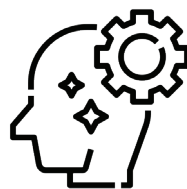
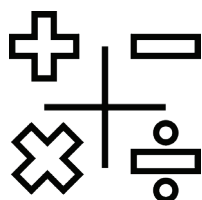


2015 TO 2026

PREVIOUS YEAR QUESTION WITH
DETAILED EXPLANATIONS

SSC-CGL

Tier I & II Exam



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Preface

The **Staff Selection Commission Combined Graduate Level (SSC CGL)** examination is one of the most sought-after exams for aspiring government employees in India. With the competition growing more intense each year, thorough preparation is essential for cracking both Tier-I and Tier-II of the SSC CGL exam.

This book, **SSC CGL (Tier-I & Tier-II)**, is designed to provide a comprehensive and structured approach to SSC CGL preparation.

Key Features of the Book:

- 1** ☐ **Complete Theory Coverage:**
A complete guide covering full theory for Reasoning, General Awareness, Mathematics, and English in one place.
- 2** ☐ **Years Covered:**
☐ **Tier-I:** 11 years of previous year questions from 2015 to 2025.
☐ **Tier-II:** 9 years of previous year questions from 2015 to 2025.
- 3** ☐ **Topic-wise Sorting:**
☐ Questions are categorized and sorted by specific topics.
☐ This helps target individual sections and allows focused study for each topic.

With this book, you will not only get an idea of the recurring trends in questions, but you will also be able to develop a strategy to maximize your score in both Tier-I and Tier-II exams. Whether you are just beginning your preparation or looking to refine your skills, this book will serve as a valuable tool in your SSC CGL journey.

We wish you success and hope that this book helps you achieve your goals with confidence and clarity.

Happy Learning!

Scheme and Syllabus

Scheme of Tier-I Examination

Tier	Subject	Number of Questions	Maximum Marks	Time Allowed
I	A. General Intelligence and Reasoning	25	50	1 hour (1 hour and 20 minutes for the candidates eligible for scribe as per Para-7.1,7.2 and 7.3)
	B. General Awareness	25	50	
	C. Quantitative Aptitude	25	50	
	D. English Comprehension	25	50	

- a. Tier-I will consist of Objective Type, Multiple choice questions. The questions will be set both in English & Hindi except for English Comprehension.
- b. There will be negative marking of 0.50 for each wrong answer.

Scheme of Tier-II Examination

Tier	Paper	Session	Subject	Number of Questions	Maximum Marks	Time allowed
II	Paper-I	Session-I (2 hours & 15 minutes)	Section-I:			1 hours (for each section)
			Module-I: Mathematical Abilities	30		
			Module-II: Reasoning & General Intelligence	30 Total = 60	60*3=180	(1 hours & 20 minutes for the candidates eligible for scribe as per Para-7.1,7.2 and 7.3)
			Section-II:			
			Module-I: English Language & Comprehension	45		
			Module-II: General Awareness	25 Total = 70	70*3=210	
		Session-II (15 minutes)	Section-III:			15 Minutes (For each module)
			Module-I: Computer Knowledge Module	20	20*3=60	
			Section-III:			
			Module-II: Data Entry Speed Test Module	One Data Entry Task	-	(20 minutes for the candidates eligible for scribe as per Para-7.1,7.2 and 7.3))

	Paper-II	Statistics	100	100*2=200	2 hours (2 hours & 40 minutes for the candidates eligible for scribe as per Para-7.1,7.2 and 7.3)
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1. Tier-II will include conducting of Paper-I & Paper-II in separate shift(s)/ day(s).
2. Paper-I is compulsory for all the posts.
3. Paper-II will be for only those candidates who apply for the posts of Junior Statistical Officer (JSO) in the Ministry of Statistics and Programme Implementation and Statistical Investigator Grade-II in the office of Registrar General of India (M/o Home Affairs) and who are shortlisted in Tier-I for these Posts.

Indicative Syllabus (Tier-I):

General Intelligence & Reasoning: It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/ pattern- folding& un-folding, Figural Pattern-folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence.

General Awareness: Questions in this component will be aimed at testing the candidates' general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighboring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy & Scientific Research.

Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals, fractions and relationships between numbers, Percentage. Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surds, Graphs of Linear

Equations, Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radian Measures, Standard Identities, Complementary angles, Heights and Distances, Histogram, Frequency polygon, Bar diagram & Pie chart.

English Comprehension: Candidates' ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Parts A, B, & D will be of a level commensurate with the essential qualification viz. Graduation and questions in Part-C will be of 10th standard level.

Indicative Syllabus (Tier-II):

General Intelligence & Reasoning: Questions of both verbal and non-verbal type. These will include questions on Semantic Analogy, Symbolic operations, Symbolic/ Number Analogy, Trends, Figural Analogy, Space Orientation, Semantic Classification, Venn Diagrams, Symbolic/ Number Classification, Drawing inferences, Figural Classification, Punched hole/ pattern-folding & unfolding, Semantic Series, Figural Pattern-folding and completion, Number Series, Embedded figures, Figural Series, Critical Thinking, Problem Solving, Emotional Intelligence, Word Building, Social Intelligence, Coding and de-coding, Numerical operations, Other sub-topics, if any.

General Awareness: Questions are designed to test the candidates' general awareness of the environment around them and its application to society. Questions are also designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspect as may be expected of an educated person. The test will also include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography, Economic Scene, General policy and scientific research.

Mathematical Abilities:

Number Systems: Computation of Whole Number, Decimal and Fractions, Relationship between numbers.

Fundamental arithmetical operations: Percentages, Ratio and Proportion, Square roots, Averages, Interest (Simple and Compound), Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time and work.

Algebra: Basic algebraic identities of School Algebra and Elementary surds (simple problems) and Graphs of Linear Equations.

Geometry: Familiarity with elementary geometric figures and facts: Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.

Mensuration: Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square Base.

Trigonometry: Trigonometry, Trigonometric ratios, Complementary angles, Height and distances (simple problems only) Standard Identities like $\sin^2\theta + \cos^2\theta = 1$ etc.

Statistics and probability: Use of Tables and Graphs: Histogram, Frequency polygon, Bar diagram, Pie-chart; Measures of central tendency: mean, median, mode, standard deviation; calculation of simple probabilities.

English Language and Comprehension: Vocabulary, grammar, sentence structure, synonyms, antonyms and their correct usage; Spot the Error, Fill in the Blanks, Synonyms/ Homonyms, Antonyms, Spellings/ Detecting mis-spelt words, Idioms & Phrases, One word substitution, Improvement of Sentences, Active/ Passive Voice of Verbs, Conversion into Direct/ Indirect narration, Shuffling of Sentence parts, Shuffling of Sentences in a passage, Cloze Passage, Comprehension Passage. To test comprehension, three or more paragraphs will be given and questions based on those will be asked. At least one paragraph should be a simple one based on a book or a story and the other two paragraphs should be on current affairs, based on a report or an editorial.

SSC CGL Tier-I Cutoff

Category	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SC	114	98	-	115.35	100.93	75.78	89.09	126.68	126.42	114.97
ST	103	88.50	111.10	104.92	93.75	62.81	77.57	118.16	111.85	106.36
OBC	125	110.00	103.22	135.95	119.23	95.11	114.27	145.94	146.23	130.36
EWS	-	-	-	135.04	109.21	104.64	102.35	143.44	141.82	127.41
UR	137	126.50	131.18	147.78	132.37	114.85	114.27	150.05	152.97	136.83
ESM	92	69.00	137.07	89.29	74.87	-	40.00	100.30	69.92	92.80
OH	97	84.50	40.00	98.43	85.99	47.42	70.70	115.98	113.10	100.87
HH	20	38.00	95.55	40.00	40.00	40.00	40.00	77.72	64.79	68.79
VH	68	89.50	40.00	110.41	95.76	40.00	40.00	121.59	102.97	72.00
Others-PWD	-	-	70.25	40.00	40.00	40.00	40.00	77.72	45.74	41.70

SSC CGL Tier-II Cutoff

Category	2016	2017	2018	2019	2020	2021	2022	2023	2024
SC	363.26	338.25	354.74	434.68	331.52	384.72	213.27	252	285.45
ST	341.00	311.25	327.05	405.13	309.87	345.12	192.23	241	266.49
OBC	397.00	379.75	403.33	478.82	381.12	440.22	242.79	271	306.27
EWS	-	-	-	466.42	366.47	423.11	228.63	265	300.03
UR	422.00	415.50	535.86	528.38	433.62	478.55	270.36	287	322.77
ESM	-	263.50	252.12	365.98	204.78	-	79.35	223	202.28
OH	333.00	294.00	302.50	392.97	287.10	341.27	187.58	234	258.66
HH	216.00	191.00	165.73	259.91	133.21	203.73	79.35	172	181.89
VH	336.00	311.00	280.98	422.76	317.48	-	158.48	228	219.45
PwD-Other	-	-	122.58	120.00	148.95	128.12	79.35	143	136.73

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NUMBER OF QUESTIONS ASKED IN SSC - CGL - REASONING (2015 to 2025)

