



UPSC – CSAT

Civil Services Exam

Union Public Service Commission

Part - 1

Mental Ability



UPSC – CSAT (ENGLISH)

CONTENTS

MENTAL ABILITY		
1.	Analogy	1
2.	Classification	12
3.	Series Test	17
4.	Inserting the Missing Character/ Number	27
5.	Blood Relation	33
6.	Distance & Direction	43
7.	Seating Arrangement	55
8.	Venn Diagram	67
9.	Coding – Decoding	79
10.	Puzzle Test	90
11.	Cube & Dice	110
12.	Number Ranking	118
13.	Decision Making	127
14.	Statement and Conclusion	135
15.	Syllogism	141
16.	Statement and Argument	152

17.	Statement and Assumptions	160
18.	Statements and Course of Action	167
19.	Cause and Effect	175

ANALOGY

Similarity or similarity is the relation or similarity of any object, word, letter, number to any other object, word, letter, number with quality, form, shape, type, character, etc.

Generally, these types of questions are asked under analogy.

Type 1 - Hindi word analogy

Under this, considering the relation of Hindi words given in the questions asked, one has to find such a word from the given answer options, whose relation can be established with the given words or with the third word.

(i) Finding similar words: - Considering the relation of two words given in the questions asked under this, one has to find such word from the answer options, whose relation is established with the given third word.

Ex.1 Select the related word from the given alternatives.

River : Stream :: Ocean : ?

- (a) Current (b) Pond
(c) Dam (d) Sea

Ans. (a)

Sol. Just as a stream originates from the water of a river, in the same way a current arises from the water of the ocean.

Ex.2 The way Colombo is related to Sri Lanka, in the same way Kathmandu is related to?

- (a) Tibet (b) India
(c) Bhutan (d) Nepal

Ans. (d)

Sol. Just as Colombo is the capital of Sri Lanka, in the same way, Kathmandu is the capital of Nepal.

(ii) Finding the identical pair :- In the questions that come under this, two words are given, which are related to each other in some way. Exactly the same type of relation is also in any one of the options given below.

Ex.3 Select the related word pair from the given alternatives.

Preamble : Constitution :: ? : ?

- (a) Word : dictionary
(b) Theme : Magazine
(c) Explanation : Poem
(d) Introduction : Book

Ans. (d)

Sol. Just as there is a preamble of the constitution, in the same way there is a preamble of the book.

(iii) Choosing similar words and special classes for similar words -

Some words are given in the questions coming under it. You have to choose a word from the given alternatives which is exactly same as the word given in the beginning and find the word which shows the particularity among the words given in the question.

Ex.4 Who is the same as - Earthquake, cyclone, volcanic eruption

- (a) Global heat
(b) Flood
(c) Accidents
(d) Nuclear explosion

Ans. (b)

Sol. Just as earthquakes, cyclones and volcanic eruptions are natural disasters. Similarly, floods are also a natural disaster.

Ex.5 Given below three words, which have some common features, select the correct option.

Snake, lizard, crocodile

- (a) Reptiles (b) Mammals
(c) Omnivores (d) Deer

Ans. (a)

Sol. Snake, Lizard and Crocodile are all three reptiles.

Ex.6 Find the alternative which has the same relation as in all the three words given below.

King, Queen, Palace

- (a) Pigeon, bird, dispensary
(b) Goat, goat, fort
(c) Bumblebee, spider, water
(d) Lion, lioness, cave

Ans. (d)

Sol. Just as both the king and queen reside together in the palace, in the same way both the lion and the lioness reside together in the cave.

(iv) Double Symmetry:- Under this, two words are given on the left and right of the symbol (::) in the question. Each word is missing in both the words.

The missing word has to be found from the options given below.

Ex.7 In the following question, find out the missing word from the alternative given below

A : Ugly :: Peace : B

- (a) A – Beautiful, B – War
(b) A – Friendship, B – Noise
(c) A – Honesty, B – Treaty
(d) A – Number, B – Strike

Ans. (a)

Sol. Just as, beautiful and ugly are opposite words of each other. Similarly, peace and war are also opposite words to each other.

Type - 2 English Alphabets Analogy

The questions under this are based on letters or letter groups of the English alphabet. After knowing the relationship of the first two letter-groups given in these questions, on this basis, the correct answer for the third letter-group has to be found from the options.

