul/mind) + Logos (study), meaning "study of the mind."

Q.14 The literature-based method in teaching mainly develops:

A. Scientific skills
B. Language and imagination
C. Physical strength
D. Mathematical ability

Answer: B

Sol:

The correct answer is **b) Language and imagination.**
Literature exposes learners to stories, creativity, vocabulary, and moral values.

Q.15 The famous book Emile is written by:

A. Pestalozzi
B. Rousseau
C. John Locke
D. Montessori

Answer: B

Sol:

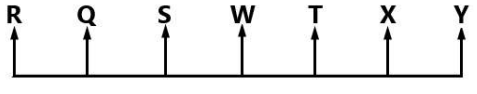
The correct answer is **b) Rousseau.**
In Emile, Rousseau emphasized natural education and learning through experience.

Q.16 Seven students, Q, R, S, T, W, X and Y, are sitting in a straight line facing north. Only R sits to the left of Q. Only four people sit between R and X. Only W sits between S and T, and S is not an immediate neighbour of X. How many people sit between Y and S?

A. Three
B. Four
C. Two
D. One

Answer: A

Sol: **Given**:
Seven students, Q, R, S, T, W, X and Y, are sitting in a straight line facing north.
Only R sits to the left of Q.
Only four people sit between R and X.
Only W sits between S and T, and S is not an immediate neighbour of X.
From the given information seating arrangement will be.



Three people sit between Y and S.
Thus, correct option is (a).

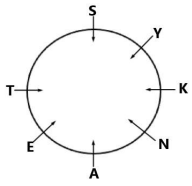
Q.17 Y, A, K, S, E, N, and T are sitting around a circular table facing the centre. A sits second to the left of K. S sits second to the right of K. Only one person sits between S and E. T sits second to the right of Y. Only one person sits between E and N. Who sits to the immediate left of E?

A. A
B. S
C. T
D. K

Answer: C

Sol: **Given**:
Y, A, K, S, E, N, and T are sitting around a circular table facing the centre.
A sits second to the left of K.
S sits second to the right of K.

Only one person sits between S and E.
T sits second to the right of Y.
Only one person sits between E and N.
From the given information seating arrangement will be.



T sits to the immediate left of E.
Thus, correct option is (c).

Q.18 Six identical boxes of different colours, Purple, Black, Yellow, Green, Cyan and Magenta, are arranged one over the other in the following manner: Only three boxes are kept between the Cyan and Purple boxes. The Yellow box is kept at the bottom most position. Only the Black colour box is kept between the Magenta and Green colour boxes. What coloured box is kept at the third position from the top?

A. Cyan
B. Magenta
C. Green
D. Black

Answer: D

Sol: **Given**:
Six identical boxes of different colours, Purple, Black, Yellow, Green, Cyan and Magenta, are arranged one over the other in the following manner:
Only three boxes are kept between the Cyan and Purple boxes.
The Yellow box is kept at the bottom most position.
Only the Black colour box is kept between the Magenta and Green colour boxes.
From the given information arrangement will be.

Order	Colours
6	Cyan
5	Green
4	Black
3	Magenta
2	Purple
1	Yellow

Black coloured box is kept at the third position from the top.
Thus, correct option is (d).

Q.19 In a certain code language,
'living inside houses' is coded as 'ca de mo',
'snow houses built' is coded as 'ni tp ca',
'living with snow man' is coded as 'vr hs ni mo'.
(Note: All codes are two letter codes only)
If 'built with brick' is coded as 'vr aj tp', what is the probable code for 'brick man' in the given code language?

A. mo to
B. hs aj
C. vr ni
D. aj vr

Answer: B

Sol: **Given**: In a certain code language,
'living inside houses' is coded as 'ca de mo',
'snow houses built' is coded as 'ni tp ca',
'living with snow man' is coded as 'vr hs ni mo'.
If 'built with brick' is coded as 'vr aj tp'.

living inside houses = ca de mo

snow houses built = ni tp ca

living with snow man = vr hs ni mo

built with brick = vr aj tp

So, the code of '**brick man**' is '**hs aj**'.
Thus, correct option is (b).

Q.20 In the following question, find the missing number from the given series.
77, 85, 93, 101, 109, ?

A. 117
B. 119
C. 116
D. 118

Answer: A

Sol: **Given**: 77, 85, 93, 101, 109, ?
Logic: Numbers are increasing + 8 place.
77 + 8 = 85
85 + 8 = 93
93 + 8 = 101
101 + 8 = 109
109 + 8 = **117**
So, the missing term is **117**.
Thus, correct option is (a).

Q.21 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
PRU, NPS, LNQ, JLO, ?

A. HJM
B. HIN
C. HJN
D. HIM

Answer: A

Sol: **Given**: PRU, NPS, LNQ, JLO, ?

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letters are decreasing - 2 place.
P - 2 = N, N - 2 = L, L - 2 = J, J - 2 = **H**
R - 2 = P, P, P - N, N - 2 = L, L - 2 = **J**
U - 2 = S, S - 2 = Q, Q - 2 = O, O - 2 = **M**
So, the missing term is **HJM**.
Thus, correct option is (a).

Q.22 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statements.
Statements:
1. All priests are teachers.

2. Some priests are singers.

Conclusions:

I. Some singers are teachers.

II. Some singers are priests.

A. Only conclusion I follows.
B. Both conclusions I and II follows.
C. Only conclusion II follows.
D. Neither conclusion I nor II follows.