TIER - I		2015	2016	2017	2019	2020	2021	2022	2023	2024	2025
1	ANALOGY	11	5	4	6	5	5	8	8	4	6
2	BLOOD RELATIONS	-	-	1	1	1	1	3	2	1	4
3	CODING - DECODING	3	1	1	2	2	2	4	2	2	-
4	LOGICAL REASONING	8	3	2	-	-	-	1	-	-	3
5	MATHEMATICAL OPERATIONS	3	2	2	2	3	2	6	2	2	1
6	ODD ONE OUT	6	3	6	3	2	3	3	-	2	4
7	SYLLOGISM	2	1	1	1	1	1	3	2	-	-
8	WORD ARRANGEMENTS	3	2	2	1	1	1	2	1	2	1
9	SERIES										
	SERIES NON-VERBAL	-	-	-	1	1	1	3	2	2	-
	SERIES VERBAL	4	2	2	2	3	3	7	2	5	6
10	VENN DIAGRAM	2	1	1	1	1	1	1	-	-	-
11	SPATIAL & DIAGRAMMATIC REASONING										
	EMBEDDED FIGURES	1	1	1	1	1	-	3	-	1	-
	CUBE AND DICE	1	-	1	1	1	1	3	1	2	-
	MIRROR/WATER IMAGE	1	1	1	-	1	1	1	2	-	-
	PAPER CUT FOLD	1	1	1	1	1	1	1	1	1	-
	COMPLETION OF FIGURE	2	1	1	-	-	-	-	-	-	-
	COUNTING OF FIGURE	2	1	1	1	1	1	-	-	1	-

**NUMBER OF QUESTIONS ASKED IN
SSC - CGL - REASONING (2023 to 2026)**

TIER - II		2023	2025	2026
1	ANALOGY	3	3	4
2	BLOOD RELATIONS	2	2	2
3	CODING - DECODING	2	2	2
4	LOGICAL REASONING	8	9	4
5	MATHEMATICAL OPERATIONS	2	1	3
6	ODD ONE OUT	4	3	-
7	SYLLOGISM	1	1	1
8	WORD ARRANGEMENTS	1	3	2
9	SERIES			
	SERIES NON-VERBAL	1	1	-
	SERIES VERBAL	2	1	5
10	SPATIAL AND DIAGRAMMATIC REASONING			
	EMBEDDED FIGURES	1	1	1
	MIRROR / WATER IMAGE	1	1	1
	PAPER CUT FOLD	1	-	2
	COMPLETION OF FIGURE	1	1	-
	CUBE & DICE	-	1	1
	FIGURE COUNTING	-	-	2

1

CHAPTER

ANALOGY

ANALOGY

Analogies are an important part of logical and verbal reasoning. In this topic, questions are usually based on finding a relationship between two given words, numbers, letters, or figures, and then identifying a similar relationship in another pair. These questions may involve similarities in meaning, function, structure, sequence, or pattern, and they help develop the ability to think logically and recognize connections between different ideas.

Common types of analogy questions include **word analogies**, where the relationship is based on meaning, usage, or grammar; **number analogies**, which involve patterns like addition, subtraction, multiplication, or sequences; and **letter analogies**, based on alphabetical order, position, or patterns. There are also figure or image analogies, where shapes follow a visual rule, and mixed analogies, which combine more than one idea such as logic and sequence.

Word Analogies:

Word analogies deal with relationships between words based on their meaning, usage, or grammatical form. In this section, questions commonly test ideas such as synonyms, antonyms, cause and effect, part and whole, and function or purpose.

Before solving word analogy questions, it is helpful to be familiar with certain commonly used word relationships. A clear understanding of these relationships makes it easier to recognize patterns in analogy questions and answer them accurately.

(I) Countries and Their Capitals:

Country	Capital	Country	Capital
Afghanistan	Kabul	Kenya	Nairobi
Australia	Canberra	Kyrgyzstan	Bishkek
Austria	Vienna	Malaysia	Kuala Lumpur
Bangladesh	Dhaka	Myanmar	Nay pyi taw
Bhutan	Thimphu	Nepal	Kathmandu
Brazil	Brasilia	Nigeria	Abuja
Canada	Ottawa	North Korea	Pyongyang
China	Beijing	Pakistan	Islamabad
Cuba	Havana	Russia	Moscow
Egypt	Cairo	Saudi Arabia	Riyadh

France	Paris	South Africa	Pretoria
Germany	Berlin	South Korea	Seoul
Greece	Athens	Spain	Madrid
India	New Delhi	Sri Lanka	Colombo
Indonesia	Jakarta	Thailand	Bangkok
Iran	Tehran	Turkey	Ankara
Iraq	Baghdad	UAE	Abu Dhabi
Italy	Rome	UK	London
Japan	Tokyo	USA	Washington DC

(II) Countries and Their Currency:

Country	Currency	Country	Currency
Argentina	Peso	Netherlands	Guilder
Bangladesh	Taka	Pakistan	Rupee
Burma (Myanmar)	Kyat	Russia	Rouble
China	Yuan / Renminbi	Saudi Arabia	Riyal
Germany	Mark	Spain	Peseta
Greece	Euro	Sweden	Krona
India	Rupee	Thailand	Baht
Indonesia	Rupiah	Turkey	Lira
Iran	Rial / Toman	UAE	Dirham
Japan	Yen	UK	Pound
Kuwait	Dinar	USA	Dollar

(III) Quantities and Their Units:

Quantity	Common units
Angle	Radian, degree
Conductance	Siemens (mho)
Current	Ampere
Energy	Joule, calorie
Force	Newton, dyne
Magnetic field	Tesla, gauss
Mass	Kilogram, gram
Power	Watt, horsepower
Pressure	Pascal, bar, atmosphere
Potential difference	Volt

Quantity	Common units
Resistance	Ohm
Temperature	Kelvin, degree celsius, fahrenheit
Time	Second, minute, hour
Volume	Cubic metre, litre
Work	Joule, erg

(IV) Instruments and Measurements:

Instrument	Measurement
Ammeter	Current
Anemometer	Wind
Balance	Mass
Hygrometer	Humidity
Odometer	Speed
Scale	Length
Screw gauge	Thickness
Seismograph	Earthquake
Taseometer	Strains
Thermometer	Temperature

(V) Animals and Their Young ones:

Animal	Young one
Bear	Cub
Butterfly	Caterpillar
Cat	Kitten
Cow	Calf
Deer	Fawn
Dog	Puppy
Donkey	Foal
Duck	Duckling
Elephant	Calf
Frog	Tadpole
Goat	Kid
Hen	Chick
Horse	Colt / filly
Insect	Larva
Lion / tiger	Cub
Monkey	Infant
Pig	Piglet
Rabbit	Kit
Sheep	Lamb
Stag	Fawn
Swan	Cygnets

(VI) Male and Female:

Male	Female
Bachelor	Spinster
Brother	Sister

Male	Female
Bull	Cow
Bullock	Heifer
Cock	Hen
Colt	Filly
Dog	Bitch
Drake	Duck
Drone	Bee
Earl	Countess
Fox	Vixen
Gander	Goose
Lion	Lioness
Lord	Lady
Master	Mistress
Nephew	Niece
Tutor	Governess
Wizard	Witch

(VII) Workers and Their Tools:

Worker	Tool
Author	Pen
Barber	Razor
Blacksmith	Anvil
Carpenter	Saw
Chef	Knife
Cobbler	Awl
Doctor	Stethoscope
Farmer	Plough
Gardener	Harrow
Labourer	Spade
Mason	Plumb line
Painter	Brush
Sculptor	Chisel
Soldier	Gun
Surgeon	Scalpel
Tailor	Needle
Warrior	Sword
Woodcutter	Axe

(VIII) Studies and Their Topics

Study	Topic
Anthropology	Man
Archaeology	Artifacts
Astrology	Future
Cardiology	Heart
Craniology	Skull
Dermatology	Skin
Endocrinology	Secretions

Study	Topic
Entomology	Insects
Haematology	Blood
Ichthyology	Fishes
Mycology	Fungi
Nephrology	Kidney
Onomatology	Names
Oology	Eggs
Palaeography	Writings
Pathology	Diseases
Pedology	Soil
Physiology	Body
Phycology	Algae
Selenology	Moon
Virology	Viruses
Zoology	Animals

Number Analogies

Number analogy deals with relationships between numbers based on mathematical operations or logical patterns. In this segment, questions commonly involve addition, subtraction, multiplication, division, squares, cubes, fractions, ratios, or number series.

Example 1: 82 : 9 :: 197 : ?

- (1) 13 (2) 14
(3) 15 (4) 16

Explanation: (2)

Note that $9^2 + 1 = 81 + 1 = 82$

Similarly, $14^2 + 1 = 196 + 1 = 197$

Example 2: Select the option in which the two numbers are related in the same way as are the two numbers of the following number-pair.