Vowels and Consonants of English Letters:-

Vowel Letters – A, E, I, O, U

Consonant Letter – B, C, D, F, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z

English alphabets their corresponding numbers :-

English Alphabet	A B C D E F G H I J K L M
Corresponding No.	1 2 3 4 5 6 7 8 9 10 11 12 13

Ex.8 CHAIR : RIAHC :: TABLE : ?

- (a) BLAET (b) ETABL
(c) LETAB (d) ELBAT

Ans. (d)

Sol. Like,

CHAIR → RIAHC

Similarly,

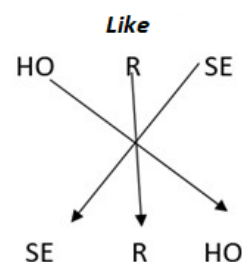
TABLE → ELBAT

Ex.9 HORSE : SERHO :: CURSE : ?

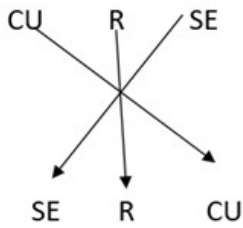
- (a) RCUES (b) SECRU
(c) SERCU (d) ERCUS

Ans. (c)

Sol.



Similarly,



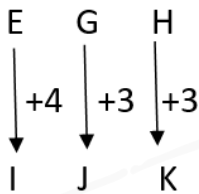
Ex.10 EGH : IJK :: NPQ : ?

- (a) PRS (b) RSU
(c) RTU (d) RST

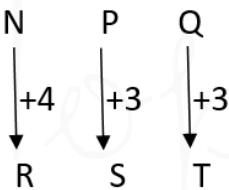
Ans. (d)

Sol.

Like,



Similarly,



Type - 3 English Word Analogy

The questions under this are based on English words. After finding the relation of the first two words given in these questions, we find out the correct answer for the third word from the options on the same basis.

(i) Finding Related Words

Ex.11 In the following question, select the option which is related to the third word in the same way as the second term is related to the first term.

Shallow : Profound :: Synonym : ?

- (a) Context (b) Antonym
(c) Meaning (d) Content

Ans. (b)

Sol. Just as the opposite word of Shallow is Profound, similarly, the opposite word of Synonym is Antonym.

(ii) To find the word pair similar to the word pair :-

Ex.12 Which of the following pair of words shows the same relation. What kind of relationship is there between Fan : Heat ?

- (a) Water : Drink
(b) Food : Hunger
(c) Light : Night
(d) Air : Breath

Ans. (b)

Sol. When there is heat, then the fan is turned on, in the same way food is done when there is hunger.

Type - 4 - Number Analogy

In the questions that come under this, questions are asked based on the order of numbers, the order of the squares of the numbers, the sequence of prime numbers, etc. In other words, the questions asked under it are based on mathematical operations.

Ex.13 Select the option, which is related to the third term in the same way as the second term is related to the first term.

23 69 : 27 : ?

- (a) 91 (b) 73
(c) 81 (d) 89

Ans. (c)

Sol. Like $23 \times 3 = 69$
Similarly, $27 \times 3 = 81$

Ex.14 Select the related number from the given alternatives.

8 : 32 :: 6 : ?

- (a) 31 (b) 22
(c) 18 (d) 21

Ans. (c)

Sol. Like $8^2 = 64$

$$64 \div 2 = 32$$

$$\text{Similarly, } 6^2 = 36$$

$$36 \div 2 = 18$$

Ex.15 From the given alternatives, find the one which is similar to $10 : 13 :: 16$.

- (a) $8 : 10 : 15$
- (b) $13 : 16 : 19$
- (c) $23 : 29 : 23$
- (d) $10 : 16 : 23$

Ans. (b)

Sol. Like, $10 : 13 :: 16$

$$+3 \quad +3$$

$$\text{Similarly, } 13 + 16 + 19$$

$$+3 \quad +3$$

(Analogy or Similarity)

Type – I

Directions - Find out the related words from the alternatives given below.

1. Virus : Chickenpox :: Bacteria : ?

- (a) Chickenpox
- (b) Typhoid
- (c) Malaria
- (d) Sleeping Disease

Ans. (b)

Explanation:

Smallpox is spread by virus. Similarly, typhoid is caused by bacteria (Bacteria name: Salmonella Typhi).

2. Book : Shelf :: Clothes : ?

- (a) Hanger (b) Cupboard
- (c) Wardrobe (d) Bureau

Ans. (c)

Explanation –

Books are kept systematically on the shelf. Similarly, clothes are kept in the wardrobe.