Answer: B

Sol: **Statements**:

1. All priests are teachers.
2. Some priests are singers.

From the given statements possible Venn diagram will be.

Conclusions:

I. Some singers are teachers. (**True**, all priests are teachers and some priests are singers, that means some singers are priests).

II. Some singers are priests. (**True**, from statement some priests are singers, that means some singers are priests).

So, **Both conclusions I and II follows.**

Thus, correct option is (b).

Q.23 $66 \div \left[67 - \left\{43 - \left(17 - \frac{117}{9 \times 4}\right)\right\}\right] = ?$

A. $\frac{264}{151}$
B. $\frac{154}{121}$
C. $\frac{265}{113}$
D. $\frac{117}{35}$

Answer: A

Sol: **Given:**

$66 \div \left[67 - \left\{43 - \left(17 - \frac{117}{9 \times 4}\right)\right\}\right]$

Concept Used:

Operation preference wise	**Symbol**
Brackets	[], {}, ()
Orders, of	^{x} (power), √ (root), of
Division	÷
Multiplication	×
Addition	+

Subtraction	-

Solution:

$66 \div \left[67 - \left\{43 - \left(17 - \frac{117}{9 \times 4}\right)\right\}\right]$

$= 66 \div \left[67 - \left\{43 - \left(17 - \frac{13}{4}\right)\right\}\right]$

$= 66 \div \left[67 - \left\{43 - \left(\frac{68 - 13}{4}\right)\right\}\right]$

$= 66 \div \left[67 - \left\{\frac{172 - 55}{4}\right\}\right]$

$= 66 \div \left[67 - \left\{\frac{117}{4}\right\}\right]$

$= 66 \div \left[\frac{268 - 117}{4}\right]$

$= 66 \div \left[\frac{151}{4}\right]$

$= 66 \times \frac{4}{151}$

$= \frac{264}{151}$

Q.24 $119 \div \left[22 - \left\{90 \div \left(23 - \frac{105}{7 \times 3}\right)\right\}\right] = ?$

A. 4
B. 12
C. 3
D. 7

Answer: D

Sol: **Given:**

$119 \div \left[22 - \left\{90 \div \left(23 - \frac{105}{7 \times 3}\right)\right\}\right]$

Concept Used:

Operation preference wise	**Symbol**
Brackets	[], {}, ()
Orders, of	^{x} (power), √ (root), of
Division	÷
Multiplication	×

Addition +

Subtraction -

Solution:

$$119 \div \left[22 - \left\{90 \div \left(23 - \frac{105}{7 \times 3}\right)\right\}\right]$$

$$= 119 \div [22 - \{90 \div (23 - 5)\}]$$

$$= 119 \div [22 - \{90 \div (18)\}]$$

$$= 119 \div [22 - \{5\}]$$

$$= 119 \div [17]$$

$$= 7$$

Q.25 Evaluate: 41 - [36 - {48 ÷ 2 - (5 - 10 ÷ 2) ÷ 3}]

A. 28
B. 30
C. 31
D. 29

Answer: D

Sol: **Given:**

41 - [36 - {48 ÷ 2 - (5 - 10 ÷ 2) ÷ 3}]

Concept Used:

Operation preference wise	Symbol
Brackets	$[], \{\}, ()$
Orders, of	^{x}(power), $\sqrt{}$(root), of
Division	$\div$
Multiplication	$\times$
Addition	$+$
Subtraction	$-$

Solution:

41 - [36 - {48 ÷ 2 - (5 - 5) ÷ 3}]

= 41 - [36 - {48 ÷ 2 - 0 ÷ 3}]

= 41 - [36 - 24]

= 41 - 12 = 29

Q.26 If difference between Compound Interest & Simple Interest on a certain sum of money for 2 yrs. @ 5% p.a. is Rs.122. Find the sum?

A. Rs. 44000
B. Rs. 25000
C. Rs. 48800
D. Rs. 17000

Answer: C

Sol: **Given:**
Compound Interest (CI) - Simple Interest (SI) for 2 years = Rs. 122

Rate of interest = 5% per annum.

Formula Used:

The difference between CI and SI for 2 years can be calculated using the formula:

Difference = $\frac{P \times R^2}{100^2}$

Where:

P is the principal, R is the rate of interest.

Solution:

Applying the formula;

$122 = \frac{P \times 5^2}{100^2}$

$122 = \frac{P \times 25}{100 \times 100}$

$122 = \frac{25P}{100 \times 100}$

$122 = \frac{P}{4 \times 100}$

$P = 122 \times 400 = 48800$

Therefore, the sum of money is Rs. 48800

Q.27 Siddhant invested some money in HDFC at 4% per annum rate of interest. What would be the corresponding simple interest (in Rs.) if after 2 years, Siddhant got Rs. 255 as compound interest, considering annual compounding?

A. 245
B. 250
C. 265
D. 260

Answer: B

Sol: **Given:**
Principal (P) = ?
Rate of Interest (R) = 4% per annum
Time (T) = 2 years
Compound Interest (CI) = Rs. 255 (annual compounding)
Formula Used:
$CI = P\left[\left(1 + \frac{R}{100}\right)^T - 1\right]$
$SI = \frac{P \times R \times T}{100}$
Solution:
$255 = P\left[\left(1 + \frac{4}{100}\right)^2 - 1\right]$

$\Rightarrow \quad 255 = P \times 0.0816$

$P = \frac{255}{0.0816} = 3125$

$$SI = \frac{3125 \times 4 \times 2}{100} = 250$$

Q.28 What is the desert of Rajasthan known as?

