

## Chapter 4

# Analogy

In questions based on analogy, a particular relationship is given and another similar relationship has to be identified from the alternatives provided.

For example :

### 1. Action Object Relationship

#### ILLUSTRATION 1:

Shoot is to Gun as Eat is to .....

- |            |            |
|------------|------------|
| (1) Hunger | (2) Thirst |
| (3) Dinner | (4) Fruit  |

**Sol. (4)** The relationship between the given words is that 'shoot' is the action and 'Gun' is the specified object of action. Similarly 'eat' is the action and 'fruit' is the specified object.

### 2. Antonym Relationship

#### ILLUSTRATION 2:

INTROVERT : EXTROVERT

- |                      |                       |
|----------------------|-----------------------|
| (1) ANGLE : TANGENT  | (2) EXTREME : INTERIM |
| (3) AGAINST : FAVOUR | (4) ACTION : LAW      |

**Sol. (3)** The related words are opposite in meaning.

### 3. Grammatical Relationship

#### ILLUSTRATION 3:

Clever is to Beautiful as Sour is to .....

- |              |             |
|--------------|-------------|
| (1) Lemon    | (2) Cunning |
| (3) Loathing | (4) Taste   |

**Sol. (2)** The related words are Adjectives.

### 4. Part Whole Relationship

#### ILLUSTRATION 4:

MAN : MAMMAL

- |                        |                         |
|------------------------|-------------------------|
| (1) HALL : SNOW        | (2) NATIVE : INHABITANT |
| (3) OFFSPRING : FAMILY | (4) LIBERTY : URBANISM  |

**Sol. (3)** Man is a part of the whole species of mammal, so is an offspring of the whole family.

### 5. Sequence Relationship

#### ILLUSTRATION 5:

..... is to Dusk as Summer is to Monsoon.

- |             |          |
|-------------|----------|
| (1) Evening | (2) Dawn |
| (3) Night   | (4) Noon |

**Sol. (1)** Summer season is immediately followed by monsoon (rainy season) and evening is immediately followed by dusk.

### 6. Volume Relationship

#### ILLUSTRATION 6:

GALLONS : SWIMMING POOL

- |                             |
|-----------------------------|
| (1) SPECTATORS : AUDITORIUM |
| (2) CURRENCY : SHARES       |
| (3) DUST : MOUNTAIN         |
| (4) BOOKS : CATALOGUE       |

**Sol. (1)** Gallons of water is needed to fill a swimming pool and large number of spectators can be admitted into an auditorium.

#### COMMON RELATIONSHIPS

##### 1. Country and currency :

India : Rupee  
Argentina : Peso, China : Yuan, Iraq : Dinar, Kuwait : Dinar,  
Thailand : Baht, Bangladesh : Taka, Greece : Drachma,  
Japan : Yen, UK : Pound, UAE : Dirham, Burma : Kyat  
Iran : Rial, Korea : Won, USA : Dollar, Turkey : Lira

##### 2. Quantity and Unit :

Length: Metre  
Metre is the unit of measuring length.  
Mass : Kilogram                      Time : Seconds  
Energy: Joule                          Resistance: Ohm  
Angle : Radians                      Power: Watt  
Work: Joule                              Current: Ampere  
Area: Hectare                          Temperature: Degrees  
Luminosity: Candela                  Magnetic field: Oersted  
Force: Newton                          Volume : Litre  
Potential : Volt                          Pressure : Pascal  
Conductivity: Mho

##### 3. Animal and Young One :

Cow: Calf	
Calf is the young one of cow.	
Bear : Cub	Hen: Chick
Horse : Colt/Filly/Foal	Lion/tiger : Cub
Duck: Duckling	Sheep : Lamb
Butterfly : Caterpillar	Stag: Fawn
Dog: Puppy	Deer: Fawn
Cockroach: Nymph	Cat : Kitten
Man : Child	Insect: Larva
Frog: Tadpole	Swan: Cygnet

##### 4. Animal and Movement:

Duck: Waddle	
Waddling is the name given to the movement of the duck.	
Bird: Fly	Cock: Strut
Owl: Flit	Bear: Lumber
Elephant: Amble	Horse : Gallop
Lion: Prowl	Mouse: Scamper
Eagle : Swoop	Donkey: Trot
Lamb : Frisk	Rabbit : Leap

Prism : Glass	
Prism is made of glass.	
Butter: Milk	Cloth : Fibre
Wine : Grapes	Fabric: Yarn
Road : Asphalt	Furniture: Wood
Shoes : Leather	Pullover: Wool
Omelette: Egg	Metal : Ore
Rubber: Latex	Linen: Flax
Oil : Seed	Paper: Pulp
Wall : Brick	Book: Paper
Sack : Jute	Jewellery: Gold
Jaggery : Sugarcane	

## RELATION ANALOGY

**DIRECTIONS (ILLUSTRATION 7-9) :** There is a certain relation between two given words on one side of : : and one word is given on another side of : : while another word is to be found from the given alternatives, having the same relation with this word as the given pair has. Select the best alternative.

### ILLUSTRATION 7:

Pigeon : Peace : : White flag : ?

- (1) Enmity (2) Victory  
(3) Surrender (4) War

**Sol. (3)** Pigeon is a symbol of peace and white flag is a symbol of surrender.

### ILLUSTRATION 8:

Mature : Regressed : : Varied : ?