3. Gramophone : Record :: Video : ?

- (a) T.V. (b) Recording
- (c) Cassette (d) Camera

Ans. (c)

Explanation –

Gramophone (record) is a thin circular plastic object on which voice, especially music, is recorded.

Video is recorded on cassette or magnetic tape.

4. Axe : Rip :: Path : ?

- (a) Shear (b) Pull
- (c) Ploughing (d) Knitting

Ans. (d)

Explanation –

The axe is used to cut or tear wood. In the same way something is knitted with needle.

5. Bird : Feather :: Fish : ?

- (a) Gills (b) Scales
- (c) Tail (d) Pisces

Ans. (2)

Explanation –

The body of a bird is covered with feathers, similarly, the body of a fish is covered with scales.

6. Movement : Required :: Effort : ?

- (a) Personality (b) Motivation
- (c) Success (d) Probability

Ans. (c)

Explanation –

When the need arises, the person becomes agitated. Similarly, to achieve success, one has to do efforts.

Type – II

Direction - Find out the related number from the alternatives given below.

7. $85 : 42 :: 139 : ?$

- (a) 68 (b) 69
- (c) 70 (d) 67

Ans. (b)

Explanation –

$$85 - 1 = 84, 84 \div 2 = 42$$

$$139 - 1 = 138, 138 \div 2 = 69$$

8. 8 : 28 :: 27 : ?

- (a) 8 (b) 28
(c) 64 (d) 65

Ans. (d)

Explanation –

$$(4) (2)^3 \times 2 \times 2 = 8$$

$$28 = (3)^3 + 1 = 3 \times 3 \times 3 + 1 = 28$$

$$(3)^3 = 3 \times 3 \times 3 = 27$$

$$\therefore ? = 4 \times 4 \times 4 + 1 = 65$$

9. 8 : 56 :: 9 : ?

- (a) 10 (b) 63
(c) 7 (d) 9

Ans. (b)

Explanation –

The relationship is as follows = $x - 7$

$$8 \times 7 = 56$$

Similarly,

$$9 \times 7 = 63$$

10. 8 : 512 :: 9 : ?

- (a) 781 (b) 792
(c) 729 (d) 728

Ans. (c)

Explanation –

$$8 : (8)^3 = 512$$

Similarly,

$$9 : (9)^3 = 729$$

11. 21 : 3 :: 574 : ?

- (a) 113 (b) 23
(c) 97 (d) 82

Ans. (d)

Explanation –

$$\frac{21}{7} = 3$$

$$\text{Similarly, } \frac{574}{7} = 82$$

12. 100 : 121 :: 36 : ?

- (a) 64 (b) 49
(c) 25 (d) 16

Ans. (b)

Explanation –

$$10 \times 10 = 100$$

$$11 \times 11 = 121$$

$$6 \times 6 = 36$$

Similarly,

$$7 \times 7 = 49$$

Type – III

Directions - Find out the related letters from the alternatives given below.

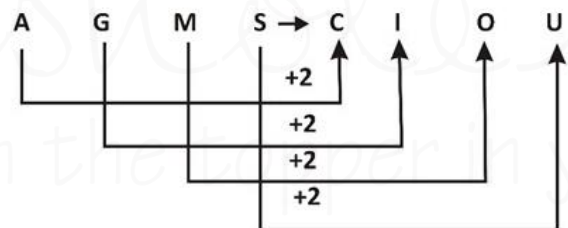
13. AGMS : CIOU :: DJPV : ?

- (1) BHNY (b) STUV
(c) FLRX (d) MNOP

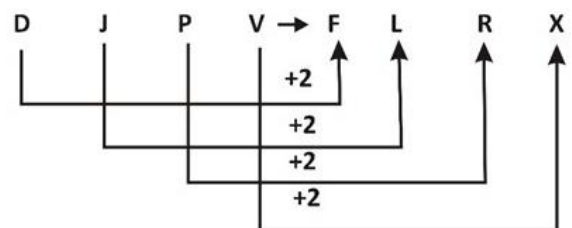
Ans. (c)

Explanation –

Like,



Similarly,



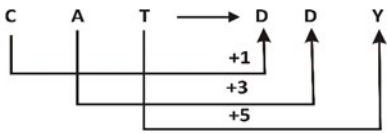
14. CAT : DDY :: BIG : ?