A. Gobi
B. Sahara
C. Kalahari
D. Thar

Answer: D

Sol: The correct answer is (d) Thar.
Explanation:
· The desert of Rajasthan is known as the Thar Desert, also known as the Great Indian Desert.
· It is the world's 17th largest desert and the 9th largest subtropical desert.
· The Thar Desert covers a significant portion of Rajasthan, extending into neighboring states and into Pakistan.
Information Booster:
· The Thar Desert is characterized by sand dunes, scrubland, and is a major part of the semi-arid climate zone.
· Despite its arid conditions, it supports a diverse ecosystem and a vibrant local culture.
· The Indira Gandhi Canal has been instrumental in providing water to parts of the Thar Desert, enabling agriculture and supporting human settlements.
Additional Knowledge: (a) Gobi: The Gobi Desert is located in East Asia, primarily in Mongolia and China. (b) Sahara: The Sahara is the world's largest hot desert and is located in North Africa. (c) Kalahari: The Kalahari Desert is a large, semi-arid sandy savanna in Southern Africa.

Q.29 A merchant offers a discount of 25% on the list price, due to which she makes a loss of 13%. What percent profit or percent loss will she make if she sells at a discount of 10% of the list price?

A. 4.8% Loss
B. 4.8% Profit
C. 4.4% Profit
D. 4.4% Loss

Answer: C

Sol: **Given:**
Discount = 25% leads to 13% loss

Formula used:

Selling Price (SP) = LP - Discount

Cost Price (CP) = SP ÷ (1 - Loss%)

Profit% = $\frac{SP - CP}{CP} \times 100$

Solution:

Let List Price (LP) = ₹100

For 25% discount:
SP = ₹100 - ₹25 = ₹75

13% loss

CP = SP ÷ 0.87 = ₹75 ÷ 0.87 = ₹86.21

Now, for 10% discount:

SP = ₹100 - ₹10 = ₹90

Profit% = $\frac{(₹90 - ₹86.21)}{₹86.21} \times 100 = \frac{3.79}{86.21} \times 100 \approx 4.4\%$

Q.30 If height of an equilateral triangle is √3 cm, then its perimeter will be:

A. 7 cm
B. 6 cm
C. 5 cm
D. 5√3 cm

Answer: B

Sol: **Given:**
Height of an equilateral triangle = $\sqrt{3}\,\text{cm}$
Formula used: $\text{Height} = \frac{\sqrt{3}}{2}a$
Solution:
$\frac{\sqrt{3}}{2}a = \sqrt{3} \Rightarrow a = \frac{2 \times \sqrt{3}}{\sqrt{3}} = 2\,\text{cm}$

$\text{Perimeter} = 3a = 3 \times 2 = 6\,\text{cm}$
Correct answer is (b) **6 cm.**

Q.31 In a race, an athlete covers a distance of 312 m in 156 sec in the first lap. He covers the second lap of the same length in 52 sec. What is the average speed (in m/sec) of the athlete?

A. 3
B. 2
C. 6
D. 12

Answer: A

Sol: **Given:**
Distance covered in each lap = 312 m

Time for the first lap = 156 sec

Time for the second lap = 52 sec

Formula Used:

Average speed = $\frac{\text{Total distance}}{\text{Total time}}$

Solution:
Total distance = Distance of first lap + Distance of second lap
Total distance = 312 m + 312 m = 624 m

Total time = Time for first lap + Time for second lap
Total time = 156 sec + 52 sec = 208 sec

Average speed = $\frac{624}{208}$ = 3 m/sec

The average speed of the athlete is 3 m/sec.

Q.32 One fan is available for Rs. 1500 down payment and Rs. 440 in 5 equal monthly installments. If 24% annual interest is charged under the installment plan, the cash value of the fan will be.

A. Rs. 3580
B. Rs. 3500
C. Rs. 3600
D. Rs. 3680

Answer: A

Sol: **Given:**
Down payment = ₹1500
5 equal monthly installments = ₹440 each
Interest = 24% p.a. = 2% per month
Concept used :
Cash price = down payment + present value of the installment annuity (payments at month-end).
Formula used:

$$PV = A \times \frac{1-(1+r)^{-n}}{r}$$

Solution:

$$PV = 440 \times \frac{1-(1.02)^{-5}}{0.02}$$

$$(1.02)^5 = 1.10408$$

$$(1.02)^{-5} = 0.90573$$

$$1 - 0.90573 = 0.09427$$

$$\frac{0.09427}{0.02} = 4.7135$$

$$PV = 440 \times 4.7135 \approx 2073.9$$

Cash Value $= 1500 + 2073.9 = 3573.9 \approx$ ₹3580
Correct answer is (a) **3580.**

Q.33 Suresh alone can do a piece of work in 12 days and Vinay alone can do it in 16 days. Suresh and Vinay agreed to do it for ₹ 6400. With the help of Ram they finished the work in 6 days. How much should Ram be paid?

A. Rs. 1000
B. Rs. 800
C. Rs. 1200
D. Rs. 450

Answer: B

Sol: **Given:**
Suresh can do the work alone in 12 days.

Vinay can do the same work alone in 16 days.

Suresh, Vinay, and Ram together complete the work in 6 days.

Total earning from the work = ₹6400.