- (1) Rhythmic (2) Monotonous  
(3) Decorous (4) Obsolete

**Sol. (2)** The words in each pair are opposites of each other.

### ILLUSTRATION 9:

Igloo : Ice : : Marquee : ?

- (1) Canvas (2) Silk  
(3) Buckram (4) Satin

**Sol. (1)** First is made up of the second.

## SIMPLE ANALOGY

**DIRECTIONS (EXAMPLE 10-15) :** For the following questions, choose the best option.

### ILLUSTRATION 10:

Cyclone is related to Anticyclone in the same way as Flood is related to .... ? .....

- (1) Devastation (2) Havoc  
(3) River (4) Drought

**Sol. (4)** Both words are opposite to each other.

### ILLUSTRATION 11:

Accident is related to Carefulness in the same way as Disease is related to ..... ?

- (1) Sanitation (2) Treatment  
(3) Medicine (4) Doctor

**Sol. (1)** Lack of second results in the first.

### ILLUSTRATION 12:

Aflatoxin is related to Food Poisoning in the same way as Histamine is related to ..... ? .....

- (1) Allergy (2) Headache  
(3) Anthrax (4) Inhabited

**Sol. (1)** First causes the second.

### ILLUSTRATION 13:

Ostrich is related to Antelope in the same way as Egret is related to ..... ? .....

- (1) Cow (2) Buffalo  
(3) Camel (4) Zebra

**Sol. (2)** Both live together to derive benefits from each other.

### ILLUSTRATION 14:

Bihar is related to India in the same way as Florida is related to ..... ? .....

- (1) Canada (2) Mexico  
(3) North America (4) USA

**Sol. (4)** Bihar is a state in India. Similarly, Florida is a state in USA.

### ILLUSTRATION 15:

Forfeit is related to Surrender in the same way as Remit is related to ..... ? .....

- (1) Perceive (2) Confiscate  
(3) Exempt (4) Cancel

**Sol. (4)** The words in each pair are synonyms.

## CHOOSING A SIMILAR WORD

**DIRECTIONS (ILLUSTRATION 16-18) :** In each of the following questions, a group of three interrelated words is given. Choose a word from the given alternatives that belongs to the same group.

### ILLUSTRATION 16:

Potato : Carrot : Raddish

- (1) Tomato (2) Spinach  
(3) Sesame (4) Groundnut

**Sol. (4)** All grow underground.

### ILLUSTRATION 17:

Patna : Mumbai : Dispur

- (1) Cochin (2) Trombay  
(3) Udaipur (4) Chennai

**Sol. (4)** All are Capitals of states

### ILLUSTRATION 18:

Jam : Jelly : Pickles

- (1) Butter (2) Marmalade  
(3) Grapes (4) Preserve

**Sol. (2)** All are different forms in which fruits/vegetables are preserved.

## DETECTING ANALOGIES

**DIRECTIONS (ILLUSTRATION 19-23) :** In each question three words in bold letters are given which have something in common among themselves. Out of the four given alternatives, choose the most appropriate description about these three words.

### ILLUSTRATION 19:

**Mars : Mercury : Venus :**

- (1) They have no opposite motion  
(2) They are evil planets  
(3) They are the planets nearest to the earth  
(4) They have no corresponding lucky stone.

**Sol. (3)**

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**ILLUSTRATION 20 :**

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**Canoe : Yacht : Dinghy**

- (1) These are tribal people
- (2) These are famous clubs
- (3) These are names of boats
- (4) These are rest houses

**Sol. (3)**

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**ILLUSTRATION 21 :**

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**Slumber : Drowse : Snooze**

- (1) They are medical terms
- (2) The words are connected with sleep
- (3) The terms are connected with peace
- (4) They are first symptoms of somnambulism

**Sol. (2)**

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**ILLUSTRATION 22 :**

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**Prakrit : Pali : Sanskrit**

- (1) They are classical languages of Asia and Europe
- (2) The Vedas are written in these languages
- (3) They are old languages of India
- (4) They are dead languages

**Sol. (3)**

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**ILLUSTRATION 23 :**

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**Vinci : Angelo : Raphael**

- (1) They were Italian engineers
- (2) They were European painters
- (3) They were dictators
- (4) They were famous politicians

**Sol. (2)**

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**THREE WORD ANALOGY**

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**DIRECTIONS (ILLUSTRATION 24-28) :** In each of the following questions, some words are given which are related in some way. The same relationship is obtained among the words in one of the four alternatives given under it. Find the correct alternative.

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**ILLUSTRATION 24 :**

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**Evaporation : Cloud : Rain**

- (1) Sneezing : Cough : Cold
- (2) Accident : Injury : Pain
- (3) Tanning : Leather : Purse
- (4) Bud : Flower : Fragrance

**Sol. (2)** First causes the second and second leads to the third.

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**ILLUSTRATION 25 :**

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**Lizard : Reptile : Insects**

- (1) Fox : Wolf : Forest
- (2) Fly : Insect : Bee
- (3) Man : Mammals : Meat
- (4) Tiger : Mammal : Deer

**Sol. (3)** Second denotes the class to which the first belongs. Also, first feeds on the third.

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**ILLUSTRATION 26 :**

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**Smile : Laugh : Cry**

- (1) Sit : Sleep : Play
- (2) Frown : Anger : Temper
- (3) Morning : Night : Day
- (4) Touch : Catch : Release

**Sol. (4)** Second is of higher intensity than first; third is antonym of second.

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**ILLUSTRATION 27 :**

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**India : Pakistan : Bangladesh**

- (1) Japan : China : Turkey
- (2) Sri Lanka : Japan : India
- (3) Iraq : Kuwait : Iran
- (4) Canada : California : Mexico

**Sol. (3)** India, Pakistan & Bangladesh are countries of Indian sub-continent and Iran, Iraq and Kuwait are the countries of the Arabian sub-continent.