- (a) CLL (b) CLM
(c) CML (d) CEP

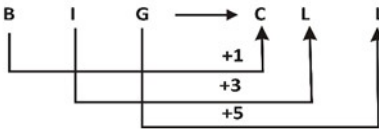
Ans. (a)

Explanation –

Like,



Similarly

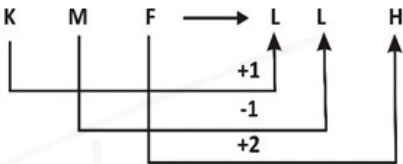


15. KMF : LLH :: RMS : ?
 (a) SLR (b) SLU
 (c) SSU (d) SUS

Ans. (b)

Explanation –

Like,



Similarly,

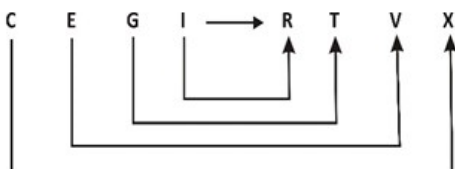


16. CEGI : RTVX :: IKMO : ?
 (a) JKLP (b) LNPR
 (c) MNPQ (d) DFHI

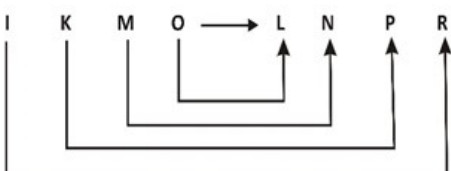
Ans. (b)

Explanation –

Like,



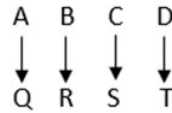
Similarly,



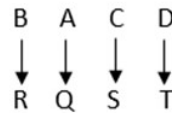
17. ABCD : QRST :: BACD : ?
 (a) RQST (b) STQR
 (c) QRST (d) RSTQ

Ans. (a)

Explanation –



Therefore,

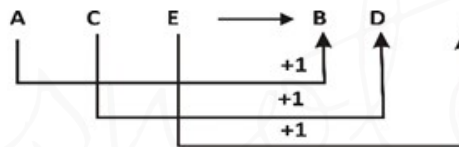


18. ACE : BDF :: MAQ : ?
 (a) BMW (b) NQP
 (c) NPR (d) BEF

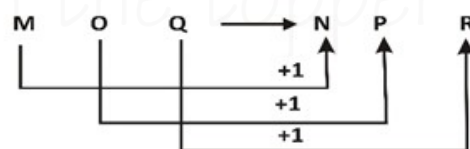
Ans. (c)

Explanation –

Like,



Similarly,

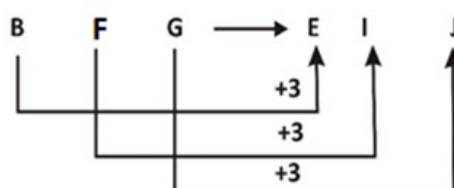


19. BFG : EIJ :: RVW : ?
 (a) UWY (b) UYZ
 (c) SWX (d) QUV

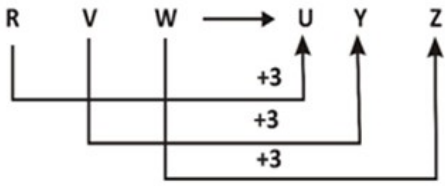
Ans. (b)

Explanation –

Like,



Similarly,



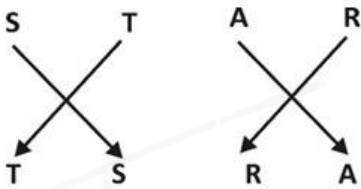
20. STAR : TSRA :: ROSE : ?

- (a) ORSE (b) ORES
 (c) ESOR (d) SORE

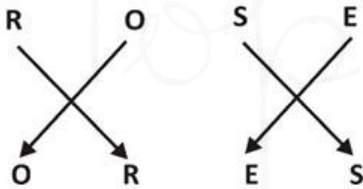
Ans. (b)

Explanation –

Like,



Similarly,



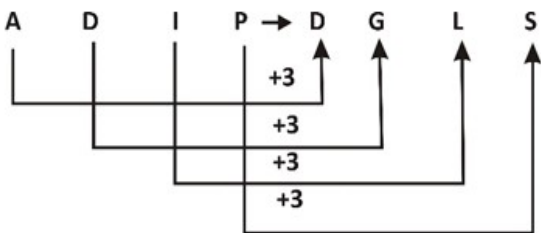
21. ADIP : DGLS :: BEJQ : ?