24: 216

- (1) 25: 343 (2) 29: 121
(3) 34: 510 (4) 30: 729

Explanation: (1)

Note that

$$24 \rightarrow 2 + 4 = 6 \rightarrow 6^3 = 216$$

Similarly,

$$25 \rightarrow 2 + 5 = 7 \rightarrow 7^3 = 343$$

Letter Analogies

Letter analogy focuses on relationships between letters based on their position in the alphabet or the pattern formed between them. In this segment, questions usually involve alphabetical order, forward or backward movement, skipping of letters, and sometimes the use of words converted into letter positions.

Remembering the alphabetical sequence and the numerical position of each letter is especially useful for solving such questions quickly and accurately.

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

Example 1: Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.

ERT : FSV

RDX : SEZ

(1) DUC : EVD

(2) UHS : VIU

(3) EOC : FPF

(4) IOP : JPS

Explanation:

Given:

ERT → FSV:

E → F (+1)

R → S (+1)

T → V (+2)

RDX → SEZ:

R → S (+1)

D → E (+1)

X → Z (+2)

Pattern: +1, +1, +2 shift to the 1st, 2nd, and 3rd letters respectively.

Option 2: UHS → VIU

U → V (+1)

H → I (+1)

S → U (+2)

Hence, this matches the pattern perfectly.

Correct answer: (2) UHS : VIU

Example 2: In the following triads, each group of letters is related to the subsequent one following a certain logic. Select from the given options, the one which follows the same logic.

LIVE – ELVI – LEIV

HANG – GHNA – HGAN

(1) PORT – TPOR – ORTP

(2) REDS – ERDS – SEDR

(3) DUSK – KDSU – DKUS

(4) PAIN – NPIA – PANI

Explanation:

LIVE → ELVI → LEIV

HANG → GHNA → HGAN

Pattern:

1. **First change:** Rearrange letters in the order 4, 1, 3, 2

2. **Second change:** Rearrange letters in the order 2, 1, 4, 3

By applying same pattern to option 3:

DUSK

1. Applying 4, 1, 3, 2 → K D S U

2. Applying 2, 1, 4, 3 → D K U S

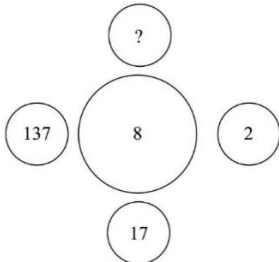
Correct answer: (3) DUSK – KDSU – DKUS

TIER-I: Previous Year Exam Questions

[9 Aug 2015: SHIFT-1] from Q. 1 to Q. 11

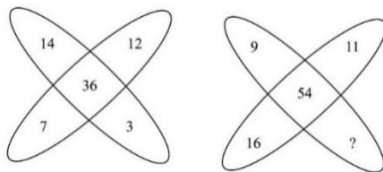
Directions (Qs. 1-5): In the following Five Questions, select the missing number from the given responses.

1.



- (1) 97 (2) 907
(3) 1097 (4) 9107

2.



- (1) 12 (2) 17
(3) 18 (4) 16

3. 9 11 13
13 15 17
10 12 14
14 16 18
11 13 ?

- (1) 22 (2) 14
(3) 15 (4) 21

4.

3	2	2	-1	6	5
4	24	-2	4	0	?

- (1) 30 (2) 11
(3) 0 (4) 1

5. 7 5 3
8 4 9
2 8 ?
112 160 162

- (1) 4 (2) 6
(3) 8 (4) 12

Directions (Qs. 6-11): In the following Six Questions, select the related word/letters/number from the given alternatives.

6. **Haematology : Blood :: Phycology : ?**

- (1) Fungi (2) Fishes
(3) Algae (4) Diseases

7. **Pride of Lions :: _____ of cats**

- (1) Herd (2) School
(3) Clowder (4) Bunch

8. **MAN : PDQ :: WAN : ?**

- (1) ZDQ (2) NAW
(3) YQD (4) YDQ

9. **AEFJ : KOPT :: ? : QUVZ**

- (1) GLKP (2) GKLP
(3) HLKP (4) HKQL

10. **2 : 32 :: 3 : ?**

- (1) 243 (2) 293
(3) 183 (4) 143

11. **D × H : 4 × 8 as M × Q : ?**

- (1) 12 × 17 (2) 12 × 16
(3) 13 × 17 (4) 14 × 18

[27 AUG. 2016: SHIFT-1] from Q. 12 to Q. 16

12. Select the related word/letters/number from the given alternatives.

Donkey : Brays :: Monkey : ?

- (1) Chatters (2) Trumpets
(3) Bellows (4) Grunts

13. Select the related word/letters/number from the given alternatives.

ABDE : FGII :: IJLM : ?

- (1) NOQR (2) NOPQ
(3) NMOP (4) NPQR

14. Select the related word/letters/number from the given alternatives.

1 : 87 : 64

- (1) 25 (2) 36
(3) 30 (4) 27

15. **If 17 + 17 = 2895**

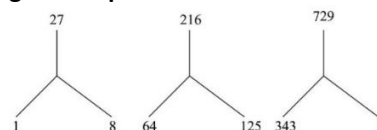
18 + 18 = 3245

19 + 19 = 3015

then 23 + 23 = ?

- (1) 5705 (2) 2505
(3) 4005 (4) 5295

16. Select the missing number from the given responses.



- (1) 432 (2) 334
(3) 512 (4) 301

[8 AUG. 2017: SHIFT-1] from Q. 17 to Q. 20

17. In the following question, select the related word from the given alternatives.

Car : Road :: Ship : ?

- (1) Water
(2) Air
(3) Road
(4) Both Air and Water

18. In the following question, select the related letters from the given alternatives.

GLOW : FJNU :: PTEL : ?

- (1) ORFN (2) ORDJ
(3) ORJD (4) OPNF

19. In the following question, select the related number from the given alternatives.

5 : 124 :: 6 : ?

- (1) 215 (2) 216
(3) 217 (4) 220

20. In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

7	6	3
2	5	1
8	9	4
115	273	?

- (1) 14 (2) 15
(3) 16 (4) 18

[6 JUNE 2019: SHIFT-2] from Q. 21 to Q. 26

21. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster

JKLM : HLKO :: PQRS : ?

- (1) MRQV (2) ORQT
(3) NRQU (4) NQRU

22. Choose the option in which the third word is related to the fourth word in the same way as the first word is related to the second word.

Happy : Joyful :: Sad : ?

- (1) Sorrowful
(2) Humorous
(3) Satisfied
(4) Joyful

23. Select the set in which the numbers are related in the same way as are the numbers of the following set.

(12, 16, 28)

- (1) (20, 25, 35)
(2) (9, 15, 21)
(3) (18, 24, 42)
(4) (36, 48, 77)

24. Select the number-pair in which the two members are related in the same way as are the two numbers of the following number-pair

28 : 63

- (1) 48 : 98 (2) 16 : 36
(3) 36 : 78 (4) 12 : 28

25. 'Dumbness' is related to 'Speech' in the same way as '_____ ' is related to 'Memory'.

- (1) Illusion
(2) Thoughtlessness
(3) Recognition
(4) Amnesia

26. Select the set in which the numbers are related in the same way as are the numbers of the following set.

(15, 22, 31)

- (1) (23, 30, 40) (2) (7, 14, 23)
(3) (11, 18, 29) (4) (5, 11, 20)

[3 MARCH 2020: SHIFT-1] from Q. 27 to Q. 31

27. Select the option in which the numbers are related in the same way as are the numbers in the given set.

(269, 278, 296)

- (1) (313, 322, 340)
(2) (109, 118, 128)
(3) (419, 430, 448)
(4) (577, 586, 598)

28. Select the option that is related to the third word in the same way as the second word is related to the first word.

Medicine : Disease :: Food : ?

- (1) Hunger (2) Energy
(3) Nutrition (4) Thirst

29. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.

12 : 72 : 18 : ? : 22 : 242

- (1) 162 (2) 140
(3) 160 (4) 164

30. Select the option in which the words share the same relationship as that shared by the given pair of words.

Clock : Time

- (1) Ammeter: Current
(2) Taseometer: Wind
(3) Balance Scale
(4) Anemometer : Strains

31. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

6	21	14
40	500	?
8	25	7

- (1) 78 (2) 98
(3) 91 (4) 84

[13 AUG. 2021: SHIFT-1] from Q. 32 to Q. 36

32. Select the option in which the words share the same relationship as that shared by the given pair of words.

Horses : Neigh

- (1) Ducks: Quack
(2) Parrots: Bray
(3) Hares: Boom
(4) Pigs: Buzz

33. Select the option that is related to the third word in the same way as the second word is related to the first word.

Depression : Mood :: Insomnia : ?

- (1) Sleep (2) Thinking
(3) Night (4) Dreams

34. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

4 7 6

15 ? 21

44 68 60

- (1) 19 (2) 20
(3) 18 (4) 24

35. Select the option that is related to the third number in the same way as the second number is related to the first number.

12 : 60 :: 16 : ?

- (1) 210 (2) 121
(3) 112 (4) 201

36. Select the option in which the numbers are related in the same way as are the numbers of the following set.

(25, 18, 225)

- (1) (9, 16, 170)
(2) (24, 22, 264)
(3) (15, 34, 190)
(4) (17, 15, 220)

[18 APRIL 2022: SHIFT-1] from Q. 37 to Q. 39

37. Select the option that is related to the third term in the same way as the second term is related to the first term.

HARMONY : BMLGUDK :: RESOLVE : ?