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**ILLUSTRATION 28 :**

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**Morning : Evening : Dusk**

- (1) Triangle : Quadrilateral : Pentagon
- (2) Happy : Gay : Excited
- (3) Summer : Winter : Autumn
- (4) Botany : Zoology : Physiology

**Sol. (3)** Second follows the first and third follows the second.

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**NUMBER ANALOGY**

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**DIRECTIONS (ILLUSTRATION 29) :** In the following question, there is a certain relation between two given numbers on one side of :: and one number is given on another side of :: while another number is to be found from the given alternatives, having the same relation with this number as the numbers of the given pair. Choose the best alternative:

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**ILLUSTRATION 29 :**

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583 : 293 : 488 :: ?

- (1) 777
- (2) 945
- (3) 1155
- (4) 324

**Sol. (2)** Sum of digits of the first number is 2 more than the sum of digits of the second number.

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**DIRECTIONS (ILLUSTRATION 30) :** The following question consists of a pair of numbers that have a certain relationship to each other, followed by four other pairs of numbers given as alternatives. Select the pair in which the numbers are similarly related as in the given pair.

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**ILLUSTRATION 30 :**

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5 : 35

- (1) 7 : 77
- (2) 9 : 45
- (3) 11 : 55
- (4) 3 : 24

**Sol. (1)** The first number is multiplied by the next prime number to obtain the second number.

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**DIRECTIONS (ILLUSTRATION 31) :** In the following question, choose one number which is similar to the numbers in the given set.

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**ILLUSTRATION 31 :**

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Given set : 131, 243, 355

- (1) 372
- (2) 467
- (3) 572
- (4) 684

**Sol. (2)** The first digits of the numbers form the series 1, 2, 3, 4. The second digits of the numbers form the series 3, 4, 5, 6. The last digits of the numbers form the series 1, 3, 5, 7.

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**DIRECTIONS (ILLUSTRATION 32) :** In the following questions, choose that set of numbers from the four alternative sets, that is similar to the given set.

(1) (36, 16, 4)                      (2) (36, 25, 16)  
(3) (39, 26, 13)                      (4) (64, 27, 8)

**DIRECTIONS (ILLUSTRATION 33-40) :** In each of the following questions, there is some relationship between the two terms to the left of :: and the same relationship holds between the two terms to its right. Also, in each question, one term either to the right of :: or to the left of it is missing. This term is given as one of the alternatives below each question. Find out this term.