Solution:

Suresh's 1 day work = $\frac{1}{12}$

Vinay's 1 day work = $\frac{1}{16}$

Let Ram's 1 day work = $\frac{1}{x}$

Together, they complete the work in 6 days:

$6 \times (\frac{1}{12} + \frac{1}{16} + \frac{1}{x}) = 1$

$6 \times (\frac{4}{48} + \frac{3}{48} + \frac{1}{x}) = 1$

$6 \times (\frac{7}{48} + \frac{1}{x}) = 1$

$\frac{7}{8} + \frac{6}{x} = 1$

$\frac{6}{x} = 1 - \frac{7}{8} = \frac{1}{8}$

x = 48

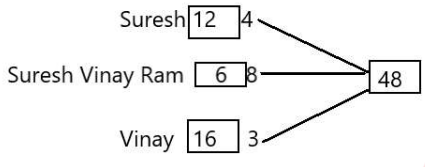
Ram's 1 day work = $\frac{1}{48}$

Ram's share in 6 days = $6 \times \frac{1}{48} = \frac{1}{8}$

Total payment = ₹6400

Ram's share = ₹6400 × $\frac{1}{8}$ = ₹800

Alternate Method:



Together Efficiency = 8

Ram Efficiency = 8 - (4 + 3) = 1 Unit

8 Unit = ₹6400

1 Unit = ₹800

Q.34 Who among the following is not appointed by the President of India?

A. Chief Minister of the State
B. Attorney General of India
C. Governor of the State
D. Chief Justice of India

Answer: A

Sol: The correct answer is: **(a) Chief Minister of the State**

Explanation:

· The **Chief Minister of a state** is **not appointed directly by the President**.
· He/She is appointed by the **Governor of the respective state**.
· The other three (Attorney General of India, Governor of a State, Chief Justice of India) are appointed by the **President of India**.

Information Booster:

· **Article 164:** Governor appoints the Chief Minister and other ministers.
· **Article 76:** Attorney General of India is appointed by the President.
· **Article 155:** Governor of a State is appointed by the President.
· **Article 124(2):** Chief Justice of India is appointed by the President.
· The President acts on the advice of the Council of Ministers in such appointments.

Additional Knowledge:

· **Attorney General of India:** Highest law officer, gives legal advice to Government of India.
· **Governor of the State:** Holds office usually for 5 years, represents the Union in states.
· **Chief Justice of India:** Head of the Indian judiciary and Supreme Court.

Q.35 When was the designation of the Governor General in India promoted as a Viceroy or Crown's representative?

A. Year 1935
B. Year 1919
C. Year 1833
D. Year 1858

Answer: D

Sol: **Correct Ans is (d) Year 1858**
Sol.

- In **1858**, the **designation of the Governor-General of India** was changed to **Viceroy of India**.
- This change was a direct consequence of the **Indian Rebellion of 1857**, also known as the **Sepoy Mutiny**.
- The British government took control of India directly from the **East India Company** after the rebellion, marking the beginning of the **British Raj.**
- The **Viceroy** acted as the **Crown's representative** in India, serving as the head of the colonial administration.
- The first **Viceroy of India** was **Lord Canning**, appointed in 1858.

Information Booster: Key Facts about the 1857 Revolt

- The **1857 Revolt**, also called the **Sepoy Mutiny**, was a major, but ultimately unsuccessful, uprising against the British East India Company's rule in India.
- In March 1857, Mangal Pandey, a sepoy in Barrackpore, had refused to use the cartridge and attacked his senior officers.
    - He was hanged to death on 8th April.
    - On 9th May, 85 soldiers in Meerut refused to use the new rifle and were sentenced to ten years' imprisonment.
- It began with the mutiny of **Indian soldiers (sepoys)** in the town of **Meerut** on **May 10, 1857**.
- The rebellion quickly spread across northern and central India, with key centers of revolt in **Delhi**, **Kanpur**, **Lucknow**, and **Jhansi.**
- The mutiny was sparked by grievances related to military practices, but it evolved into a broader anti-British rebellion involving civilian and royal support, such as that of **Rani Lakshmibai of Jhansi** and **Bahadur Shah Zafar**.
- The **British response** to the revolt was brutal, involving heavy reprisals and the eventual suppression of the rebellion by **1858**.
- The aftermath of the revolt led to the dissolution of the **East India Company** and the direct control of India by the **British Crown**, formalized by the **Government of India Act 1858**.

Q.36 The regulatory framework adopted by India between 1947 and 1990, often referred to as the "License Raj," aimed to direct economic activity. While it had certain intended benefits, what was a significant unintended negative consequence often associated with this system?

A. The creation of barriers to entry for new businesses potentially stifling innovation and leading to inefficiencies.
B. A significant reduction in corruption and bureaucratic delays in obtaining necessary approvals for economic activities.
C. A rapid increase in the quality and global competitiveness of Indian-made goods due to stringent quality control measures.
D. The fostering of a highly competitive market environment with numerous players in each industry.

Answer: A

Sol: The correct answer is: (a) The creation of barriers to entry for new businesses potentially stifling innovation and leading to inefficiencies.
Explanation:
• The "License Raj" (1947–1990) required businesses to obtain multiple government approvals to start or expand.

• It created a complex web of licenses, quotas, and regulations, which restricted competition.

• This led to inefficiency, low productivity, stifled innovation, and limited private sector growth.
Information Booster:

• License Raj = System of excessive government control on industries.