- (1) OVEJUVH (2) VEDIVHU
(3) VOEIUVH (4) EVOJHVU

38. Study the given matrix carefully and select the number from among the given options that can replace the question mark (?) in it.

12 8 100

18 6 111

15 4 ?

- (1) 62 (2) 78
(3) 108 (4) 102

39. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.

21 : 112 : 36 : 7 : 51 : 272

- (1) 252 (2) 192
(3) 72 (4) 198

[8 DEC. 2022: SHIFT-1] from Q. 40 to Q. 44

40. Select the option that is related to the fourth term in the same way as the first term is related to the second term and the fifth term is related to the sixth term.

11 : 31 :: ? : 25 :: 14 : 40

- (1) 8 (2) 10
(3) 7 (4) 9

41. Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be

considered as meaningful English words and must not be related to each other based on the number of letters / number of consonants / vowels in the word.)

Lethargy : Alertness :: Gentle : ?

- (1) Destroy (2) Kind
(3) Annoying (4) Harsh

42. Select the set in which the numbers are related in the same way as are the numbers of the following set.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g., 13-Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed).

(24, 9, 21)

(34, 16, 33)

- (1) (34, 8, 28) (2) (53, 6, 34)
(3) (43, 17, 41) (4) (42, 9, 30)

43. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.

76 : 11 :: 88 : ? :: 68 : 9

- (1) 12 (2) 14
(3) 18 (4) 15

44. Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Lake : Land :: Island : ?

- (1) Plains (2) Water
(3) Hills (4) Dessert

[19 JULY 2023: SHIFT-2]

From Q. 45 to Q. 52

45. Select the option that is related to the fifth number in the same way as the second number is related to the

first number and the fourth number is related to the third number.

243 : 9 :: 72 : 6 :: 576 : ?

- (1) 12 (2) 18
(3) 24 (4) 14

46. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.

284 : 142 : 568 : 284 : 1136 : ?

- (1) 568 (2) 567
(3) 566 (4) 569

47. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.

Auger : Bore

- (1) Axe : Grind
(2) Plier : Carve
(3) Spanner : Dig
(4) Needle : Sew

48. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.

ADOPT : DAOTP :: FINAL : IFNLA :: HUMOR : ?

- (1) UOHMR (2) UHMRO
(3) UHOMR (4) UHMOR

49. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.

CROWN : OYRVH :: TABLE : FNEEY :: UNREAL : ?

- (1) LAERNU (2) NDHVSA
(3) NCHUSB (4) MCHVSA

50. 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.

15 : 52 :: 33 : _____ :: 22 : 73

- (1) 121 (2) 122
(3) 106 (4) 111

51. Select the set in which the numbers are related in the same way as are the numbers of the given set.

(NOTE: Operations should be performed on the whole numbers,

without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(4, 25, 6)

(3, 28, 9)

- (1) (4, 17, 6) (2) (2, 17, 8)
(3) (3, 17, 9) (4) (4, 17, 8)

52. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /Subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(100, 2, 150)
(50, 5, 240)

- (1) (10, 8, 98) (2) (14, 16, 8)
(3) (10, 5, 200) (4) (16, 8, 126)

[23 SEP. 2024: SHIFT-1] from Q. 53 to Q. 56

53. 12 is related to 235 by certain logic. Following the same logic, 14 is related to 287. To which of the following is 18 related, following the same logic? (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- (1) 512 (2) 320
(3) 415 (4) 438

54. Select the triad in which the numbers are related in the same way as are the numbers of the given triads.

(25, 22, 47), (31, 24, 55)

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(1) (22, 19, 45)

(2) (18, 21, 39)

(3) (27, 25, 42)

(4) (17, 15, 22)

55. Select the option in which the numbers share the same relationship as that shared by the given pair of numbers.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding/deleting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

40 : 123

63 : 192

(1) 68 : 214 (2) 39 : 120

(3) 46 : 131 (4) 48 : 152

56. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.

(The words must be considered as meaningful English words and must NOT be related to each other based on the number of letters/number of consonants/vowels in the word)

France : Gallic Rooster

(1) New Zealand : Hornbill

(2) Germany : Swan

(3) Australia : Emu

(4) India : Eagle

[12 SEP. 2025: SHIFT-1] from Q. 57 to Q. 62

57. In the following question, select the related word from the given

alternatives.

Watt : Power :: Pascal : ?

(1) Energy

(2) Temperature

(3) Pressure

(4) Force

58. In the following question, select the related word from the given alternatives.

Mekong : Tibet :: Amazon : ?

(1) Chile (2) Peru

(3) Colombia (4) Ecuador

59. Find the option that best completes the analogy.

AG : IO :: CM : ?

(1) KO

(2) KU

(3) KS

(4) KW

60. In the following question, the second word is related to the first word by a specific pattern of letter transformation. Identify the same pattern and apply it to the third word to find the correct option that completes the analogy.

TIME : VJOG :: WORD : ?

(1) YPTF

(2) YQTG

(3) YPSF

(4) ZPSF

61. In each of the following questions, a specific pattern such as reversal or rearrangement has been applied to the first word to get the second. Apply the same pattern to the third word and find the correct answer from the given options.

GNIDAER : READING :: NOITULOS : ?

(1) SOLUTION

(2) SOLUNOIT

(3) NOILOSUT

(4) POLLUTION

62. In each of the following questions, the first word is coded to form the second word using a specific rearrangement and/or substitution rule. Apply the same rule to the third word to determine the correct corresponding word from the given alternatives.

AYRRJC : CATTLE :: NCPDCAR : ?

(1) SUBJECTS (2) NEGLECT

(3) PERFECT (4) OPERATE

Answer Key									
1	2	3	4	5	6	7	8	9	10
(3)	(3)	(3)	(3)	(2)	(3)	(3)	(1)	(2)	(1)

11	12	13	14	15	16	17	18	19	20
(3)	(1)	(1)	(4)	(4)	(3)	(1)	(2)	(1)	(2)
21	22	23	24	25	26	27	28	29	30
(3)	(1)	(3)	(2)	(4)	(2)	(1)	(1)	(1)	(1)
31	32	33	34	35	36	37	38	39	40
(3)	(1)	(1)	(4)	(3)	(2)	(2)	(1)	(2)	(4)
41	42	43	44	45	46	47	48	49	50
(4)	(4)	(2)	(2)	(1)	(1)	(4)	(2)	(4)	(3)
51	52	53	54	55	56	57	58	59	60
(2)	(4)	(3)	(2)	(2)	(3)	(3)	(2)	(2)	(1)
61	62								
(1)	(3)								

SOLUTIONS

1. **Correct Answer is (3):** Let's analyze the pattern in the diagram to find the missing number.

Checking a possible relationship using the center number 8:

1. $2 \times 8 + 1 = 17$

2. $17 \times 8 + 1 = 137$

3. $137 \times 8 + 1 = 1097$

so the answer is: (3)1097

2. **Correct Answer is (3):**

$36 - 14 + 12 + 7 = 3$

$54 - 9 + 11 + 16 = 18$

3. **Correct Answer is (3):**

- **Pattern:** Notice that each row has numbers increasing by 2.

- **Solution:** Following the pattern, the missing number is $11 + 2 = 15$.

- **Answer:** (3) 15

4. **Correct Answer is (3):**

Let's analyze the given table and find the missing number.

3	2	2	-1	6	5
4	24	-2	4	0	?

We need to determine the relationship between the numbers in the first row and the second row.

Looking at the first two columns:

- $3 \times 4 = 12$, but 24 is given.
- $2 \times 12 = 24$, which matches.
- Checking the next pair:
- $2 \times -1 = -2$ (Matches the second row)
- $-1 \times -4 = 4$ (Matches)
- Next:
- $6 \times 0 = 0$ (Matches)
- For the last column:
- $5 \times ? = ?$

- Following the pattern, since the previous column used multiplication:
- $5 \times 1 = 5$, but it should match the second row.

Thus, the missing number should be 1.

Answer: (4) 1

5. Correct Answer is (2):

Let's analyze the given number pattern:

7	5	3
8	4	9
2	8	?

Below these numbers, we have: | 112 | 160 | 162 |

Observing how the bottom row values (112, 160, 162) relate to the three columns:

Column-wise calculations:

1st column: $7 \times 8 \times 2 = 112$

2nd column: $5 \times 4 \times 8 = 160$

3rd column: $3 \times 9 \times ? = 162$

Solving for ?:

$3 \times 9 \times ? = 162$

$27 \times ? = 162$

$? = \frac{162}{27} = 6$

Final Answer: (2) 6

6. Correct Answer is (3):

The given analogy is:

Haematology: Blood :: Phycology: ?

Breaking it down:

- Haematology is the study of blood.
 - Phycology is the study of algae.
- Correct Answer: (3) Algae

7. Correct Answer is (3):

- A group of lions is called a pride.
 - A group of cats is called a clowder.
- Correct Answer: (c) Clowder
- The correct analogy is: Pride of Lions :: Clowder of Cats

8. Correct Answer is (1):

The given analogy is: MAN : PDQ :: WAN : ?

