



SUNBEAM
Exploring New Ideas Teaching New Heights

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TEST YOUR SKILLS



Synonyms

Q. Choose the option that is similar in its meaning to the word given in question

CORPULENT

- A. Lean
- B. Gaunt
- C. Emaciated
- D. Obese

Ans: D



Synonyms

BRIEF

A. Limited

B. Small

C. Little

D. Short

Ans: D



Synonyms

EMBEZZLE

A. Misappropriate

B. Balance

C. Remunerate

D. Clear

Ans: A



Synonyms

VENT

A. Opening

B. Stodge

C. End

D. Past tense of go

Ans: A



Synonyms

AUGUST

A. Common

B. Ridiculous

C. Dignified

D. Petty

Ans: C



Synonyms

STRINGENT

- A. Dry
- B. Strained
- C. Rigorous
- D. Shrill

Ans: C



Synonyms

LAMENT

- A. Complain
- B. Comment
- C. Condone
- D. Console

Ans: A



Synonyms

FORAY

A. Invasion

B. Contest

C. Ranger

D. Intuition

Ans: A



Synonyms

IRONIC

A. Inflexible

B. Bitter

C. Good-natured

D. Sarcastic

Ans: D



Synonyms

TIMID

A. Fast

B. Slow

C. Medium

D. Shy

Ans: D



Synonyms

EXTRICATE

- A. Pull
- B. Free
- C. Tie
- D. Complicate

Ans: B



Synonyms

NEUTRAL

- A. Unbiased
- B. Non-aligned
- C. Undecided
- D. Indifferent

Ans: A



Antonyms

Choose the option that is most opposite in its meaning to the word given in question.

QUIESCENT

- A. Active
- B. Dormant
- C. Weak
- D. Unconcerned

Ans: C



Antonyms

Q. MORTAL

A. Divine

B. Immortal

C. Spiritual

D. Eterna

Ans: B



Antonyms

Q. FLAGITIOUS

A. Innocent

B. Rapid

C. Ignorant

D. Frivolous

Ans: A



Antonyms

Q. BELITTLE

A. Criticize

B. Flatter

C. Exaggerate

D. Adore

Ans: B



Antonyms

Q. CULPABLE

A. Defendable

B. Blameless

C. Careless

D. Irresponsible

Ans: B



Antonyms

Q. GREGARIOUS

A. Antisocial

B. Glorious

C. Horrendous

D. Similar

Ans: A



Antonyms

Q. EVASIVE

A. Free

B. Honest

C. Liberal

D. Frank

Ans: D



Antonyms

Q. AWARE

A. Uncertain

B. Ignorant

C. Sure

D. Doubtful

Ans: B



Antonyms

Q. RARELY

A. Hardly

B. Definitely

C. Frequently

D. Periodically

Ans: C



Antonyms

Q. MALICIOUS

A. Kind

B. Boastful

C. Generous

D. Indifferent

Ans: A



Idioms & Phrases

Q. To keeps one's temper

A. To become hungry

B. To be in good mood

C. To preserve one's energy

D. To be aloof from

Ans: B



Idioms & Phrases

Q. To smell a rat

A. To see signs of plague epidemic

B. To get bad smell of a bad dead rat

C. To suspect foul dealings

D. To be in a bad mood

Ans: C



Idioms & Phrases

Q. Hit the nail on the head

A. To perform best

B. To be harmful

C. To be impressive

D. To be accurate

Ans: D



Idioms & Phrases

Q. As a social reformer, "he set his face against" notch parties.

- A. welcomed
- B. acclaimed
- C. to oppose with determination
- D. ignored

Ans: C



Idioms & Phrases

Q. Sobhraj could be easily arrested because the police were "tipped off" in a advance.

- A. Toppled over
- B. Bribed
- C. Given advance information
- D. Threatened

Ans: C



Idioms & Phrases

Q. His speech "went down well with" the majority of the audience.

A. found acceptance with

B. was attentively listened to by

C. was appreciated by

D. was applauded by

Ans: C



Idioms & Phrases

Q. Rohit has "bitten off more than he chew".

A. Is trying to do much

B. Is very greedy

C. Is always hungry

D. Has little regard for others

Ans: A



Idioms & Phrases

Q. The authorities "took him to task" for his negligence.

- A. gave him additional work
- B. suspended his assignment
- C. reprimanded him
- D. forced him to resign

Ans: C



Idioms & Phrases

Q. The detective "left no stone unturned" to trace the culprit.

A. took no pains

B. did very irrelevant things

C. resorted to illegitimate practices

D. used all available means

Ans: D



Directions

Q. Shyam travels 7 km North, then he turns to his right and walks 3 km. He again turns to his right and moves 7 km forward. Now in which direction is he from his starting point?