• Major laws: Industries (Development and Regulation) Act, 1951.

• Favored a few large business houses (e.g., Tatas, Birlas).

• Bureaucratic hurdles gave rise to rent-seeking and corruption. • Liberalisation reforms of 1991 dismantled most of this system.

Q.37 Which is the longest mountain range in the lesser Himalayas?

A. Dhauladhar range
B. Mahabharat range
C. Pir Panjal range
D. Shivalik range

Answer: C

Sol: The correct answer is **(c) Pir Panjal range**.
The Pir Panjal range is the longest mountain range in the Lesser Himalayas. It stretches across northern India and eastern Pakistan, covering parts of Jammu and Kashmir and Himachal Pradesh in India.
Key Features of the Pir Panjal Range:
Length: The Pir Panjal range extends over approximately 250 kilometers.
Location: It forms the southernmost range of the Greater Himalayas and lies to the north of the Kashmir Valley.
Significance:

- The range acts as a barrier between the Kashmir Valley and the rest of the Indian subcontinent.
- It is rich in biodiversity and has a significant role in the climate and water cycle of the region.
  Major Peaks: The highest peak of the Pir Panjal range is Mount Pumori (7,145 meters), located near the India-Pakistan border.

Other Options:

- **Dhauladhar Range:** Located in Himachal Pradesh, it is known for its scenic beauty but is not the longest range in the Lesser Himalayas.
- **Mahabharat Range:** Located in Nepal and parts of India, it is part of the central Himalayas and not the longest in the Lesser Himalayas.
- **Shivalik Range:** Also known as the Outer Himalayas, it lies at the base of the Greater Himalayas and is not considered part of the Lesser Himalayas.

ADDITIONAL INFORMATION:
The Himalayas are a vast mountain range in South Asia, stretching across five countries: India, Nepal, Bhutan, China, and Pakistan. They form the northern boundary of the Indian subcontinent, and are the highest mountain range in the world, home to the world's highest peak, Mount Everest (8,848 meters). The range is divided into three main parts: the Greater Himalayas (Himadri), the Lesser Himalayas (Himachal), and the Outer Himalayas (Shivaliks). The Himalayas are crucial for the region's climate, biodiversity, and water resources, providing a major source of rivers like the Ganges, Indus, and Brahmaputra.

Q.38 Who was the first Chief Election Commissioner of India?

A. K. V. K. Sundaram
B. S. P. Sen Verma
C. Sukumar Sen
D. Rajmannar

Answer: C

Sol: The correct answer is **(c) Sukumar Sen**
Sukumar Sen was the first Chief Election Commissioner (CEC) of India, serving from 1950 to 1958. He was an Indian Civil Services (ICS) officer and the Chief Secretary of West Bengal before his appointment as the CEC of India.

Key Points:

Additional Information:

Election Commission of India (ECI):

Key Features:

Powers and Functions:

Key Provisions:

- **Tenure:** Appointed in March 1950, shortly after which the **Representation of the People Act, 1950** was passed, laying the groundwork for elections, particularly the preparation of electoral rolls.
- In 1951, the **Representation of the People Act, 1951** was enacted, addressing other critical aspects of election conduct.

- The Election Commission of India is an autonomous constitutional authority established under **Article 324** of the Indian Constitution to administer elections.

- **Constitutional Status:**
  - Established in 1950 under Article 324.
  - Ensures free, fair, and impartial elections to:
    - Parliament
    - State Legislatures
    - Offices of the President and Vice-President.
- **Composition:**
  - Comprises the Chief Election Commissioner (CEC) and other Election Commissioners (ECs).
  - Appointments are made by the President of India.
  - Decisions are collectively made by the CEC and ECs.
- **Tenure and Conditions:**
  - Term: **6 years** or up to **65 years of age**, whichever is earlier.
  - Security of tenure:
    - The removal process for the CEC is the same as for a Supreme Court judge.
    - ECs can be removed on the recommendation of the CEC.

- Superintendence, direction, and control of elections.
- Prepares and updates electoral rolls.
- Conducts delimitation of constituencies.
- Allots symbols to political parties.
- Enforces the **Model Code of Conduct** during elections.

- **Article 325:** Prohibits discrimination in electoral roll inclusion based on religion, race, caste, or sex.
- **Article 326:** Provides for elections based on universal adult suffrage.
- **Article 327:** Empowers Parliament to legislate on election matters.
- **Article 328:** Allows state legislatures to make laws for state elections, subject to Article 324.

Q.39 The Superintendence, direction, and control of the preparation of electoral rolls for Panchayat elections is done by:

A. The State Election Commissioner
B. The Chief Electoral Officer
C. The Chief Election Commissioner of India
D. The Booth Level Officer

Answer: A

Sol:

The State Election Commissioner (SEC) is responsible for the superintendence, direction, and control of the preparation of electoral rolls and the conduct of Panchayat elections as per Article 243K of the Indian Constitution. This provision empowers the SEC to oversee elections to the Panchayati Raj institutions and ensure they are conducted in a free and fair manner.

Each state appoints its own SEC, who operates independently of the Election Commission of India (ECI). While the ECI (under Article 324) oversees elections to Parliament and State Legislatures, the SEC is in charge of elections to the local bodies, i.e., Panchayats and Municipalities.

The SEC is appointed by the Governor and enjoys autonomy in performing its duties. The electoral rolls may be shared with the ECI, but their preparation and management for local body elections are under the jurisdiction of the SEC.