Observing the pattern from MAN $\rightarrow$ PDQ, we analyze each letter's transformation:

- M $\rightarrow$ P (Shift +3)
- A $\rightarrow$ D (Shift +3)
- N $\rightarrow$ Q (Shift +3)

Each letter is increased by +3 in alphabetical order.

Now, applying the same pattern to WAN:

1. W $\rightarrow$ Z (Shift +3)

2. A $\rightarrow$ D (Shift +3)

3. N $\rightarrow$ Q (Shift +3)

Thus, WAN $\rightarrow$ ZDQ.

Correct Answer: (1) ZDQ

9. Correct Answer is (2):

The given analogy is: AEFJ : KOPT :: ? : QUVZ

Observing the pattern from AEFJ $\rightarrow$ KOPT, we analyze each letter's transformation:

- A $\rightarrow$ K (Shift +10)
- E $\rightarrow$ O (Shift +10)
- F $\rightarrow$ P (Shift +10)
- J $\rightarrow$ T (Shift +10)

Each letter is increased by +10 in alphabetical order.

Now, applying the same pattern to find the missing word ? $\rightarrow$ QUVZ:

- ? $\rightarrow$ Q (Shift +10 $\rightarrow$ G)
- ? $\rightarrow$ U (Shift +10 $\rightarrow$ K)
- ? $\rightarrow$ V (Shift +10 $\rightarrow$ L)
- ? $\rightarrow$ Z (Shift +10 $\rightarrow$ P)

Thus, GKLP $\rightarrow$ QUVZ.

Correct Answer: (2) GKLP

10. Correct Answer is (1):

The given analogy is: 2 : 32 :: 3 : ?

Observing the pattern in the first pair: $2^5 = 32$

Now, applying the same pattern for 3: $3^5 = 243$

Correct Answer: 243

11. Correct Answer is (3):

The given analogy is: D $\times$ H : 4 $\times$ 8 :: M $\times$ Q : ?

Observing the pattern in D $\times$ H $\rightarrow$ 4 $\times$ 8:

- D is the 4th letter of the alphabet.
- H is the 8th letter of the alphabet.

Now, applying the same pattern to M $\times$ Q:

- M is the 13th letter of the alphabet.
- Q is the 17th letter of the alphabet.

Thus, M $\times$ Q $\rightarrow$ 13 $\times$ 17.

Correct Answer: (3) 13 $\times$ 17

12. Correct Answer is (1):

A **donkey brays** (the sound it makes).

A **monkey chatters** (the typical sound it produces).

Other options:

- Trumpets** $\rightarrow$ Elephants
- Bellows** $\rightarrow$ Cows or Bulls
- Grunts** $\rightarrow$ Pigs

Thus, the best match is **Chatters**.

13. Correct Answer is (1):

ABDE $\rightarrow$ FGJI

A $\rightarrow$ F (+5), B $\rightarrow$ G (+5), D $\rightarrow$ I (+5), E $\rightarrow$ J (+5)

Each letter is shifted forward by +5.

Applying the Same Pattern to IJLM

I $\rightarrow$ N (+5), J $\rightarrow$ O (+5), L $\rightarrow$ Q (+5), M $\rightarrow$ R (+5)

Thus, IJLM $\rightarrow$ NOQR.

14. Correct Answer is (4):

15. Correct Answer is (4):

$17 + 17 \Rightarrow 2895$

$\Rightarrow 17 \times 17 = 289$

$\Rightarrow 289 \Rightarrow 2895$

$18 + 18 \Rightarrow 3245$

$\Rightarrow 18 \times 18 = 324$

$\Rightarrow 324 \Rightarrow 3245$

$19 + 19 \Rightarrow 3615$

$\Rightarrow 19 \times 19 = 361$

$\Rightarrow 361 \Rightarrow 3615$

Similarly,

$23 + 23 = ?$

$\Rightarrow ? = 23 \times 23 = 529$

$\Rightarrow ? = 529 \Rightarrow 5295$

16. Correct Answer is (3):

We have sets of three numbers in each group:

1st group: 27, 1, 8

2nd group: 216, 64, 125

3rd group: 729, 343, ?

Observing the numbers:

- $27 = 3^3$, $1 = 1^3$, $8 = 2^3$
- $216 = 6^3$, $64 = 4^3$, $125 = 5^3$
- $729 = 9^3$, $343 = 7^3$, and the missing number should follow the same pattern.

From the pattern, the missing number should be $8^3 = 512$.

17. Correct Answer is (1):

The analogy is:

Car : Road :: Ship : ?

A car travels on a road. A ship travels on water. Therefore, the answer is: (1) Water

18. Correct Answer is (2):

the initial pattern: GLOW : FJNU

- G to F = -1
- L to J = -2
- O to N = -1
- W to U = -2

So the pattern alternates between -1 and -2. Applying this to PTEL:

- P - 1 = O

- $T - 2 = R$
- $E - 1 = D$
- $L - 2 = J$

This gives us ORDJ, which is option (2).

Therefore, the answer is: **(2) ORDJ**

19. Correct Answer is (1):

Let's analyze the given number pair **5:124** and identify the pattern.

Observing the numbers: 5: 124

One common pattern is using cubes:

$$5^3 - 1 = 125 - 1 = 124$$

Now, applying the same logic to 6: ?:

$$6^3 - 1 = 216 - 1 = 215$$

Thus, the correct answer is **(1) 215**.

20. Correct Answer is (2):

Following pattern is:

We need to identify the pattern to determine the missing number.

(1st number $\times$ 2nd number $\times$ 3rd number) + 3 = 4th number

1. In **Column 1**, $(7 \times 2 \times 8) + 3 = 112 + 3 = 115$,
2. In **Column 2**, $(6 \times 5 \times 9) + 3 = 270 + 3 = 273$
3. In **Column 3**, $(3 \times 1 \times 4) + 3 = 12 + 3 = 15$

So, the missing number is 15.

Therefore, the correct number to complete the series in Column 3 is 15.

21. Correct Answer is (3):

Given: JKLM $\rightarrow$ HLKO

We need to find the pattern in how each letter changes.

Comparing JKLM $\rightarrow$ HLKO letter by letter:

| J $\rightarrow$ H | (-2) |

| K $\rightarrow$ L | (+1) |

| L $\rightarrow$ K | (-1) |

| M $\rightarrow$ O | (+2) |

The pattern applied is: (-2, +1, -1, +2).

We apply (-2, +1, -1, +2) to PQRS:

| P $\rightarrow$ N | (-2) |

| Q $\rightarrow$ R | (+1) |

| R $\rightarrow$ Q | (-1) |

| S $\rightarrow$ U | (+2) |

Thus, the new letter cluster is NQRU.

Answer: (4) NQRU.

22. Correct Answer is (1):

"Happy" and "Joyful" have the same meaning (they are synonyms).

Similarly, "Sorrowful" has the same meaning as "Sad."

23. Correct Answer is (3):

Let's first analyze the relationship between the numbers in the set (12, 16, 28).

- $12 \rightarrow 4 \times 3$.
- $16 \rightarrow 4 \times 4$.
- $28 \rightarrow 4 \times 7$.

Now, let's check the other sets.

1. (20, 25, 35)
 - $20 \rightarrow 5 \times 4$.
 - $25 \rightarrow 5 \times 5$.
 - $35 \rightarrow 5 \times 7$.

So, this set is not similar to the original one.

2. (9, 15, 21)
 - $9 \rightarrow 3 \times 3$.
 - $15 \rightarrow 3 \times 5$.
 - $21 \rightarrow 3 \times 7$.
 - This is not similar to the original set.
3. (18, 24, 42)
 - $18 \rightarrow 6 \times 3$.
 - $24 \rightarrow 6 \times 4$.
 - $42 \rightarrow 6 \times 7$.
 - This is similar to the original set.
4. (36, 48, 77)
 - $36 \rightarrow 6 \times 6$.
 - $48 \rightarrow 6 \times 8$.
 - $77 \rightarrow 7 \times 11$.
 - This is different from the original set.

Final Answer: (3) (18, 24, 42)

24. Correct Answer is (2):

Let's analyze the given number pair: 28:63

Identify the relationship

- Possible pattern:
 - $28 = 2^2 \times 7$
 - $63 = 3^2 \times 7$
 - The structure seems to involve square numbers and a common factor.

Now, let's check the answer choices:

1. 48:98
 - $48 = 2^4 \times 3$
 - $98 = 2 \times 7^2$
 - No clear pattern similar to (28:63).
2. 16:36
 - $16 = 2^4$
 - $36 = 3^2 \times 2^2$
 - Similar structure: one number is a square and the other has squares in its factorization.
- Possible correct answer.

3. 36:78

- $36 = 2^2 \times 3^2$
- $78 = 2 \times 3 \times 13$
- Not following the pattern.

4. 12:28

- $12 = 2^2 \times 3$
- $28 = 2^2 \times 7$
- Does not match the pattern.