(1) PRT                      (2) RTU  
(3) TVX                    (4) UWY

(1) KMNP                      (2) MNPR  
(3) TQST                      (4) TVXZ

(1) BBr                      (2) bRR  
(3) RRR                    (4) DDA

(1) XVRPA                      (2) QBKJA  
(3) LPRTU                    (4) JODKB

(1) ACMNMOTVRT      (2) SUNOB  
(3) ACNPMOTVRT      (4) ACMNMOTURT

(1) EOHYZKBB                      (2) FOHYZJBB  
(3) FPHZZKAB                      (4) HOHYBJBA

(1) BDFH	(2) ECGI
(3) SQOM	(4) XVTR

(1) TIRLAB                      (2) TRIALB  
(3) TIRLBA                    (4) TRILBA

```

      1
    2 3 4
   9 8 7 6 5
  10 11 12 13 14 15 16
 25 24 23 22 21 20 19 18 17
 26 27 28 29 30 31 32 33 34 35 36
49 48 47 46 45 44 43 42 41 40 39 38 37
50 51 52 53 54 55 56 57 58 59 60 61 62 63 64
81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65
82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
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Many types of questions are possible based on the above pattern. For instance, formation of parallel lines, perpendicular lines, triangles, squares etc. by taking numbers in order.

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**ILLUSTRATION 41 :**

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Fill the blanks from the choice given below.

129 : 145 :: 3811 : ?

(1) 3713

(2) 328

(3) 346

(4) 3615

**Sol. (4)** There are two groups of numbers. The numbers on the right hand side must have the same relation as the numbers on the left hand side. 129 and 145, in the above pyramid, form a pattern.  
Hence, the number in the blank on the right hand side must form same pattern with 3811. Therefore, the answer is 3615 which forms the pattern.

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**ILLUSTRATION 42 :**

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Fill the blank from the choice given below.

2812 : 765 :: 91123 : ?

(1) 121110

(2) 121314

(3) 122132

(4) 303132

**Sol. (2)** The two numbers on the left hand side form perpendicular line in the pyramid. Therefore, the numbers on the right hand side must be of the same pattern. The answer to the above question should be (2) 121314 to satisfy the same relation.

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**ILLUSTRATION 43 :**

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Fill the blank from the choice given below.

234 : 4614 :: 2812 : ?

(1) 3713

(2) 34614

(3) 121314

(4) 131415

**Sol. (3)** The numbers on the left -hand side form two side of a square. The numbers have been chosen in continuity. 2812 and 121314 are in continuity and form the other two side of the same square. Hence the answer is (3).

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**ILLUSTRATION 44 :**

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Fill the blank from the choice given below.

507986 : 4614 :: 2812 : ?

(1) 745742

(2) 735841

(3) 716039

(4) 755643

**Sol. (1)** Hence two numbers on the left-hand side form perpendicular lines. Therefore, the numbers on the right - hand side must form the same point, taking numbers in order. Hence the answer is (1) 745742.

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**ILLUSTRATION 45 :**

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Fill the blank from the choice given below.

322120 : 321920 :: 324342 : ?

(1) 324142

(2) 324132

(3) 323143

(4) 323319

**Sol. (1)** The numbers on the left-hand side form a triangle. Therefore the numbers on the right-hand side must form a triangle with common point 32. Hence, the answer is (1) 324142.

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## Miscellaneous Solved Examples

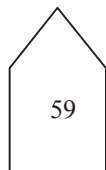
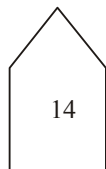
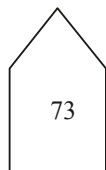
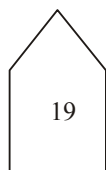
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**EXAMPLE 1 :**

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What number should replace the question mark ?



**Sol. (83)**

$$14 + 5 = (1 + 4) = 19$$

$$19 + 10 = (1 + 9) = 29$$

$$29 + 11 = (2 + 9) = 40$$

$$40 + 4 = (4 + 0) = 44$$

$$44 + 8 = (4 + 4) = 52$$

$$52 + 7 = (5 + 2) = 59$$

$$59 + 14 = (5 + 9) = 73$$

$$73 + 10 = (7 + 3) = 83$$

$$83 + 11 = (8 + 3) = 94$$

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**EXAMPLE 2 :**

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Wax is related to Grease in the same way as Milk is related to

(1) Dring

(2) Ghee

(3) Curd

(4) Protein

**Sol. (3)** First is used to prepare the second.

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**DIRECTIONS (Example 3-4) :** Choose one number which is similar to the numbers in the given set of three numbers.

