# Analogy

**Directions :** *Answer the question independent of each other.* 

- Three of the following four are alike in a certain way and so form a group. Which one does not belongs to that group?
  - (a) (b) +
  - (c) % (d) =

**Directions (Qs. 2 to 4) :** Find the set which is most similar to the given set.

- 2. Given set : (6, 15, 28)
  - (a) (46, 56, 66) (b) (50, 59, 71)
  - (c) (60, 69, 72) (d) (60, 69, 82)
- 3. Given set : (81, 77, 69)
  - (a) (64, 61, 53) (b) (56, 52, 44)
  - (c) (92, 88, 79) (d) (75, 71, 60)

4. Find the odd one out.

- (a) Grams (b) Litres
- (c) Tonnes (d) Quintals

**Directions (Qs. 5 to 9) :** There is a blank space in each of these questions in which only one of the four alternatives given under each question satisfies the same relationship as is found between the two terms on the other side of the sign : : . Find the correct alternative to fill in the blank space.

- 5. Shoe : Leather : :..... : :.....
  - (a) Bus : Conductor
  - (b) Train : Wagon
  - (c) Highway: Asphalt
  - (d) Medicine : Doctor
- 6. Condone : Offence : :..... : :.....
  - (a) Overlook : Aberration

- (b) Error : Omission
- (c) Mitigate : Penitence
- (d) Conviction : Criminal
- 7. Dinosaur : Dragon : : ...... : : ......
  - (a) Evolution : Revelation
  - (b) Gorilla : Soldier
  - (c) Snow : Ice
  - (d) Primeval : Medieval
- 8. Deterioration : Rust : :..... : :.....
  - (a) Recession : Inefficiency
  - (b) Depression : Unemployment
  - (c) Promulgation : Legislation
  - (d) Iron : Water
  - Telephone : Ring : :..... : :.....
    - (a) Door : knock
    - (b) Gate : open
    - (c) Door : wood
    - (d) Lock : key

**Directions (Qs. 10 to 12) :** In these questions, there are four groups of letters, words or riumbers listed cis (a), (b), (c) and (d). One of the groups does not belong to the same category as others. Find the odd one out.

10.	(a)	USTO	(b)	OOTU
	(c)	TTOU	(d)	SSTO
11.	(a)	5183	(b)	33442
	(c)	34424	(d)	25631
12.	(a)	BAT	(b)	RAT
	(c)	EAT	(d)	FAT

**Directions (Qs. 13 to 17) :** Fill in the blanks in these questions from among the alternatives (a) to (d) :

- 13. ADG DIN I P ... (a) V (b) W (c) X (d) Y 14. **BEINT**..... (a) A (b) S (c) U (d) V ZWSPLIE..... 15. (a) D (b) F (c) K (d) B ABA : ECE : :..... : :..... 16. (b) IDI: OFO LML:NON (a) (c) PQP:STS (d) CDC:GEG CG : EI : : FJ : ..... 17. (b) (a) LM IJ (d) (c) GK JK
- 18. If the second, third, fifth, eighth and ninth letters of the word CONTEMPLATION are combined to form a meaningful word, what will be the middle letter of that word ? If more than one such wor[djasn.can 199b9e] formed, your answer is X and if no such word can be formed, your answer is Y.
  - (a) X (b) 0
  - (c) A (d) Y
- 19. 'Offhand' is related to 'premeditation in the same wayas 'above board' is related to :
  - (a) Integrity (b) Honesty
  - (c) Guide (d) Competition

20. If table is called chair, chair is called cot, cot is called pot and pot is called filter. Where does a person sit ?

- (a) Chair (b) Cot
- (c) Pot (d) Filter

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- 1. operators while % is not.
- 2. (d) The difference between first and ii<sup>nd</sup> numbers is 9 and that between second and third numbers is 13.
- (b) The difference between first and 3. second numbers is 4 and that between second and third numbers is 8.
- (b) Litres is the unit of measurement for 4. liquid.
- 5. **(a)**
- 6. (a) Condone and offence have a contradictory relationship as on offence cannot be condoned. The same relationship is exhibited by relationship overlook : Aberration.
- (c) Dinosaur and Dragon fall in the 7. same category as Snow and Ice.
- (b) Deterioration is caused by rusting as 8. is depression caused by unemployment.
- (a) Ring is related with telephone and 9. knock is related with door.
- (a) In all other words one letter is 10. repeated.
- 11. (b) The sum of all the digits except 33442 is 17.