The best match for the relationship in 28:63 is (2) 16:36.

25. Correct Answer is (4):

Dumbness refers to the lack or loss of speech. Similarly, the correct answer should refer to the lack or loss of memory.

Among the given options:

1. Illusion – A false perception, not related to memory loss.
2. Thoughtlessness – A lack of consideration, not related to memory loss.
3. Recognition – The ability to identify something, opposite of memory loss.
4. Amnesia – The loss of memory.

Correct answer: (4) Amnesia

26. Correct Answer is (2):

Let's analyze the given number set: (15, 22, 31).

- Differences between consecutive numbers:
 - $22 - 15 = 7$
 - $31 - 22 = 9$
- The pattern in differences: +7, +9 (increasing differences).

Now, let's check the answer choices:

1. (23, 30, 40)
 - $30 - 23 = 7$
 - $40 - 30 = 10$
 - Difference pattern: +7, +10 (not matching +7, +9).
2. (7, 14, 23)
 - $14 - 7 = 7$
 - $23 - 14 = 9$
 - Difference pattern: +7, +9 (matches the given set).
3. (11, 18, 29)
 - $18 - 11 = 7$
 - $29 - 18 = 11$
 - Difference pattern: +7, +11 (not matching +7, +9).
4. (5, 11, 20)
 - $11 - 5 = 6$
 - $20 - 11 = 9$

- Difference pattern: +6, +9 (not matching +7, +9).

The correct set following the same pattern (+7, +9) is (2) (7, 14, 23).

27. Correct Answer is (1): Let's analyze the pattern in the given set: (269, 278, 296).

- 269 → 278 (Difference = +9)
- 278 → 296 (Difference = +18)

The differences follow this pattern: +9, +18 (each time increasing by 9).

Check each option

- (313, 322, 340)
 - 313 → 322 (+9)
 - 322 → 340 (+18) (Matches the pattern!)
 - (109, 118, 128)
 - 109 → 118 (+9)
 - 118 → 128 (+10) (Does not match)
 - (419, 430, 448)
 - 419 → 430 (+11)
 - 430 → 448 (+18) (Does not match)
 - (577, 586, 598)
 - 577 → 586 (+9)
 - 586 → 598 (+12) (Does not match)
- The correct answer is (1) (313, 322, 340) since it follows the same +9, +18 pattern as the given set.

28. Correct Answer is (1): The relationship between Medicine and Disease is that medicine is used to cure or treat a disease.

Now, applying the same logic:

Food is used to satisfy or eliminate hunger.

Checking the options:

- Hunger (Correct, because food eliminates hunger)
- Energy (Food provides energy, but it does not "cure" energy)
- Nutrition (Food contains nutrition, but it does not "cure" nutrition)
- Thirst (Thirst is satisfied by water, not food)

The correct option is (1) Hunger.

29. Correct Answer is (1):

Let's analyze the given pattern:

$$12:72::18:?:22:242$$

Checking the relationship between 12 and 72:

$$12 \times 6 = 72$$

Checking the relationship between 22 and 242:

$$22 \times 11 = 242$$

$$1^{\text{st}} \text{ term} \times \text{it's half} = 2^{\text{nd}} \text{ term}$$

Apply the pattern to 18

$$18 \times 9 = 162$$

Thus, the correct answer is: (1) 162

30. Correct Answer is (1): The given pair Clock: Time represents an instrument and the quantity it measures. A clock is used to measure time.

Now, let's analyze the options:

- Ammeter: Current → An ammeter measures electric current. (Correct)
 - Taseometer: Wind → Incorrect, as a taseometer measures strain, not wind.
 - Balance Scale → Incomplete pair, as it does not mention what is measured.
 - Anemometer: Strains → Incorrect, as an anemometer measures wind speed, not strains.
- Correct answer: (1) Ammeter: Current

31. Correct Answer is (3): Observing the pattern which followed column wise is:

- $(1^{\text{st}} \text{ term} \times 3^{\text{rd}} \text{ term}) - 3^{\text{rd}} \text{ term} = 2^{\text{nd}} \text{ term}$
- $6 \times 8 - 8 = 40$
- $21 \times 25 - 25 = 500$
- $14 \times 7 - 7 = 91$

Thus, the missing number is 91.

Answer: (3) 91

32. Correct Answer is (1): "Horses" make the sound "Neigh," and similarly, "Ducks" make the sound "Quack." This maintains the same relationship of animals and the sounds they produce.

33. Correct Answer is (1): Depression is a disorder that affects mood. Insomnia is a disorder that affects sleep. Therefore, the answer is: (1) Sleep

34. Correct Answer is (4):

$$\begin{array}{ccc} 4 & 7 & 6 \\ 15 & ? & 21 \\ 44 & 68 & 60 \end{array}$$

The logic is column wise : $(2^{\text{nd}} \text{ no} - 1^{\text{st}} \text{ no}) \times 4 = 3^{\text{rd}} \text{ no}$

$$1^{\text{st}} \text{ column : } (15 - 4) \times 4 = 44$$

$$3^{\text{rd}} \text{ column : } (21 - 6) \times 4 = 60$$

Similarly

$$2^{\text{nd}} \text{ column : } (? - 7) \times 4 = 68$$

$$? - 7 = 68 \div 4$$

$$? - 7 = 17$$

$$? = 17 + 7 = 24$$

Final answer : 24

35. Correct Answer is (3):

The logic is

$$12:60 \rightarrow 12[(12 \div 2) - 1] = 12 \times (6 - 1) = 12 \times 5 = 60$$

Similarly

$$16: ? \rightarrow 16[(16 \div 2) - 1] = 16 \times (8 - 1) = 16 \times 7 = 112$$

Final Answer : 112

36. Correct Answer is (2): To find the option in which the numbers are related in the same way as the set (25, 18, 225), we first need to analyze the relationship between the numbers in the given set.

From our analysis:

- The third number (225) is derived from multiplying the first number (25) by a second number (18/2).

Specifically, if we denote:

- First number = x
- Second number = y
- Third number = $x \times y/2$.

$$225 = 25 \times \left(\frac{y}{2}\right) \text{ where } y = 18$$

Now, let's test each option to find a similar relationship.

Option (1): (9, 16, 170)

- First number: 9
- Second number: 16
- Third number: $170 \neq 9 \times (16/2) = 9 \times 8 = 72$

• **Option (2): (24, 22, 264)**

- First number: 24
- Second number: 22
- Third number: $264 = 24 \times (22/2) = 24 \times 11 = 264$

- This matches!

Option (3): (15, 34, 190)

- First number: 15
- Second number: 34
- Third number: $190 \neq 15 \times (34/2) = 15 \times 17 = 255$

Option (4): (17, 15, 220)

- First number: 17
- Second number: 15
- Third number: $220 \neq 17 \times (15/2) = 17 \times 7.5 = 127.5$

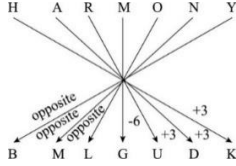
Conclusion

The only option that maintains a consistent relationship similar to that of the original set is: **(2) (24, 22, 264).**

37. Correct Answer is (2):

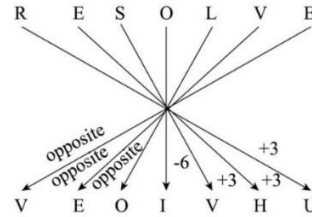
"The logic followed here is:-

HARMONY : BMLGUDK



Similarly,

RESOLVE : ?



Hence, the correct answer is 'VEOIVHU'."

38. Correct Answer is (1):

Multiplication

Addition/Subtraction

$$12 \times 8 + 4 = 96 + 4 = 100$$

$$18 \times 6 + 3 = 108 + 3 = 111$$

$$15 \times 4 + 2 = 60 + 2 = 62$$

Thus, the missing number is 62.

39. Correct Answer is (2):

Checking for a pattern:

$$21^2 - 1 = 441 - 1 = 112$$

$$51^2 - 1 = 2601 - 1 = 272$$

Apply the same pattern to 36

$$36^2 - 1 = 1296 - 1 = 192$$

40. Correct Answer is (4):

To find the missing number, let's analyze the given number pairs:

1. $11 \rightarrow 31$

2. $? \rightarrow 25$

3. $14 \rightarrow 40$

Looking at the first and second terms:

$$11 \rightarrow 31$$

Checking the relation:

$$11 \times 3 - 2 = 31$$

$$(11 \times 3) - 2 = 33 - 2 = 31$$

Now, checking the last given pair:

$$14 \rightarrow 40$$

$$14 \times 3 - 2 = 42 - 2 = 40$$

Apply the pattern to find the missing number

We have $? \rightarrow 25$, so we solve for ?:

$$? \times 3 - 2 = 25$$

$$? \times 3 = 27$$

$$? = 9$$

The missing number is 9.

Correct option: (4) 9.

41. Correct Answer is (4):

Let's analyze the relationship between Lethargy and Alertness:

- Lethargy refers to a state of being sluggish or inactive.
- Alertness refers to being awake, aware, and active.

These two words are opposites, meaning lethargy is the opposite of alertness.