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**EXAMPLE 3 :**

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Given set : 363, 489, 579

(1) 652

(2) 471

(3) 382

(4) 281

**Sol. (2)**  $3 + 6 + 3 = 12$ , sum of the digits =  $1 + 2 = 3$   
 $4 + 8 + 9 = 21$ , sum of the digits =  $2 + 1 = 3$   
 $5 + 7 + 9 = 21$ , sum of the digits =  $2 + 1 = 3$   
 $\Rightarrow 471 = 4 + 7 + 1 = 12$ , sum of the digits =  $1 + 2 = 3$

#### EXAMPLE 4:

**Given set : 134, 246, 358**

- (1) 372 (2) 460  
 (3) 572 (4) 684

**Sol. (2)** First digit of the given numbers are 1, 2, 3, 4  
 Second digit of the given numbers are 3, 4, 5, 6  
 The last digit of the given numbers are 4, 6, 8, 0

**DIRECTIONS (EXAMPLE 5-6) :** Choose the set of numbers from the four alternatives which is similar to the given set.

#### EXAMPLE 5:

**Given set : (9, 15, 21)**

- (1) (10, 14, 16) (2) (7, 21, 28)  
 (3) (5, 10, 25) (4) (4, 8, 12)

**Sol. (4)** Second number is the average of the other two.

#### EXAMPLE 6:

**Given set : (8, 3, 2)**

- (1) (10, 6, 5) (2) (63, 8, 3)  
 (3) (95, 24, 5) (4) (168, 15, 4)

**Sol. (2)**  $2, 2^2 - 1, 3^2 - 1$ ; so  $3, 3^2 - 1, 8^2 - 1$

**DIRECTIONS (Example 7-8) :** Answer the questions based on series

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

#### EXAMPLE 7:

**ACE : FHJ :: OQS : ?**

- (1) PRT (2) RTU  
 (3) TVX (4) UWY

**Sol. (3)** The logic is +5 letters

#### EXAMPLE 8:

**CAT : DDY :: BIG : ?**

- (1) CLL (2) CLM  
 (3) CML (4) CEP

**Sol. (1)** The logic is +1, +3, +5 steps

## Exercise

# 1

- What number should replace the question mark ?  
 $2836 : 13 ; 9423 : 14 ; 7229 : ?$   
 (1) 16 (2) 18  
 (3) 20 (4) 12
- What number should replace the question mark ?  
 $4322 : 48 ; 4172 : 56 ; 7615 : ?$   
 (1) 110 (2) 210  
 (3) 140 (4) 180
- What number should replace the question mark to follow a definite rule ?  
 $14 + 55 \rightarrow 69 ; 28 + 23 \rightarrow 60 ; 22 + 31 \rightarrow 35$   
 $17 + 28 \rightarrow 99 ; 41 + 27 \rightarrow ?$   
 (1) 115 (2) 116  
 (3) 118 (4) 113

**DIRECTIONS (Qs. 4-8) :** Out of the four choices given for each question, you have to select one that will maintain the relationship on the two sides of the sign :: the same if it is substituted for the question mark '?'

- $12 : 30 :: 20 : ?$   
 (1) 25 (2) 32  
 (3) 35 (4) 42
- $3 : 10 :: 8 : ?$   
 (1) 10 (2) 13  
 (3) 14 (4) 17
- $13 : 19 :: ? : 31$   
 (1) 21 (2) 23  
 (3) 25 (4) 26
- $48 : 122 :: 168 : ?$   
 (1) 284 (2) 286  
 (3) 288 (4) 290
- $TSR : FED :: WVU : ?$   
 (1) CAB (2) MLK  
 (3) PQS (4) GFH

**DIRECTIONS (Qs. 9-10) :** Letters of the English alphabet have been formed into groups in certain order. Find the set of letters that is most appropriate to fill the gap from the sets given in the choice.

- ACBD : EFGH :: OQPR -  
 (1) STUV (2) RSTU  
 (3) UVWX (4) QRST
- CEG : EGC :: LNP :  
 (1) LPN (2) UWY  
 (3) NPL (4) MOP

**DIRECTIONS (Qs. 11-12) :** Fill up the blank with the letter given in the choice in each of the following expression.

- E : V :: I : .....  
 (1) Q (2) R  
 (3) S (4) T
- ACE : FGH :: LNP ?  
 (1) QRS (2) PQR  
 (3) QST (4) MOQ

**DIRECTIONS (Qs. 13 & 14) :** In each question first two given words are related in some way . The same relation is in between third and fourth. Find out the one correct answer among the alternatives.

- $211 : 333 :: 356 : ?$   
 (1) 358 (2) 359  
 (3) 423 (4) 388
- Wine : Grapes :: Vodks : ?  
 (1) Apple (2) Potatoes  
 (3) Oranges (4) Flour

**DIRECTIONS (Qs. 15 & 19) :** In each question, there are four terms in each question. The terms right to symbol :: have same relationship as the term of the left to symbol ::. Out of the four, one term is missing which is one of the four alternatives given below. Find out the correct alternatives.

15. UVST : WrUr :: ? : RiLo  
 (1) P K J Q (2) T S U V  
 (3) U V T S (4) T S V U
16. Race : Fatigue :: Fast : ?  
 (1) Food (2) Appetite  
 (3) Hunger (4) Weakness
17. Neck is related to Tie in the same way as Waist is related to—  
 (1) Watch (2) Belt  
 (3) Ribbon (4) Shirt
18. ACFJ is related to ZXUQ in the same way as EGJN is related to —  
 (1) DBYU (2) VTQM  
 (3) VTRP (4) VUSQ
19. 9 : 80 :: 7 : ?  
 (1) 48 (2) 50  
 (3) 78 (4) 82

**DIRECTIONS (Qs. 20-22):** In each of the following questions, there are two words / set of letters / numbers to the left of the sign :: which are connected in some way. The same relationship obtains between the third words / set of letters / numbers and one of the four alternatives under it. Find the correct alternative in each question.

20. 'JKLM' is related to 'XYZA' in the same way as 'NOPQ' is related to  
 (1) RSTU (2) YZAB  
 (3) DEFG (4) BCDE
21. 'Engineer' is related to 'Machine' in the same way as 'Doctor' is related to  