Information Booster:

· Article 243K deals with State Election Commissions.
· SEC is responsible for Panchayat and Municipality elections.
· Appointed by the Governor of the state.
· Independent of the Election Commission of India.
· SEC ensures free and fair local body elections.
· Electoral rolls for Panchayats are managed under the SEC's authority.

Additional Knowledge:

· The Chief Electoral Officer: This officer is appointed by the Election Commission of India to supervise the conduct of elections to Parliament and State Assemblies within a state. Although the CEO may help in coordinating logistical support, the CEO does not supervise Panchayat elections.
· The Chief Election Commissioner of India: Heads the Election Commission of India and oversees Lok Sabha, Rajya Sabha, and State Assembly elections. The CEC has no role in local body elections like Panchayats or Municipalities.
· The Booth Level Officer: A field-level officer who assists in verifying voter lists and other polling duties under the supervision of the Electoral Registration Officer. While important operationally, the BLO has no superintendence or control powers regarding electoral roll preparation.

Q.40 Chilika Lake, the largest salt water lake in India in the state of Orisse, lies to the south of the .

A. Baitarani delta
B. Brahmani delta

C. Budhabalanga delta
D. Mahanadi delta

Answer: D

Sol: **The correct answer is (d) Mahanadi delta.**
Chilika Lake, located in the state of **Odisha** (formerly known as **Orissa**), is the largest saltwater lake in India. It lies to the **south of the Mahanadi delta**. The **Mahanadi River**, which flows through Odisha, forms a delta region that includes **Chilika Lake** as part of its estuarine system. The lake is a significant ecological hotspot, supporting a variety of flora and fauna, including migratory birds.

Other Options:

- **Baitarani delta:** Located in the northeastern part of Odisha but not near Chilika Lake.
- **Brahmani delta:** Situated in the northern part of Odisha, not associated with Chilika Lake.
- **Budhabalanga delta:** Located in northern Odisha, far from Chilika Lake.

ADDITIONAL INFORMATION:
Chilika Lake is the largest brackish water lake in India and the second largest in the world. Located along the eastern coast of India, it spans the state of **Odisha** and is of great ecological, economic, and cultural importance.

Geographical Features:

- **Location:** Situated on the eastern coast of India, **Chilika Lake** lies to the south of the **Mahanadi Delta** and stretches across three districts: **Khurda, Ganjam,** and **Gajapati** in Odisha.
- **Area:** It covers an area of about **1,100 square kilometers** (during the monsoon season) and is known to be **14-20 km wide** and **64 km long.**
- **Water Type:** The lake is **brackish** (a mix of freshwater and saltwater), influenced by the tidal movements of the **Bay of Bengal.**

Q.41 Gram Sabha can form one or more monitoring committees. Who can constitute this committee?

A. Ward members
B. Mukhiya, Up-Mukhiya and Ward Member
C. Any person who holds the post of Gram Panchayat.
D. From such persons who are not members of Gram Panchayat.

Answer: D

Sol: **The Correct Option: (d) From such persons who are not members of Gram Panchayat**
Explanation:
• According to the *Panchayati Raj* framework and various state-specific Panchayat Acts, the **Gram Sabha** is empowered to form one or more **monitoring committees** for social accountability and transparency.
• These committees are to be formed **from among persons who are not members of the Gram Panchayat**, ensuring impartial oversight of Gram Panchayat's functioning.
• Their role includes monitoring development works, welfare schemes, and proper utilization of funds at the village level.
• Such provisions enhance community participation and democratic decentralization in rural governance.

Information Booster:

1. **Gram Sabha** consists of all adult members (18+) of a village registered in the electoral rolls.
2. These committees may include Vigilance Committee, Education Committee, Health Monitoring Committee, etc.
3. Committee members are usually selected during Gram Sabha meetings and serve on a voluntary basis.
4. The objective is to promote people's participation and ensure accountability of elected Panchayat officials.
5. Such practices are in line with the 73rd Constitutional Amendment which empowers Gram Sabhas in decentralized governance.

Additional Knowledge:

Ward Members
• They are elected representatives but are not eligible to form or constitute monitoring committees themselves.

Mukhiya, Up-Mukhiya and Ward Member
• These are Gram Panchayat office-bearers and are specifically excluded from being committee members to avoid conflict of interest.

Any person who holds the post of Gram Panchayat

• This includes elected representatives whose involvement in such committees would compromise neutrality; hence, disqualified.

Q.42 At the 2025 International Wiesław Maniak Memorial in Poland, what was Annu Rani's winning distance in the women's javelin throw?

A. 60.96 m
B. 62.59 m
C. 64.00 m
D. 58.36 m

Answer: B

Sol: The correct answer is (b) 62.59 m.

Explanation:

- **Annu Rani** won **gold** at the International Wiesław Maniak Memorial in Poland with a **season-best throw of 62.59 m**.
- Her first attempt (60.96 m) already secured the lead, but she extended it in her second attempt to 62.59 m.
- This performance places her among the **top 15 javelin throwers in the world** for 2025.
- She is aiming to cross the **64 m qualification mark** for the **2025 World Athletics Championships in Tokyo**.
- Competitors: **Silver** – Eda Tugsuz (Turkey, 58.36 m); **Bronze** – Lianna Davidson (Australia, 58.24 m).