Now, let's apply the same logic to Gentle:

- Gentle refers to being mild, kind, or soft.
- The opposite of gentle would be something harsh or not mild.

Looking at the options:

1. Destroy – This doesn't fit as an opposite of gentle.
2. Kind – This is a synonym, not an opposite.
3. Annoying – This is not the opposite of gentle.
4. Harsh – This is the opposite of gentle.

Thus, the word related to Gentle in the same way as Alertness is related to Lethargy is Harsh.

Correct answer: (4) Harsh

42. Correct Answer is (4):

Let's analyze the relationship between the numbers in the set (24, 9, 21).

- The first number is 24.
- The second number is 9.
- The third number is 21.

Now, let's explore the operations between these numbers:

1. $24 - 9 = 15$

2. $24 - 21 = 3$

3. $9 + 3 = 12$

It seems like there is a subtraction between the first and second numbers, then a subtraction between the first and third numbers, and then the sum of those differences.

Now, let's apply this relationship to the options:

Option 1: (34, 8, 28)

- $34 - 8 = 26$

- $34 - 28 = 6$

- $8 + 6 = 14$

This doesn't match the pattern from the given set.

Option 2: (53, 6, 34)

- $53 - 6 = 47$

- $53 - 34 = 19$

- $6 + 19 = 25$

This doesn't match the pattern either.

Option 3: (43, 17, 41)

- $43 - 17 = 26$

- $43 - 41 = 2$

- $17 + 2 = 19$

This doesn't match the pattern.

Option 4: (42, 9, 30)

- $42 - 9 = 33$

- $42 - 30 = 12$

- $9 + 12 = 21$

This matches the pattern of the original set (24, 9, 21).

Correct answer: (4) (42, 9, 30)

43. Correct Answer is (2):

The logic followed here is:

Logic: (2nd number + 8) $\times$ 4 = 1st number.

Now,

For 76 : 11

$$\Rightarrow (11 + 8) \times 4$$

$$\Rightarrow 19 \times 4 = 76.$$

For 68 : 9

$$\Rightarrow (9 + 8) \times 4$$

$$\Rightarrow 17 \times 4 = 68.$$

Similarly, for 88 : ?

$$\Rightarrow (14 + 8) \times 4$$

$$\Rightarrow 22 \times 4 = 88.$$

Hence, the correct answer is "14".

44. Correct Answer is (2):

Let's analyze the given analogy:

Lake: Land :: Island: ?

- Lake: Land: A lake is a body of water surrounded by land.

- So, land is the opposite or complement of a lake.

Now, applying this logic to Island : ? :

- An island is a piece of land surrounded by water.

- The complement of an island would be Water because water surrounds the island.

Thus, the answer is Water.

The correct answer is (2) Water.

45. Correct Answer is (1):

Let's check as per the logic:

- 243 : 9
 $243 = (9)^2 \times (9 \div 3)$
 $243 = 81 \times 3$
 $243 = 243$
 $LHS = RHS$
- 72 : 6
 $72 = (6)^2 \times (6 \div 3)$
 $72 = 36 \times 2$
 $72 = 72$
 $LHS = RHS$
- Similarly,
 $576 : ?$
 $576 = (?)^2 \times (? \div 3)$
 $576 \times 3 = (?)^3$
 $1728 = (?)^3$
 $? = 12$

Hence, the correct answer is "12."

46. Correct Answer is (1):

The pattern in the given number pairs appears to be:

1st number $\div 2 =$ 2nd number

Let's verify:

- $284 \div 2 = 142$
 - $568 \div 2 = 284$
 - $1136 \div 2 = 568$
- Thus, the missing number should be 568.

47. Correct Answer is (4):

- Auger: Bore $\rightarrow$ An auger is a tool used to bore holes.
 - Needle: Sew $\rightarrow$ A needle is a tool used to sew fabric.
- This maintains the same "tool and its function" relationship as Auger: Bore.

48. Correct Answer is (2):

- ADOPT $\rightarrow$ DAOTP
 The first and second letters swap places: A $\rightarrow$ D, D $\rightarrow$ A
 The last three letters remain in the same order.
- FINAL $\rightarrow$ IFNLA
 The first and second letters swap places: F $\rightarrow$ I, I $\rightarrow$ F
 The last three letters remain in the same order.
 Now, applying the same pattern to HUMOR:
 - Swap the first and second letters: H $\rightarrow$ U, U $\rightarrow$ H
 - The last three letters remain unchanged: MOR $\rightarrow$ MRO

Thus, HUMOR $\rightarrow$ UHMRO.

49. Correct Answer is (4):

CROWN $\rightarrow$ OYRVH

Mapping each letter:

First reverse the mapping order

C(+5) $\rightarrow$ H

R (+4) $\rightarrow$ V

O(+3) $\rightarrow$ R

W (+2) $\rightarrow$ Y

N(+1) $\rightarrow$ O

TABLE $\rightarrow$ FNEEY

T (+5) $\rightarrow$ Y

A(+4) $\rightarrow$ E

B(+3) $\rightarrow$ E

L (+2) $\rightarrow$ N

E (+1) $\rightarrow$ F

The pattern appears to involve shifting letters according to a set transformation.

Following the pattern, we map each letter of UNREAL accordingly:

U (+6) $\rightarrow$ A

N (+5) $\rightarrow$ S

R (+4) $\rightarrow$ V

E(+3) $\rightarrow$ H

A (+2) $\rightarrow$ C

L (+1) $\rightarrow$ M

Thus, UNREAL $\rightarrow$ MCHVSA.

50. Correct Answer is (3):

Checking the relationship:

• $(15 \times 3) + 7 = 52$

• $(22 \times 3) + 7 = 73$

Applying the same pattern to 33:

• $(33 \times 3) + 7 = 106$

51. Correct Answer is (2):

One possible pattern is:

Middle Number

$= (\text{First Number}^2)$

$+ (\text{Third Number}^2)$

Let's verify:

1. For (4, 25, 6): $\Rightarrow 4^2 + 6^2 = 16 + 9 = 25$

2. For (3, 28, 9): $\Rightarrow 3^2 + 9^2 = 9 + 81 = 90$

Now, let's check the options using the same pattern:

1. (2, 17, 8) $\Rightarrow 2^2 + 8^2 = 4 + 64 = 68$

52. Correct Answer is (4):

For (100, 2, 150):

Possible relation:

$\frac{100}{2} \times 3 = 150$

For (50, 5, 240):

$\frac{50}{5} \times 24 = 240$

Now, let's check the options using the same logic:

(16, 8, 126)

$\frac{16}{8} \times 63 = 126$

This follows the same logic as the given pairs.

53. Correct Answer is (3):

- Focus on the first pair (12 and 235):** We need to transform 12 into 235 using valid operations. Let's consider squaring the number:

- 12 squared (12^2) = $12 \times 12 = 144$

- Now see how far off we are from the target number:** We have 144, and we want to get to 235. So, we calculate the difference:

- $235 - 144 = 91$

- Let's test that pattern on the second pair (14 and 287):**

- 14 squared (14^2) = $14 \times 14 = 196$

- $287 - 196 = 91$

The Rule:

The rule is: "Square the first number and then add 91 to the result to get the second number."

Mathematically: First Number² + 91 = Second Number

Applying the Rule to 18:

Now we can confidently apply this rule to find the number related to 18:

1. Square 18: $18^2 = 18 \times 18 = 324$

2. Add 91 to the result: $324 + 91 = 415$

Therefore, 18 is related to 415.

54. Correct Answer is (2):

Let's analyze the relationship in the given triads: (25, 22, 47) and (31, 24, 55).

• In (25, 22, 47): $25 + 22 = 47$

• In (31, 24, 55): $31 + 24 = 55$

The relationship is that the sum of the first two numbers equals the third number.

Now, we need to find a triad among the options that follows the same pattern:

• (1) (22, 19, 45): $22 + 19 = 41$, not 45.

• (2) (18, 21, 39): $18 + 21 = 39$. This matches the pattern.

• (3) (27, 25, 42): $27 + 25 = 52$, not 42.

• (4) (17, 15, 22): $17 + 15 = 32$, not 22.

Therefore, the triad that follows the same relationship is **(2) (18, 21, 39)**.

55. Correct Answer is (2):

Let's first analyze the relationship between the numbers in the given pairs:

40: 123 and 63: 192

If we look at the relationship between the numbers, it appears that the second number can be derived from the first using the following pattern:

- For **40: 123**, the relationship could be expressed as:
 $40 \times 3 + 3 = 123$
 - For **63: 192**, the relationship could be expressed as:
 $63 \times 3 + 3 = 192$
- So, the pattern seems to be multiplying the first number by 3 and then adding 3.
- Now, let's check the options to see which pair follows the same logic.
1. **68: 214:** $68 \times 3 + 3 = 204 + 3 = 207$ (This is not equal to 214)
 2. **39: 120:** $39 \times 3 + 3 = 117 + 3 = 120$ (This is a match)
 3. **46: 131:** $46 \times 3 + 3 = 138 + 3 = 141$ (This is not equal to 131)
 4. **48: 152:** $48 \times 3 + 3 = 144 + 3 = 147$ (This is not equal to 152)
- Therefore, the correct option is **(2) 39: 120**.