- A. South
- B. North
- C. West
- D. East

Ans: D



Series

Q. Given a Series 2, 5, 12.5, ?, 78.125, 195.3125

Find what number would come in place of the question mark(?).

- A. 31.25
- B. 40.25
- C. 32.50
- D. 21.00

Ans: A



Blood Relation

Q. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?

- A. Brother
- B. Nephew
- C. Uncle
- D. Son in law

Ans: A



Coding-Decoding

Q. If MONKEY is coded as OQPMGA and ZEBRA as BGDTC, then how will DEER be coded?

- A. FGGT
- B. OQGT
- C. GFFT
- D. BGGT

Ans: A



Coding-Decoding

Q. In a certain code language, "ZEBRA" is coded as "WBYAJ". How will "TORCH" be written in that same code?

- A. LGRTY
- B. MHR SX
- C. LGISX
- D. MHITY

Ans: D



Coding-Decoding

Q. If DOOR is coded FQQT, then how is WINDOW coded?

- A. YKPFQY
- B. ZLQGRZ
- C. YJPEQY
- D. YKPEPY

Ans: A



Coding-Decoding

Q. In a certain case, INSTITUTION is written as NOITUTITSNI. How is PERFECTION written in that code?

- A. NOICTEFREP
- B. NOITCEFERP
- C. NOITCEFREP
- D. NOITCEFPER

Ans: C



Coding-Decoding

Q. If in a certain code RASHMI is written as ODPKJL then, how would MODE be written in that code ?

- A. PLAB
- B. JRAH
- C. PRGH
- D. JLAB

Ans: B



Reading Comprehension

Archaeology, often described as the study of human history and prehistory through the excavation of artifacts and the analysis of material remains, is a discipline that unveils the mysteries of ancient civilizations and cultures. Through meticulous excavation techniques and scientific analysis, archaeologists piece together the story of humanity's past, shedding light on various aspects of ancient life, including social structures, economic systems, religious beliefs, and technological advancements. The field of archaeology encompasses a diverse range of specialties, including classical archaeology, which focuses on ancient Mediterranean civilizations like Greece and Rome, and prehistoric archaeology, which delves into the distant past before written records. Additionally, underwater archaeology explores submerged sites, revealing sunken ships, ports, and even entire cities, while forensic archaeology applies archaeological methods to legal investigations, aiding in the recovery of evidence from crime scenes. Archaeological research involves a multidisciplinary approach, drawing upon expertise from fields such as anthropology, geology, biology, and chemistry. Advanced technologies like LiDAR (Light Detection and Ranging) and ground-penetrating radar have revolutionized archaeological surveying, allowing researchers to map ancient landscapes and detect buried structures without excavation. Furthermore, advancements in DNA analysis enable archaeologists to trace human migration patterns and genetic relationships among ancient populations. Despite its contributions to our understanding of the past, archaeology also faces challenges, including ethical considerations surrounding the excavation and preservation of cultural heritage, as well as the threat of looting and illegal trafficking of antiquities. Efforts to promote community engagement, collaboration with indigenous peoples, and responsible stewardship of archaeological sites are essential for the sustainable practice of archaeology in the modern world.



Reading Comprehension

Q. What does forensic archaeology apply archaeological methods to?

- A. Military strategies
- B. Legal investigations, aiding in the recovery of evidence from crime scenes
- C. Medical diagnoses
- D. Economic analysis

Ans: B

- Legal investigations, aiding in the recovery of evidence from crime scenes



Reading Comprehension

Q. What practices are essential for the sustainable practice of archaeology?

- A. Commercialization of artifacts
- B. Exclusive focus on excavation
- C. Collaboration with Indigenous peoples.
- D. Rapid development of sites

Ans: C



Reading Comprehension

Q. What threat does archaeology face regarding cultural heritage?

- A. Looting and illegal trafficking of antiquities
- B. Climate change
- C. Lack of public interest
- D. Political instability

Ans: A



Reading Comprehension

Q. Which advanced technology allows archaeologists to map ancient landscapes and detect buried structures without excavation?