Information Booster:

- **Annu Rani** is the **reigning Asian Games champion** in women's javelin throw.
- Her personal best is **63.82 m**, achieved in 2022.
- The **64 m mark** is the automatic qualification standard for the 2025 World Championships.
- Poland's Wiesław Maniak Memorial is an annual track and field meet named after **Wiesław Maniak**, a Polish sprinter and 1964 Olympic silver medalist.
- India's **Pooja** won bronze in the women's 800 m (2:02.95) at the same event.

Additional Knowledge:

- **World ranking impact:** A 62.59 m throw boosts Annu Rani's position into the **top 15 globally** for 2025, improving her seeding for upcoming events.
- **Training focus:** Rani's current target is technical refinement for **longer release angles** to reach the 64 m mark.
- **Historical context:** She was the **first Indian woman to qualify for a World Athletics Championships javelin final** in 2019 (Doha).
- **Global field:** Women's javelin world record stands at **72.28 m**, set by Barbora Špotáková (Czech Republic) in 2008.

Q.43 Indian Tennis Player Sania Mirza, the former doubles World No. 1, has confirmed her retirement from professional Tennis. In which year did she win her first grand slam?

A. 2010
B. 2009
C. 2008
D. 2007

Answer: B

Sol: Sania Mirza won her first grand slam in 2009 by winning Australian Open Mixed doubles title with Mahesh Bhupathi. The pair also won the French Open 2012.

Details:

· Indian Tennis Player Sania Mirza (36-year-old), the former doubles World No. 1, has confirmed her retirement from professional Tennis.

· She announced that the Dubai Tennis Championships, a Women's Tennis Association (WTA) 1000 event in Dubai in February 2023 will be her last match.

Career graph of Sania Mirza:

· She has won six Grand Slam doubles titles.

· She won her first grand slam in 2009 by winning Australian Open Mixed doubles title with Mahesh Bhupathi. The pair also won the French Open 2012.

· She won her 3rd mixed doubles title at the US Open in 2014 with Brazil's Bruno Soares.

· Sania Mirza and Martina Hingis of Switzerland won 3 women's doubles – Wimbledon 2015, the US Open 2015, and the Australian Open 2016

· Mirza became the first Indian to win a WTA singles title in 2005.

Q.44 The concept of 'Education for All' (EFA) was launched by UNESCO in:

A. 1960
B. 1980
C. 1990
D. 2000

Answer: C

Sol: **Solution: Correct Answer: C. 1990**

Explanation:

The concept of "Education for All" (EFA) was officially launched in 1990 at the World Conference on Education for All, held in Jomtien, Thailand. It was organized by UNESCO, UNICEF, the World Bank, and UNDP, aiming to ensure that every child, youth, and adult has access to basic education of good quality.

Information Booster:

→EFA focuses on six main goals, including universal primary education, improving adult literacy, gender equality in education, and enhancing the quality of learning.

→The Dakar Framework for Action (2000) reinforced EFA goals and set 2015 as the target year for achieving them.

→EFA strongly influenced later initiatives such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), especially SDG 4 on quality education.

Additional Knowledge:

→The EFA movement emphasized not just enrollment but completion and learning outcomes, recognizing that access without quality is incomplete education. Many countries used EFA as a framework to develop their national education policies and increase public investment in schooling.

Q.45 The theme for the International Day of Education 2025 is _____.

A. Education for all
B. Learning for life
C. AI and education: Preserving human agency in a world of automation
D. Empowering youth through education

Answer: C

Sol: The Correct answer **is (c) 'AI and education: Preserving human agency in a world of automation.'**

Solution:

· The International Day of Education is celebrated on January 24 annually.

· This year marks the seventh year of the celebration with the theme **'AI and education: Preserving human agency in a world of automation.'**

· On December 3, 2018, the United Nations General Assembly declared January 24 as International Education Day, following a recommendation by the **UN Economic and Social Council.**

· The first celebration took place on January 24, 2019, as a global initiative to highlight the importance of education in achieving the Sustainable Development Goals (SDGs), particularly SDG 4, which calls for I **nclusive and equitable quality education and promotes lifelong learning opportunities for all.**

Information Booster:

United Nations Educational, Scientific and Cultural Organization (UNESCO):

· It is a specialized agency of the United Nations (UN), that seeks to build peace through international cooperation in Education, the Sciences, and Culture.

· It was established on 16 November 1945.

· It has 193 Members and 11 Associate Members.

· **Headquarter:** France, Paris.

· **Notable Programs:**

· **World Heritage Sites**: UNESCO designates and helps preserve cultural and natural landmarks around the world.

· **Man and the Biosphere (MAB) Program**: launched in 1971, promotes sustainable development by integrating human and environmental systems.

Q.46 In an electric circuit, the device that acts as a variable resistor is called _____.

A. galvanometer
B. ammeter
C. voltmeter
D. rheostat

Answer: D

Sol: The correct answer is **(d) Rheostat**

Explanation:

- A **rheostat** is a device that acts as a **variable resistor** in an electric circuit. It allows the resistance to be adjusted manually, thereby controlling the current flowing through the circuit.
- This is useful for controlling the brightness of a light bulb, the speed of a fan, or in various other applications where current control is necessary.

Information Booster:

- **Rheostat Function:** The rheostat typically has a slider or dial that changes the length of the resistor, adjusting the amount of current flowing through the circuit. It is commonly used in electrical devices to fine-tune the flow of electricity.
- **Types of Resistors:**
  - **Fixed Resistor:** Offers a constant resistance.
  - **Variable Resistor (Rheostat):** Allows for the resistance to be varied, adjusting the current flow.