- (a) CGLS (b) EHMT
 (c) EJQU (d) FINU

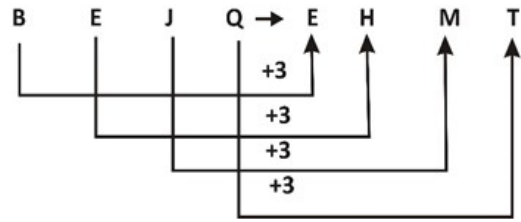
Ans. (b)

Explanation –

Like,



Similarly,



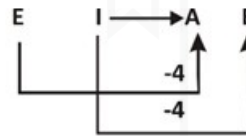
22. EI : AE :: UO : ?

- (a) PK (b) QJ
 (c) PJ (d) QK

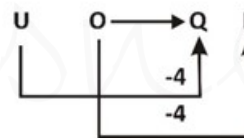
Ans. (d)

Explanation –

Like,



Similarly,



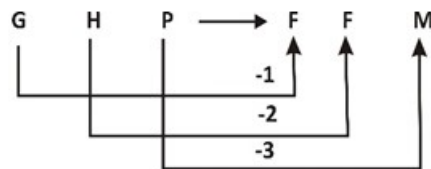
23. GHP : FFM :: PIC : ?

- (a) OGZ (b) OHZ
 (c) NGA (d) NHA

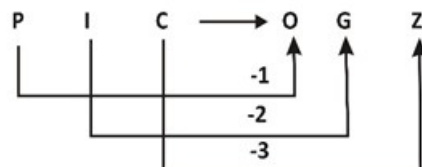
Ans. (a)

Explanation –

Like,



Similarly,



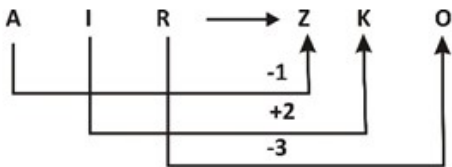
24. AIR : ZKO :: CAP : ?

- (a) ACM (b) ABN
 (c) BCM (d) BBN

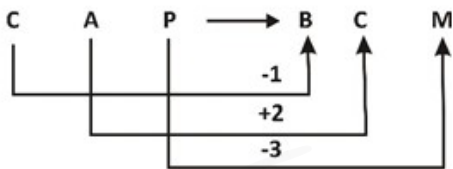
Ans. (c)

Explanation –

Like,



Similarly,



25. NU : MF :: EH : ?

- (a) IR (b) VS
 (c) GT (d) DW

Ans. (b)

Explanation –

Like,



These are all combinations of opposite characters.

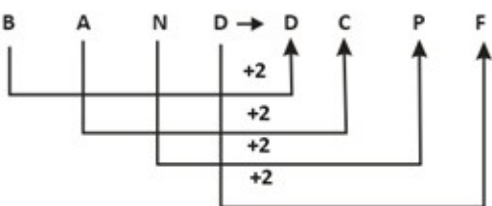
26. BAND : DCPF :: PUSY : ?

- (a) GVTZ (b) HWTZ
 (c) GVUA (d) HWUA

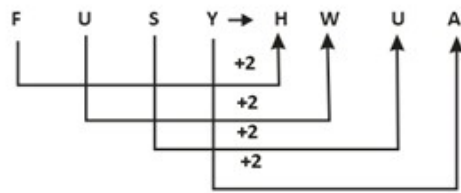
Ans. (d)

Explanation –

Like,



Like,



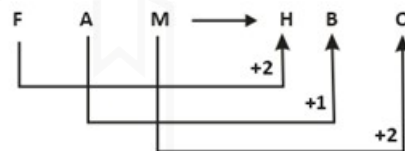
27. FAM : HBO :: LMP : ?

- (a) MOR (b) NOR
 (c) NNR (d) MNR

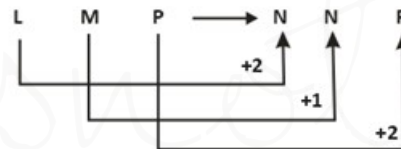
Ans. (c)

Explanation –

Like,



Like,



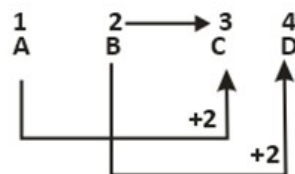
28. AB : CD :: WX : ?