- (c) -, + and + are mathematical 12. (c) EAT is verb, whereas all other are noun.
  - 13. (b)  $A \xrightarrow{+3} D \xrightarrow{+3} G$  $D \xrightarrow{+5} I \xrightarrow{+5} N$  $I \xrightarrow{+7} P \xrightarrow{+7} W$
  - 14. (a) The sequence is following the pattern +3, +4, +5, +6, +7.
  - 15. (b) The sequence is moving backward in alphabetical order with a difference - 3, - 4, - 5, - 6 .... and so on.
  - 16. (d) In ABA, middle letter B is + 1 of A in alphabetical order whereas in ECE, middle letter C is -1 of letter E in alphabetical order.
  - Each pair of letters has three 17. (c) consecutive letter of the alphabet in between so GK is the correct answer.
  - 18. (b) The meaningful word that can be formed is ALONE. The middle letter is 0.
  - 19. (d) Above board is related to competition.
  - **20.** (b) A person sits on chair, here chair is cot. So, the person sits on cot.



# **Coding and Decoding**

**Directions (Qs. 1 to 19) :** Answwer the question independent of each other.

- If 18514 stands for AHEAD, what does 31385 stands for?
  - (a) CATCH (b) CASSET
  - (c) CONQUER (d) CACHE
- 2. If in a certain language, TRIANGLE is coded SQHZMFKD, then which word would be coded as DWZLOKD?
  - (a) EXAMPLE (b) DISMISS
  - (c) FIGMENT (d) DISJOIN
- 3. In a certain code language, 'nee muk plc' means 'grave and concern'; dic so' means 'every body else' and muk so' means 'body and soul'. Which of the following would mean 'every concern'?
  - (a) dic pic (b) pic nee
  - (c) ill nee
  - (d) Cannot be determined
- 4. In a certain code, '975' means Throw away garbage `528' means 'Give away smoking' and '213' means `Smoking is harmuful'. Which digit in that code means `Give'?
  - (a) 5 (b) 8 (c) 2 (d) 3
- In a certain code, 15789 is written as XTZAL and 2346 at is written as NPSU. How is 23549 written in that code
  - (a) NPTUL (b) PNTSL
  - (d) NBTSL (c) NPTSL
- 6. If VICTORY is coded as YLFWRUB, then how can SUCCESS be coded ?

- (a) VXEEIVV (b) VXF17VV
- (d) None of these (c) VYEEHVV
- 7. In a certain code language, '3a, 2b, 7c' means 'Truth is Eternal', '7c, 9a, 8b, 3a' means 'Enmity is not Eternal' and '9a, 4d, 2b, 8b means 'Truth does not perish'. Which of the followiny means 'Enmity' in that language.

(a) 3a	(b)	7c
(c) 8b	(d)	9a

8.

- In a certain code language, 'po ki top ma' means 'Usha is playing cards', `kop ja ki ma' means 'Asha is playing tennis', 'ki top sop ho' means 'they are playing football' and 'po sue kop' means 'cards and tennis'. Which word in that language means 'Asha' ?
  - (a) ja (b) ma
  - (c) kop (d) top
- 9. if PRATAP could be given the code number 1018120116, then what code number can be given to NAVIN ?
  - (a) 73957614 (b) 2439125
  - (e) 14122914 (d) 19274651
- 10. If A + B = C, D C = A and E- B = C, then what does D + F stands for ? Provide your answer in letter terms as well as in number terms.
  - (a) J & 10 (b) A & 1
  - (c) C & 3 (d) Q &17

- 11. If NOR is coded as 2-3-6, then how should REST be coded in the same code language ?
  - (a) 6-19-6-7 (b) 5-19-5-8
  - (c) 6-19-7-8 (d) 6-18-5-8
- 12. In a school, the following codes were used during physical exercise. 1. means start walking, 2. means keep standing, 3. means start running at the same spot, 4. means sit down. How many times a student, who performs the following sequence without error from the beginning to the end, has to sit down?

 $1\ 2\ 3\ 4\ 2\ 3\ 1\ 4\ 4\ 3\ 2\ 2\ 1\ 2\ 4\ 3\ 1\ 4\ 4\ 4\ 1\ 2$ 

- (a) 2 (b) 3
- (c) 6 (d) 5
- 13. in the following sequence are instructions, 1. stands for Run, 2. stand for stop, 3.stands for Go, 4 stands for Sit and 5.stands for Wait. If the sequence is continued, which instruction will come next?
  - (a) Wait (b) Sit
  - (c) Stop (d) Run
- 14. In a certain code language, ROAD is written as URDG. How is SWAN Written in that code,

(a)	UXDQ	(b)	VZCQ
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- (c) VZCP (d) VZDQ
- 15. If the code of ABCDEF is ZYXWVU, then what is the code for PASS ?
  - (a) KZHH (b) KHZZ
  - (c) KMHH (d) WZHH
- 16. In a certain code, CAT is written as SATC and DEAR is written as SEARD. How would SING be vvritten in that code ?