 (1) Hospital (2) Body  
 (3) Disease (4) Medicine
22. 'Chapter' is related to 'Book' in the same way as 'brick' is related to  
 (1) heap (2) building  
 (3) clay (4) mason

**DIRECTIONS (Qs. 23 & 28) :** Choose the best alternative.

23. Moon : Satellite :: Earth : ?  
 (1) Sun (2) Planet  
 (3) Solar system (4) Asteroid
24. Ocean : Water :: Glacier : ?  
 (1) Refrigerator (2) Ice  
 (3) Mountain (4) Cave
25. Bank : River :: Coast : ?  
 (1) Flood (2) Waves  
 (3) Sea (4) Beach
26. Wax is related to Grease in the same way as Milk is related to .....?  
 (1) Drink (2) Ghee  
 (3) Curd (4) Protein
27. Chef is related to Restaurant in the same way as Druggist is related to .....?  
 (1) Medicine (2) Pharmacy  
 (3) Store (4) Chemist

28. Kilogram is related to Quintal in the same way as Paisa is related to .....?  
 (1) Rupee (2) Coin  
 (3) Wealth (4) Money

**DIRECTIONS (Qs. 29-31) :** Select the lettered pair that has the same relationship as the given pair of words.

29. Knife : Chopper :: ? : ?  
 (1) Walking : Fitness  
 (2) Swim : Float  
 (3) Scissors : Cloth  
 (4) Quilt : Blanket
30. Fury : Ire :: ? : ?  
 (1) Amusement : Happiness  
 (2) Joke : Laugh  
 (3) Cry : Hurl  
 (4) Convulsion : Spasm
31. Food : Hungry :: ? : ?  
 (1) Thought : Politics  
 (2) Water : River  
 (3) Rest : Weary  
 (4) Wine : Intoxication

**DIRECTIONS (Qs. 32-33) :** Choose a word from the given alternatives that belongs to the same group of three related words.

32. Jute : Cotton : Wool  
 (1) Terylene (2) Silk  
 (3) Rayon (4) Nylon
33. Basic : Pascal : Fortran  
 (1) Cyclotrone (2) Computer  
 (3) Cobol (4) Bhopal

**DIRECTIONS (Qs.34-36):** Choose the best alternative.

34. 6 : 18 :: 4 : ?  
 (1) 2 (2) 6  
 (3) 8 (4) 16
35. 583 : 293 :: 488 : ?  
 (1) 291 (2) 378  
 (3) 487 (4) 581
36. 8 : 28 :: 27 : ?  
 (1) 8 (2) 28  
 (3) 64 (4) 65

**DIRECTIONS (Qs.37-39):** Choose one number which is similar to the numbers in the given set of three numbers.

37. Given set: 363, 489, 579  
 (1) 562 (2) 471  
 (3) 382 (4) 281
38. Given set: 282, 354, 444  
 (1) 453 (2) 417  
 (3) 336 (4) 255
39. Given set: 134, 246, 358  
 (1) 372 (2) 460  
 (3) 572 (4) 684

**DIRECTIONS(Qs.40-42) :** Choose the set of numbers from the four alternatives which is similar to the given set.

40. Given set: (6, 13, 22)  
 (1) (6, 13, 27) (2) (10, 16, 28)  
 (3) (11, 18, 27) (4) (13, 19, 27)



41. Given set: (12, 20, 4)  
 (1) (5, 10, 15) (2) (13, 18, 5)  
 (3) (17, 27, 5) (4) (20, 15, 25)
42. Given set: (21, 51, 15)  
 (1) (21, 30, 51) (2) (21, 35, 41)  
 (3) (31, 51, 42) (4) (21, 91, 35)

**DIRECTIONS (Qs.43-53):** In each of the following questions, there are two words / set of letters / numbers to the left of the sign :: which are connected in some way. The same relationship obtains between the third words / set of letters / numbers and one of the four alternatives under it. Find the correct alternative in each question.

43. Man : Walk :: Fish : ?  
 (1) Swim (2) Eat  
 (3) Live (4) Sleep
44. Medicine : Sickness :: Book : ?  
 (1) Ignorance (2) Knowledge  
 (3) Author (4) Teacher
45. Supervisor : Worker ::  
 (1) Junior : Senior (2) Elder : Younger  
 (3) Debtor : Creditor (4) Officer : Clerk
46. Thunder : Rain :: Night : ...  
 (1) Day (2) Dusk  
 (3) Darkness (4) Evening

47. NUMBER : UNBMER :: GHOST : ?  
 (1) HOGST (2) HOGTS  
 (3) HGOST (4) HGSOT
48. Court : Justice :: School : ?  
 (1) Teacher (2) Student  
 (3) Ignorance (4) Education
49. Oxygen : Burn :: Carbon dioxide : ?  
 (1) Isolate (2) Foam  
 (3) Extinguish (4) Explode
50. Teheran : Iran :: Beijing : ?  
 (1) China (2) Japan  
 (3) Turkey (4) Malaysia
51. Ocean : Pacific :: Island : ?  
 (1) Greenland (2) Ireland  
 (3) Netherland (4) Borneo
52. Major : Battalion :: Colonel : ?  
 (1) Company (2) Regiment  
 (3) Army (4) Soldiers
53. Shout : Whisper :: Run : ?  
 (1) Stay (2) Stand  
 (3) Walk (4) Hop

## Exercise

## 2

**DIRECTIONS (Qs. 1-5) :** Out of the four choices given for each example, you have to select one that will maintain the relationship on the two sides of the sign :: the same if it is substituted for the question mark '?'

1. A b c : p Q r :: ? : x Y z  
 (1) L M N (2) M n o  
 (3) u v w (4) B C D
2. 25 : 15 :: 7 : ?  
 (1) 4 (2) 5  
 (3) 6 (4) 7
3. ? : W P J :: M H Z : ?  
 (1) Y R L, K F X (2) V O I, N I B  
 (3) X Q K, L G Y (4) W R J, M I Z
4. F L O : M O C :: R D P : ?  
 (1) N G O (3) M G P  
 (2) G M P (4) M P G
5. Moon : Satellite :: Earth : ?  
 (1) Sun (2) Planet  
 (3) Solar system (4) Asteroid

**DIRECTIONS (Qs. 6-11) :** Out of the four choices given for each question, you have to select one that will maintain the relationship on the two sides of the sign :: the same if it is substituted for the question mark '?'

6. C J D L : F M G R :: I K J R : ?  