- A. DNA analysis
- B. LiDAR
- C. Carbon dating
- D. Satellite imaging

Ans: B



Reading Comprehension

Q. What is a specialty within archaeology that focuses on the distant past before written records?

- A. Classical archaeology
- B. Underwater archaeology
- C. Forensic archaeology
- D. Prehistoric archaeology

Ans: D



Reading Comprehension

Q. Select the most appropriate ANTONYM of the underlined word.

He regards himself as a patriot.

- A. nationalist
- B. dutiful
- C. traitor
- D. loyal

Ans: C



Directions

Q. Ajay starts from point Facing East and travel 4m and take right to again travel 8m, from there Ajay take again right and travel 4m. After that Ajay take right to travel 9m, then finally, after taking the last right of 16m Ajay reached his final destination. In which direction Ajay is from his starting point?

- A. North
- B. Northeast
- C. Northwest
- D. South
- E. Southwest

Ans: B



Series

Q. Given a Series 50, 45, 40, 35, 30, ?

Find what number would come in place of the question mark(?).

A. 28

B. 15

C. 25

D. 20

Ans: C



Odd One Out

Q. Four words are given below out of which three are alike in some manner and fourth one is different. Choose out the odd one :

- A. Walk
- B. Run
- C. Ride
- D. Crawl

Ans: C



Blood Relation

Q. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

- A. Brother
- B. Uncle
- C. Cousin
- D. Father

Ans: D



Miscellaneous

Q. Arrange the following words as per order in the Dictionary;

1. Organ
2. Origin
3. Orient
4. Organic
5. Organize

- A. 1, 5, 3, 4, 2
- B. 1, 5, 4, 2, 3
- C. 1, 4, 5, 3, 2
- D. 1, 4, 5, 2, 3

Ans: C



Miscellaneous

1. Anger
 2. Analogy
 3. Animate
 4. Anchor
 5. Anarchy
- A. 5, 2, 4, 3, 1
 - B. 4, 2, 5, 3, 1
 - C. 4, 3, 5, 1, 2
 - D. 2, 5, 4, 1, 3

Ans: D



Miscellaneous

1. Develop
 2. Devote
 3. Derogate
 4. Devotee
 5. Deviate
- A. 3, 1, 5, 2, 4
 - B. 4, 3, 1, 2, 5
 - C. 3, 4, 5, 1, 2
 - D. 3, 4, 5, 2, 1

Ans: A



Miscellaneous

Q. Elated is to despondent as enlightened is to

- A. aware
- B. ignorant
- C. miserable
- D. tolerant

Ans: B



Miscellaneous

Q. Jay and Anand like painting, but Nina and Dinesh like drawing, Jay and Dinesh both like drawing. Who likes painting and drawing?

- A. Anand
- B. Jay
- C. Nina
- D. Dinesh

Ans: B



Miscellaneous

Q. PILLOW is to SLEEP as CHAIR is to?

- A. SOFA
- B. CUSHION
- C. SIT
- D. TABLE

Ans: C



Directions

Q. Rohit walked 25 m towards south. Then he turned to his left and walked 20 m. He then turned to his left and walked 25 m. He again turned to his right and walked 15 m. At what distance is he from the starting point and in which direction?

- A. 35 m East
- B. 35 m North
- C. 30 m West
- D. 45 m East

Ans: A



Series

Q. Given a Series 1, 30 5, 26, 9, 22, 13, 18, ?

Find what number would come in place of the question mark(?).

A. 17

B. 22

C. 28

D. 19

Ans: A



Odd One Out

Q. Choose the odd one out from the following.

- A. Sandy : beach
- B. Spiny : porcupine
- C. Warm : quilt
- D. Page : book

Ans: D



Miscellaneous

Q. CAREFUL is to CAUTIOUS as BOASTFUL is to

- A. Arrogant
- B. Humble
- C. Joyful
- D. Suspicious

Ans: A



Miscellaneous

Q. Ira and Jay like chocolates, but Ojas and Leena like strawberry, Ira and Ojas both like strawberry. Who likes Chocolate and strawberry?

- A. Jay
- B. Leena
- C. Ira
- D. Ojas

Ans: C



Miscellaneous

Q. SHOES are to WALK as BICYCLE is to ?

- A. RIDE
- B. RUN
- C. WALK
- D. FLY

Ans: A



Coding Decoding

Q. In a certain code language, "FINISH" is written as "HSINIF". How is "SHOULDER" written in that code?

- A. HBGTENKH
- B. SHPOUBHF
- C. REDLUOHS
- D. RESHOLDV

Ans: C



Miscellaneous

Q. Fill in the blanks with the suitable option-

Many shops were set up in _____ enclosed area.