- (a) AZ (b) YZ
 (c) XM (d) PQ

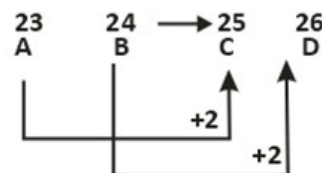
Ans. (b)

Explanation –

Like,



Similarly,



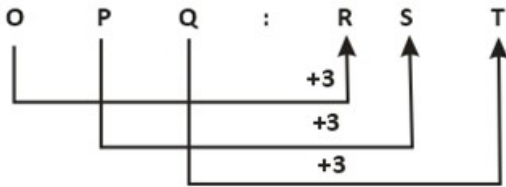
29. OPQ : RST :: ABC : ?

- (a) BCA (b) DMN
 (c) DEF (d) ABD

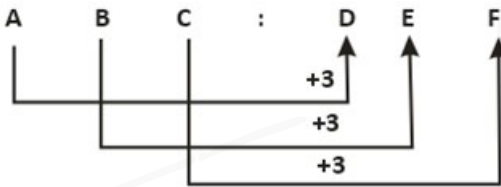
Ans. (c)

Explanation –

Like,



Similarly,



30. Select the option whose letters share the same relationship as the pairs of the given letters.

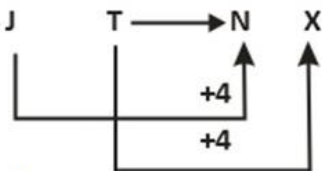
JT : NX

- (a) TP : XT (b) RK : VG
 (c) GS : KU (d) LD : PG

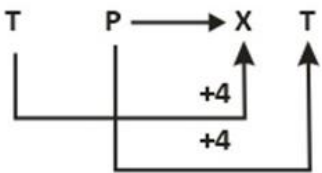
Ans. (a)

Explanation –

Like,



Like



Analogy Practice

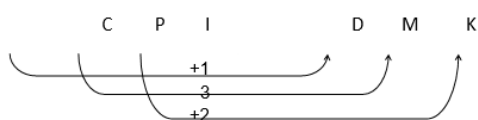
Q.1. If CPI : DMK, then who among the following will be BJP?

- (a) GC (b) CGR
 (c) CRG (d) CSF

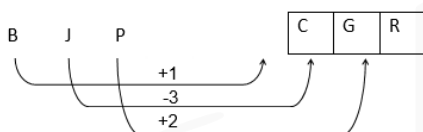
Ans. (b)

Explanation –

Just as,



Similarly,



Q.2. Which of the following pairs have the same relation as between JL : WZ?

- (a) AC : R (b) AB : PW
 (c) PR : LM (d) TU : WX

Ans. (a)

Explanation

Just as,



Similarly,



Hence, option (a) with the correct sequence is the correct Ans..

Q.3. 'Doctor' is related to 'Nurse' in the same way as Police Inspector is related to?

- (a) Thief (b) Constable
 (c) Pistol (d) Jail

Ans. (b)

Explanation - Just like a nurse is an assistant to a doctor. Similarly, the constable is an assistant to the 'Inspector'.

Q.4. The relation "Optimistic : Pessimistic" is best explained in which of the following?

- (a) Difficult: Impossible
 (b) Export: Import
 (c) Reading: Playing
 (d) Tolerable: Detestable

Ans. (b)

Explanation – Optimistic : Pessimistic is a combination of two antonyms. Similarly, option (b) shows such relationship.

Directions - In the following question three words are given and alternative words are given below them. Out of these four alternative words, one word represents the class of the above three words. Find that one alternative expression

Q.5. Hammer, Saw, Sand

- (a) Pen (b) Screwdriver
 (c) Fork (d) Carpenter

Ans. (b)

Explanation - Screwdriver is also a tool like hammer, saw and sander.

Directions - In the following question, two words are given, which are related to each other in a similar way, in any one of the alternatives given below, select that option.

Q.6. Australia : Continent : : ?

- (a) Engine : Train
 (b) River : Coast
 (c) Vikrant : Ship
 (d) Yuri Gagarin : Space

Ans. (c)

Explanation - Just as 'Australia' is a 'continent', similarly 'Vikrant' is a 'ship' (aircraft-carrier).

Q.7. As 'Accident' is related to 'Caution', in the same way 'Sickness' is related to?

- (a) Bacteria
- (b) Pollution
- (c) Hygiene
- (d) Doctor
- (e) None of these

Ans. (c)

Explanation - As with caution, accidents do not happen. Similarly, cleanliness does not cause disease.

Q.8. Just as 'justice' is related to 'court'. Similarly, which of the following is related to 'School'?

- (a) Teacher
- (b) Student
- (c) Class
- (d) Education
- (e) None of these

Ans. (D)

Explanation - Just as justice is done in court. similarly, education takes place in school.