 (1) O Q P T (2) R S T U  
 (3) L S M T (4) K R M O
7. R U X : T R P :: B E H : ?  
 (1) S Q N (2) Q O N  
 (3) Q O M (4) Q N L

**DIRECTIONS (Qs. 8-9) :** Fill up the blank with the letter given in the choice in each of the following expression.

8. A : X :: B : .....  
 (1) W (2) V  
 (3) Y (4) Z
9. K L M : P O N :: N O P : .....  
 (1) L M K (2) M L K  
 (3) N M L (4) K L N

**DIRECTIONS (Qs. 10) :** In each question, there are four terms in each question. The terms right to symbol :: have some relationship as the term of the left to symbol :: . Out of the four , one term is missing which is one of the four alternatives given below. Find out the correct alternatives.

10. Choose a word from the given alternatives that belongs to the same group.  
 Clutch : Brake : Horn  
 (1) Stand (2) Steering  
 (3) Car (4) Accident

**DIRECTIONS :** In each of the following questions, a pair of words is given, followed by four pairs of words as alternatives. Choose the correct pair in which the words bears the same relationship to each other as the words of the given pair bear.

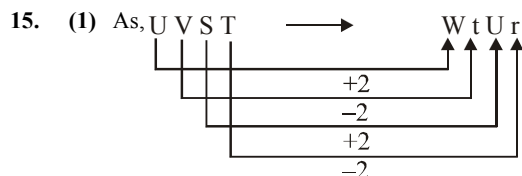
11. Teeth : Chew ::  
 (1) Mind : Think (2) Sweater : Heat  
 (3) Food : Taste (4) Eyes : Flicker
12. Eyes : Tears ::  
 (1) Sea : Water (2) Volcano : Lava  
 (3) Heart : Artery (4) Hunger : Bread

13. Lawn : Grass ::  
 (1) Wool : Sheep (2) Skin : Goat  
 (3) Pelt : Fur (4) Rice : Farm
14. Telephone : Ring :: ..... : .....  
 (1) Door : knock (2) Gate : open  
 (3) Door : wood (4) Lock : key
15. Always : Never ::  
 (1) Often : Rarely  
 (2) Frequently : Normally  
 (3) Constantly : Frequently  
 (4) Intermittently : Casually
16. Insult : Humiliate ::  
 (1) Shoot : Kill (2) Abuse : Disrespect  
 (3) Dog : Bark (4) Injury : Pungent
17. Soldier : Regiment :: ?  
 (1) Wheels : Bearings (2) Coil : Motor  
 (3) Book : Printer (4) Nitrogen : Gas
18. Seldom : Rarely ::  
 (1) Frequent : Infrequently  
 (2) Often : Usually  
 (3) Collectively : Selectively  
 (4) Tantamount : Equivalent
19. PS : DG ::  
 (1) CE : TR (2) KM : OQ  
 (3) EH : TW (4) FH : JL
20. Volcano : Lava ::  
 (1) Fault : Earthquake (2) Death : Sorrow  
 (3) Delta : River (4) Rock : Sand
21. Shoe : Leather :: ..... : .....  
 (1) Bus : Conductor (2) Train : Wagon  
 (3) Highway : Asphalt (4) Medicine : Doctor
22. Dinosaur : Dragon :: ..... : .....  
 (1) Evolution : Revelation  
 (2) Gorilla : Soldier  
 (3) Snow : Ice  
 (4) Primeval : Medieval

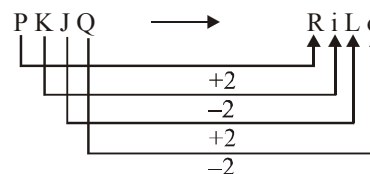
# Hints & SOLUTIONS

## Exercise 1

1. (1)  $7 + 2 - 2 + 9 = 16$   
 2. (2)  $7 \times 6 \times 1 \times 5 = 210$   
 3. (4) Reverse the digits to the right of the plus sign.  
 4. (4)  $12 = 3^2 + 3$ ,  $30 = 5^2 + 5$  :  
 $20 = 4^2 + 4$  :  $? = 6^2 + 6$   
 5. (4)  $3 = 2^2 - 1$ ,  $10 = 3^2 + 1$   
 $8 = 3^2 - 1$ ,  $? = 4^2 + 1$   
 6. (2) 13 and 19 are primes with 17 left out in between.  
 7. (4)  $48 = 7^2 - 1$ ,  $122 = 11^2 + 1$  :  
 $168 = 13^2 - 1$ ,  $? = 17^2 + 1$   
 8. (2) The letters are consecutive and written in reverse order.  
 9. (1)  $\begin{matrix} \text{A B C D} & \text{O P Q R} \\ \text{E F G H} & \text{S T U V} \end{matrix}$   
 10. (3) CEG is formed by skipping the letters in between them, the second set EGC is formed by simply putting the first letter of CEG at last to form EGC, and so on.  
 11. (2) The 5th letter from A correspond to 5th from Z and therefore 9th letter 'I' from A would correspond 9th letter 'R' from Z.  
 12. (1) The three letters moved 5, 4, and 3 and steps forward respectively.  
 13. (4)  $211 \Rightarrow 2 + 1 + 1 = 4$   $\left. \begin{matrix} \\ \\ \end{matrix} \right\} + 5$   
 $333 \Rightarrow 3 + 3 + 3 = 9$   
 Similarly,  $356 \Rightarrow 3 + 5 + 6 = 14$   $\left. \begin{matrix} \\ \\ \end{matrix} \right\} + 5$   
 $388 \Rightarrow 3 + 8 + 8 = 19$
14. (2) As Wine is made up by grapes, similarly Vodka is made up by rye or wheat or potatoes.



In the same way,



$\therefore ? = \text{P K J Q}$

16. (3) Race causes fatigue and fast causes hunger.  
 17. (2) Tie is worn in the neck and belt is worn on the waist.  
 18. (2) A, C, F, J are 1st, 3rd, 6th and 10th letters from the start of alphabets whereas Z, X, U, Q are the 1st, 3rd, 6th and 10th letters from the end. In the same way, EGJN are related to VTQM.  
 19. (1) The logic is  $x : (x^2 - 1)$ . So the missing number is  $7^2 - 1$  i.e. 48.  
 20. (4) Each letter of JKLM stands for each corresponding letter of XYZA, 14 places before.  
 21. (3) First tackles the second.  
 22. (2) As 'Chapter' is a part of a 'Book', in the same way, 'brick' is a part of a 'Building'.  
 23. (2) Moon is a satellite and Earth is a planet.  