Additional Knowledge:

- A galvanometer is used to detect and measure small currents.
- An ammeter measures the current flowing through the circuit.
- A voltmeter measures the potential difference (voltage) across two points.

Q.47 Which of the following processes is involved in chemical reactions?

A. Heating copper wire in the presence of air at high temperature
B. Melting of ice to give water
C. Storing of oxygen gas under pressure in a gas cylinder
D. Liquefaction of air

Answer: A

Sol: The correct answer is (a) **Heating copper wire in the presence of air at high temperature**.

· Among the given options, the process that involves a **chemical reaction** is **heating copper wire in the presence of air at high temperature**.

· When copper is heated in the presence of air, it reacts with oxygen to form **copper oxide (CuO)**. This is a chemical reaction because a new substance (copper oxide) is formed, and it involves a change in the chemical composition of the copper.

· The reaction can be represented as:

$2Cu+O2 \rightarrow 2CuO$

This reaction shows that the original element (copper) changes chemically by combining with oxygen, forming a new compound.

Additional Knowledge:

· **Melting of ice to give water**: This is a **physical change**, not a chemical reaction. Melting ice involves a change in the state of matter from solid (ice) to liquid (water) without changing its chemical composition (H_2O remains H_2O).

· **Storing of oxygen gas under pressure in a gas cylinder**: This is also a **physical process** where oxygen gas is simply compressed into a cylinder; there is no change in its chemical structure or composition.

· **Liquefaction of air**: This process involves cooling air to convert it into liquid form, but it does not alter the chemical composition of the gases present in air (such as nitrogen, oxygen, etc.). It is a **physical change.**

Q.48 Which of the following chemical equations is INCORRECT?

A. $2Mg(s) + O_2(g) \rightarrow 2MgO(g)$
B. $CO(g) + 2H_2(g) \rightarrow CH_3OH(l)$
C. $CO)g) + H_2(g) \rightarrow CH_2O(l)$
D. $3Fe(s) + 4H_2O(l) \rightarrow Fe_3O_4(s) + 2H_2(l)$

Answer: C

Sol: **The correct answer is: (c) CO(g) + H₂(g) → CH₂O(l)**

Explanation:

- The equation **CO(g) + H₂(g) → CH₂O(l)** is **incorrect** as it **does not represent a standard or balanced chemical reaction**.
- CH_2O (formaldehyde) is **not formed directly** by simply combining **carbon monoxide (CO)** and **hydrogen (H_2)** in a 1:1 ratio.
- In industrial chemistry, **formaldehyde** is typically produced by the **oxidation of methanol (CH_3OH)**, not directly from CO and H_2.

So, this reaction is **chemically inaccurate** in terms of both **reaction mechanism** and **stoichiometry**.

Information Booster:

· **Formaldehyde (CH_2O)** is commonly produced by:

  - Oxidizing **methanol (CH_3OH)** over a metal catalyst.
  - Reaction: **$CH_3OH + ½\ O_2 \rightarrow CH_2O + H_2O$**

· $CO + 2H_2 \rightarrow CH_3OH$ is a valid industrial reaction (methanol synthesis).

· No direct standard synthesis route exists for CH_2O from **CO + H_2**.

· CH_2O is a **volatile and toxic aldehyde** used in plastics, resins, and disinfectants.

Additional Information:

- **(A) 2Mg(s) + O₂(g) → 2MgO(g) – Correct** (Magnesium burns in oxygen to form magnesium oxide).
- **(B) CO(g) + 2H₂(g) → CH₃OH(l) – Correct** (This is the industrial synthesis of methanol).
- **(D) 3Fe(s) + 4H₂O(l) → Fe₃O₄(s) + 2H₂(g) – Correct** (Iron reacts with steam to form magnetite and hydrogen gas).

Q.49 Like Litmus paper, _____ is also a natural indicator to test the nature of chemical substances.

A. baking powder
B. indigo
C. sodium
D. turmeric

Answer: D

Sol: The correct answer is (d) turmeric.

· **Turmeric** is a natural indicator that can be used to test the acidity or alkalinity of a substance.

· When turmeric is added to an alkaline solution, it turns red, while in acidic solutions, it remains yellow, making it useful for testing the pH of various substances.

Information Booster:

· **Litmus paper** is also a well-known natural pH indicator that turns red in acidic solutions and blue in alkaline solutions.

· Natural indicators like turmeric are derived from plants, making them environmentally friendly alternatives to synthetic chemicals used in pH testing.

Additional Information:

· Other natural indicators include **red cabbage juice**, which changes color depending on the pH of a solution.
· The use of natural indicators highlights the growing trend of sustainability in chemical testing and education.

Q.50 Who among the following formulated a model in the early 1970s, generally representing the cell membrane structure and dynamics?

A. Singer and Nicolson
B. Schleiden and Schwann
C. Hooke and Brown
D. Evans and Kauffm an

Answer: A

Sol: In **1972**, **Singer and Nicolson** proposed the **Fluid Mosaic Model**, which describes the **cell membrane's structure and function**. This model suggests that **membranes are flexible and contain a mosaic of lipids, proteins, and carbohydrates**.

Information Booster

- The model explains **selective permeability** of cell membranes.
- **Lipid bilayer** provides flexibility.
- **Proteins help in transport and communication**.
- This model replaced the **earlier Davson-Danielli model**.