- A. A
- B. an
- C. the
- D. none of these

Ans: B



Coding Decoding

Q. If the word "MYSELF" is coded "NZRDMG", then what is the code for "DREAMS"?

- A. ERMASD
- B. ESDZNT
- C. ENSZGV
- D. EDTENT

Ans: B



Odd One Out

Q. Choose the odd (person)one out.

A. M H Ansari

B. Abdul Kalam

C. Pranab Mukherjee

D. Dr. Rajendra Prasad

Ans: A



Miscellaneous

Q. Arrange the following words according to English dictionary

1. Episode
2. Epistle
3. Episcopo
4. Epigraph

A. 4 , 1 , 3 , 2

B 4 , 3 , 2 , 1

C. 3 , 4 , 1 , 2

D. 4 , 3 , 1 , 2

Ans: D



Analogy

Q. From the following options, select the word that has the same relation as the word pair below.

cattle : herd :: sportsman : ?

- A. Team
- B. Tournament
- C. Gang
- D. Medal

Ans: A



Syllogism

Q. Statements:

Some CPUs are keyboards. No keyboard is a Mouse. All Mouses are CPU.

Conclusion:

I. Some keyboards are CPU

II. All CPU's are Mouse

III. No Mouse is a keyboard

IV. Some Mouse are keyboard

A. Only I follows

B. Only II and III follow

C. Only I and III follow

D. Only II follows

Ans: C



Ranking & Ordering

Q. In a row of certain persons, Pradip is sitting 463 from the left end and 531 from the right end. Find out the total number of persons in that row?

- A. 963
- B. 942
- C. 993
- D. 994

Ans: C

Type 1 - Total persons in a queue-

Total number of persons = [Position of person from upward/right + Position of person from downward/left] – 1



Ranking & Ordering

Type 2 - Rank of person in a queue-

Position of person from upward = [total number of persons – position of person from down] + 1

Position of person from downward= [total number of persons – position of person from up] + 1

Position of person from right= [total number of persons – position of person from left] + 1

Position of person from left= [total number of persons – position of person from right] + 1



Miscellaneous

Q. LUNCH is to EAT as BEVERAGE is to ?

A. CONSUME

B. DRINK

C. SWALLOW

D. GLASS

Ans: B



Miscellaneous

Q. If + means \times , \times means $-$, \div means $+$, & $-$ means \div , then,

$$146 - 2 + 3 \times 123 \times 5 + 2 = ?$$

A. 132

B. 128

C. 116

D. 86

Ans: D



Odd One Out

Q. Choose the odd one out from the given answer options-

A. Magazine

B. Novel

C. Dictionary

D. Essay

Ans: D



Miscellaneous

Q. If + means -, - means \times , \times means \div and \div means +, then what will be the value of following? $480 \times 15 + 7 - 4 \div 12 = ?$

- A. -8
- B. 12
- C. 16
- D. None of the above

Ans: C



Miscellaneous

Q. Tom and Harry like ice-cream but Chris and Diana like cake. Tom and Eric both like cake. Who likes ice-cream and cake?

- A. Tom
- B. Harry
- C. Chris
- D. Diana
- E. Eric

Ans: A



Puzzle Test

Q. If bat is called racket, racket is called football, football is called shuttle, shuttle is called ludo and ludo is called carrom, what is cricket played with ?

- A. Racket
- B. Football
- C. Bat
- D. Shuttle
- E. Carrom

Ans: A



Ranking & Ordering

Q. Ram ranked 11th from the top and thirty-one from the bottom in a class. How many students are there in the class?

A. 42

B. 43

C. 41

D. 40

Ans: C



Odd One Out

Q. Choose or find odd pair :

A. Broad : Wide

B. Light : Heavy

C. Tiny : Small

D. Big : Large

Ans: B



Puzzle Test

Q. If LIGHT is called MORNING, MORNING is called DARK, DARK is called NIGHT, NIGHT is called SUNSHINE and SUNSHINE is called DUSK, when do we sleep ?