56. Correct Answer is (3):

The word pair **France: Gallic Rooster** is a symbolic representation of France, where the rooster is often used as a national symbol, particularly in relation to France's heritage and culture.

Now, let's analyze the options:

- (1) **New Zealand: Hornbill:** The hornbill is not a symbol of New Zealand.
 - (2) **Germany: Swan:** The swan is not a prominent national symbol of Germany.
 - (3) **Australia: Emu:** The emu is a national symbol of Australia, similar to how the Gallic rooster is a symbol of France.
 - (4) **India: Eagle:** While the eagle is a national symbol, it is not as directly connected to India as the rooster is to France.
- So, the correct answer is **(3) Australia: Emu**, as the emu is a national symbol of Australia, similar

to the Gallic Rooster's relationship with France.

57. Correct Answer is: (3)

This is a unit physical quantity analogy.

- Watt is the unit of Power
 - Pascal is the unit of Pressure
- So, the correct answer is Pressure.

58. Correct Answer is: (2)

This is a river place of origin analogy.

- Mekong originates from the Tibet
 - Amazon originates from Peru
- So, the correct answer is Peru.

59. Correct Answer is: (2)

AG : IO :: CM : ?

Look at letter positions

AG → IO

- A → I : +8
 - G → O : +8
- So, the rule is: each letter moves forward by 8 positions.
- Apply the same rule to CM
- C → K : +8
 - M → U : +8
- So, CM → KU

Correct answer: KU

60. Correct Answer is: (1)

TIME → VJOG

Check letter-wise shifts:

- T → V : +2
- I → J : +1
- M → O : +2
- E → G : +2

So, the pattern is: +2, +1, +2, +2

Now apply the same to WORD:

- W → Y : +2
- O → P : +1
- R → T : +2
- D → F : +2

That gives YPTF.

61. Correct Answer is: (1)

GNIDAER → READING

This is a **simple reversal** of letters.

Now apply the same to **NOITULOS**:

Reverse it → **SOLUTION**

That gives **SOLUTION**.

62. Correct Answer is: (3)

Given:

AYRRJC → CATTLE

Check letter-wise transformation:

- A → C (+2)
- Y → A (+2, wrap after Z)
- R → T (+2)
- R → T (+2)
- J → L (+2)

- C → E (+2)

Rule: Each letter is shifted **+2 positions forward** in the alphabet (with wrap-around).

Apply the same rule to:

NCPDCAR

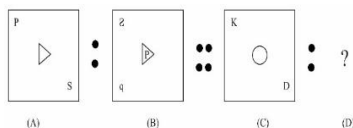
- N → P
- C → E
- P → R
- D → F
- C → E
- A → C
- R → T

Result = **PERFECT**

TIER-II**PREVIOUS YEAR EXAM QUESTION**

[2nd MARCH 2023] from Q. 1 to Q. 3

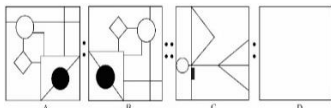
1. Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::?
: DKR :: PCL : %
 (1) # = BNQ, % = NFM
 (2) # = FHT, % = NFJ
 (3) # = COQ, % = OGH
 (4) # = BNP, % = NFJ
2. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
 (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
 (11, 33, 17), (18, 44, 21)
 (1) (12, 40, 18)
 (2) (7, 32, 9)
 (3) (16, 43, 22)
 (4) (15, 34, 19)
3. Figure A is related to B in a certain pattern. Following the same pattern, figure C is related to D. Study the pattern and select the figure which should be placed in place of D.



- (1)
- (2)
- (3)
- (4)

[18th JAN. 2025] from Q. 4 to Q. 6

4. Figure A is related to B in a certain pattern. Following the same pattern, figure C is related to D. Study the pattern and select the figure which should be in place of D.



- (1)
- (2)
- (3)
- (4)

5. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
NOTE : Operations should be performed on the whole numbers without breaking down the numbers into its constituent digits.
Eg. 13 — Operations on 13 such as

adding/ subtracting/ multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.

(215, 185, 135)

(276, 246, 196)

(1) (255, 235, 205)

(2) (294, 264, 224)

(3) (269, 229, 199)

(4) (238, 208, 158)

6. Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of :: ?

: XAF :: SVA : %

(1) # = BEJ % = QRW

(2) # = BEJ % = ORW

(3) # = BEJ % = ORP

(4) # = BBJ % = ORW

[18TH JAN. 2026: SHIFT-1] from Q.7 to Q.10

7. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number:

4: 49 :: 6: 81 :: 8: ?

(1) 187 (2) 176

(3) 145 (4) 121

8. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D by selecting a suitable figure from the answer set that would replace the question mark (?) in figure D.

Problem Figures :

T C () S : O L S ★ :: V O = + : ?

Answer Figures :

C A + = C A X = C A X = C A + = C A + =

(1) 3 (2) 1

(3) 4 (4) 2

9. Instructions: In each of the following, the first and second pair of letters have a specific relationship. Apply the same logic to complete the third pair.

WOODLAND : ZIRXOUQX :: PERIODIC : SYUCRXLW :: MAGAZINE : ?

(1) LOWXSYCZ

(2) HERDWBMO

(3) NUCAQQLP

(4) PUJUCCQY

10. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number:

3: 30 :: 4: 68 :: 5: ?

(1) 175 (2) 145

(3) 130 (4) 126

Answer Key					
1	2	3	4	5	6
(2)	(3)	(2)	(2)	(4)	(2)
7	8	9	10		
(4)	(3)	(4)	(3)		

Solutions

1. Correct Answer is (2):

PCL → NFJ uses shifts:

P(16) → N(14) = -2

C(3) → F(6) = +3

L(12) → J(10) = -2

Apply same shifts to DKR (D= 4, K= 11, R= 18):

D → F (+2), K → H (-3), R → T (+2)

→ gives FHT

So the correct pair is: # = FHT, % = NFJ

Answer: 2

2. Correct Answer is (3):

Given:

(11, 33, 17)

→ 11 × 3 = 33

→ 33 - 16 = 17

Check Option 3: (16, 43, 22)

→ 16 × 3 = 48

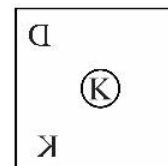
→ 48 - 5 = 43

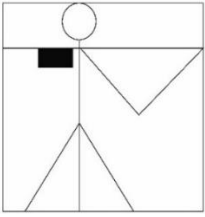
→ 43 - 21 = 22

Follows the same pattern

Correct answer: Option 3

3. Correct Answer is (2):



4. Correct Answer is (2):**5. Correct Answer is (4):**

Find the differences in each set

Set 1:

- $215 \rightarrow 185 \rightarrow 135$
- $215 - 185 = 30$
- $185 - 135 = 50$

Set 2:

- $276 \rightarrow 246 \rightarrow 196$
- $276 - 246 = 30$
- $246 - 196 = 50$

Pattern:

- First number - second = 30
- Second - third = 50

Option 4: (238, 208, 158)

- $238 - 208 = 30$
- $208 - 158 = 50$

Matches perfectly!

Final Answer: 4. (238, 208, 158)

6. Correct Answer is (2):

The pattern is that the letters in the second cluster are obtained by reversing the order of the letters in the first cluster and then shifting each letter one position forward in the alphabet. Applying this pattern, XAF becomes SVA, where S is obtained by reversing X, V by reversing A, and A by reversing F. Then, S is shifted one position to T, V is shifted to W, and A is shifted to B. Following the same pattern, BEJ will become ORW.

7. Correct Answer is (4):

Observe:

$$4 \rightarrow 49 = (4 + 3)^2$$

$$6 \rightarrow 81 = (6 + 3)^2$$

So, rule:

$$n \rightarrow (n + 3)^2$$

For 8:

$$(8 + 3)^2 = 11^2 = 121$$

8. Correct Answer is (3):

Observe that

T C () S : O L ∞ ★

A

B

The first symbol T is inverted and moved to the second place.

The second symbol C is mirrored and

moved to the first place.

The fourth symbol S is rotated 90 degrees anticlockwise.

The third symbol () is changed into a closed and shaded star figure and moved to the fourth place.

Applying the same transformation, Figure 4 (option 3) is the best fit for the given analogy.

9. Correct Answer is (4):

Pattern: Alternating +3 and -6

$$\begin{aligned} M + 3 &= P, A - 6 = U, G + 3 \\ &= J, A - 6 = U, Z + 3 = C, I - 6 \\ &= C, N + 3 = Q, E - 6 = Y \\ &\Rightarrow PUJ UCCQY \end{aligned}$$

10. Correct Answer is (3):

Given: 3: 30 :: 4: 68 :: 5: ?

Observe pattern:

$$n \rightarrow n^3 + n$$

Check:

$$3^3 + 3 = 27 + 3 = 30$$

$$4^3 + 4 = 64 + 4 = 68$$

Apply for 5:

$$5^3 + 5 = 125 + 5 = 130$$