 24. (2) First consists of the second.  
 25. (3) Bank is the land beside a river and coast is the land beside a sea.  
 26. (3) First is used to prepare the second.  
 27. (2) Second is the working place of the first.  
 28. (1) Second is a bigger unit than the first and both are used to measure the same quantity.  
 29. (4) Both knife and chopper are used for the same purpose i.e. cutting. Similarly, both quilt and blanket are used for protection from cold.

30. (4) Second is more intense form of the first. Convulsion and spasm means any violent contraction of muscles.
31. (3) A hungry person requires food and a weary person requires rest.
32. (2) All are animal fibres.
33. (3) All are computer languages.
34. (3) The logic is  $x: \frac{x^2}{2}$ .
35. (2) Sum of the digits of the first number is 2 more than the sum of the digits of the second number.
36. (4) The logic is  $x^3: (x+1)^3+1$
37. (2)  $3+6+3=12$ , sum of the digits  $=1+2+=3$   
 $4+8+9=21$ , sum of the digits  $=2+1=3$   
 $5+7+9=21$ , sum of the digits  $=2+1=3$   
 $\Rightarrow 471=4+7+1=12$ , sum of the digits  
 $=1+2=3$ .
38. (1) In all the numbers, the sum of the digits is 12, and the largest digit lies in the middle.
39. (2) First digit of the given numbers 1, 2, 3, 4.  
Second digit of the given numbers are 3, 4, 5, 6.  
The last digit of the given numbers are 4, 6, 8, 0.
40. (3) In each set, 2nd number = 1st number + 7 3rd number = 2nd number + 9.
41. (2) Sum of the digits = 36.
42. (4) In each set 2nd number = 1st number +  $2 \times$  3rd number.
43. (1) As a man covers some distance after walking, in the same way, a fish covers some distance after swimming. Hence the correct answer is (1).
44. (1) As medicine cures sickness, in the same way, books remove ignorance.
45. (4) As supervisor supervises the worker, in the same way, officer supervises the clerk.
46. (3) As 'Rain' is followed by 'Thunder', similarly 'Darkness' is followed by 'Night'.
47. (4) First two letters of the first term are in reverse order in the second term and so are the next two letters.
48. (4) First is the place where the second is imparted.
49. (3) 'Oxygen' helps in burning while 'carbon dioxide' extinguishes fire.
50. (1) 'Teheran' is the capital of 'Iran' and 'Beijing' is the capital of 'China'.
51. (1) The largest ocean is Pacific Ocean.  
Similarly, the largest island is Greenland.
52. (2) As Major heads a battalion, the Colonel commands a regiment.
53. (3) Whisper is of lesser intense than shouting, so is walking to running.

## Exercise 2

1. (2) pQr follows Mno in sequence.
2. (3) 3rd and 4th terms are sums of digits of 1st and 2nd terms.
3. (3) Similarly placed letters on either side of : : show the same pattern such as (WX, YZ) and (JK, LM).
4. (1) The first and third letters are moved two and three steps backwards respectively and the second letter three steps forward.



5. (2) Moon is a satellite and Earth is a planet.
6. (3) In each set of letters, the 1st and 3rd letters are consecutive.
- C J D L : F M G R :: I K J R : L S M T
- [     ]     [     ]     [     ]     [     ]
7. (3) The letters in first set are jumping two letters i.e. moving steps forward and in the second they are jumping one letter i.e. moving two step backward.
8. (1) If A corresponds to X (the third from the end) then B should correspond to the fourth letter W.
9. (2) Because KLM are assigned No. 11, 12 & 13 from A onwards, this corresponds to PON, which are also numbered 11, 12 and 13 from Z to A in reverse order. Hence NOP will correspond to MLK.
10. (3) All the three items given are the parts of a car.
11. (1) Second is the function of the first.
12. (2) Second comes out of the first.
13. (3) Second grows on the first. "Pelt" is the skin of an animal with the fur or hair still on it.
14. (1) Ring is related to telephone in the same way knock is related to door.
15. (1) The words in each pair are antonyms.
16. (1) Insult results in humiliation as shooting kills.
17. (2) Soldiers form part of a Regiment as coil forms a part of motor. This is part and whole relationship.
18. (2) Seldom means not very often. Rarely is more extreme than seldom. Often means quite frequent but usually is more extreme in meaning, i.e. most of the time.
19. (3) In the both terms, two letters are skipped in between. Similar relationship exists in (3).
20. (1) Volcano causes lava to flow. Faulting or displacement of earth's crust causes an earthquake. Both are natural occurrences connected with earth.
21. (2) A shoe is made by attaching different shapes of leather. In the same way a train is constituted by a number of wagons.
22. (3) Dinosaur and dragon belong to the same category. In the same way snow and ice fall in the same category.