- A. Dusk
- B. Dark
- C. Sunshine
- D. Night

Ans: C



IMPORTANT FORMULAE

- **I.1.**Area of a rectangle=(length x breadth)
- Therefore length = (area/breadth) and breadth=(area/length)
- **2.**Perimeter of a rectangle = 2 x (length + breadth)
- **II.**Area of a square = (side)² =1/2(diagonal)²
- **III** Area of four walls of a room = 2*(length + breadth)*(height)
- **IV** 1.Area of the triangle=1/2(base*height)
- 2. Area of a triangle = (s*(s-a)(s-b)(s-c))^(1/2), where a,b,c are the sides of a triangle & s= ½(a+b+c)
- 3.Area of the equilateral triangle =((3^{1/2})/4)*(side)²



IMPORTANT FORMULAE

- **V.1.**Area of the parellogram =(base *height)
- 2.Area of the rhombus= $\frac{1}{2}$ (product of the diagonals)
- 3.Area of the trapezium= $\frac{1}{2}$ (size of parallel sides)*distance between them.
- **VI** 1.Area of a circle = πr^2 ,where r is the radius
- 2. Circumference of a circle = $2\pi R$.
- 3. Length of an arc = $\frac{2\pi R\theta}{360}$ where θ is the central angle
- 4. Area of a sector = $(\frac{1}{2}) (\text{arc} \times R) = \frac{\pi R^2 \theta}{360}$.
- **VII.** 1. Area of a semi-circle = $(\pi) R^2$.
- 2. Circumference of a semi-circle = $(\pi) R$.
- where, **π** = 3.142



VOLUME AND SURFACE AREA – IMPORTANT FORMULAE

- **I. CUBOID**

- Let length = l, breadth = b and height = h units. Then,
- **1. Volume** = (l x b x h) cubic.units.
- **2. Surface area** = $2(lb + bh + lh)$ sq.units.
- **3. Diagonal** = $\sqrt{l^2 + b^2 + h^2}$ units

- **II. CUBE**

- Let each edge of a cube be of length a. Then,
- **1. Volume** = a^3 cubic units.
- **2. Surface area** = $6a^2$ sq. units.
- **3. Diagonal** = $\sqrt{3} a$ units.

- **III. CYLINDER**

- Let radius of base = r and Height (or length) = h. Then,
- **1. Volume** = ($\pi r^2 h$) cubic units.
- **2. Curved surface area** = ($2\pi rh$). units.
- **3. Total surface area** = $2\pi r (h+r)$ sq. units



VOLUME AND SURFACE AREA – IMPORTANT FORMULAE

- **IV. CONE**

- Let radius of base = r and Height = h . Then,
- **1. Slant height, $l = \sqrt{h^2 + r^2}$**
- **2. Volume** = $(1/3) \pi r^2 h$ cubic units.
- **3. Curved surface area** = (πrl) sq. units.
- **4. Total surface area** = $(\pi rl + \pi r^2)$ sq. units.

- **V. SPHERE**

- Let the radius of the sphere be r . Then,
- **1. Volume** = $(4/3) \pi r^3$ cubic units.
- **2. Surface area** = $(4 \pi r^2)$ sq. units.

- **VI. HEMISPHERE**

- Let the radius of a hemisphere be r . Then,
- **1. Volume** = $(2/3) \pi r^3$ cubic units.
- **2. Curved surface area** = $(2 \pi r^2)$ sq. units.
- **3. Total surface area** = $(3 \pi r^2)$ units.



Surds and Indices

○ Rules of Indices: -

- i. $a^n * a^m = a^{m+n}$
- ii. $\frac{a^m}{a^n} = a^{m-n}$
- iii. $(a^n)^m = a^{mn}$
- iv. $(ab)^n = a^n * b^n$
- v. $\left(\frac{a}{b}\right)^n = \frac{a^n}{b^n}$
- vi. $a^0 = 1$ (where $a \neq 0$)
- vii. $a^{-n} = \frac{1}{a^n}$

○ Rules of Surds: -

- i. $\sqrt[n]{a} = a^{\frac{1}{n}}$
- ii. $\sqrt[n]{ab} = a^{\frac{1}{n}} * b^{\frac{1}{n}}$
- iii. $\sqrt[n]{\frac{a}{b}} = \frac{a^{\frac{1}{n}}}{b^{\frac{1}{n}}}$
- iv. $\left(\sqrt[n]{a}\right)^n = a$
- v. $\left(\sqrt[n]{a}\right)^m = a^{\frac{m}{n}}$