(a)	GNISS	(b)	SINGS
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- (c) SGNIS (d) BGINS
- 17. In a certain code language, 134 means Good and Tasty 47b means see good pictures and 729 means pictures are faint. Which of the following numerical symbols stands for see ?
  - (a) 1 (b) 2 (c) 7 (d) 8
- 18. If BRIDGE is written as EULGJH in a certain code, how will FRUIT be written in that code ?

(a) IUXLW	(b)	IVLX'W
(c) MICE	(d)	IUXVT

19. In a certain code, EASE is written as GUCG. How is CUT written in that code?

(a)	UWE	(b)	VWE
(c)	EWU	(d)	CWF

**Directions (Qs. 20 to 23) :** In a secret way of writing INDIA HAS WON FIRST GOLD MEDAL is written as JEZJU OUV SEF PIM REQZ ITZUQ. Bearing the method in mind, pick up the code from the answer choices for each given word.

20.	FOOT	Γ
	() T	

(a)	PEEB	(b)	SEEZ
(c)	BEEB	(d)	CEEA

- 21. DIESEL
  - (a) ZJTVTQ (b) ZJEVTQ
  - (c) BZTETV (d)
- 22. WOOD
  - (a) SEEZ (b) BEEZ
  - (c) ZEES (d) LEEB

23. TAILOR

(a) BUTQEP (b) BUJQED

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ZJTQVT

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- 1. (d)  $A \rightarrow 4 \ 1, B \rightarrow 2, C \rightarrow 3 \text{ and so on.}$
- (a) Each letter of the alphabet moves one step backword is alphabetical order.
- 3. (d) 'muk' means 'and' 'so' means 'body' 'true' means 'soul'
- **4.** (**b**) '5' means 'away'

'2' means 'smoking'

'8' means 'give'

5. (c) Clearly code for  $2 \rightarrow N, 3 \rightarrow P, 5 \rightarrow$ T,  $4 \rightarrow S$  and  $9 \rightarrow L$ .

Hence 23549 will be coded as NPTSL.

- 6. (b) Each letter is coded 3 steps forward in alphabetical order. Hence SUCCESS will be coded as VXTFI-IVV.
- (c) Comparing all the statements "Enmity' will be coded as 8b.
- 8. (a) 'Asha' is coded as ja'.
- 9. (c) Each letter carries it position in alphabetical order. Hence NAVIN is coded as 14122914.
- 10. (a) D's position in alphabetical order = 4, F's position = 6. Hence D + F = 10which is the position of J.
- 11. (c) Difference between alphabetical position of N and 0 is 1 as it is between 2 and 3 and that of O & R is 3 as it is between 3 and 6. Hence REST will be coded as 6-19-7-8.

- **12.** (c) Six times.
- 13. (d) The sequence proceeds as below: 4, 45, 453, 4531, 45312, 45, 453, 4531
  Hence, the next instruction will be run.
- 14. (d) Each letter of the word ROAD moves three steps in forward direction in alphabetical order.
- 15. (a) A is first alphabet and Z is last alphabet, B is second from start and Y is second last and so on. Hence, word PASS will be coded as KZHH.
- 16. (b) Letter S is placed in the beginning for each coding then first letter is placed at last place keeping an other letters as it. In the same way SING will be coded as SINGS.
- 17. (d) On comparing all the three sentences we get, good = 4, pictures = 7 and see = 8.

Hence see stands for 8.

- 18. (a) Each letter of the word BRIDGE is moved three steps in forward direction in the alphabetical order. Hence FRUIT will be coded as IUXIW.
- **19. (b)** The 1st and 4th letters are interchanged. Then second and third letters are interchanged. After this each letter is moved two steps in forward direction. Hence, CUT will be coded as VWE.
- **20.** (a) Codes for  $F \rightarrow P$ ,  $0 \rightarrow E$ ,  $T \rightarrow B$ . Hence code for FOOT will be PEER.

- **21.** (a) Code for DIESEL is ZJTVFQ.
- **22.** (a) Code for WOOD will be SEEZ.
- 23. (b) Code for TAILOR will be BUJQED.(33 to 36) :

816321-The brown dog frightened the cat

...(1)

XCXCXCXXXX XCXCXX XCXCXX XCXX

- 64851-The frightened cat ran away.....(2)
- 7621-The cat was brown. ...(3)
- 341- The dog ran. ...(4)

Clearly the code for  $1 \rightarrow$  The, comparing

- (1) & (2) frightened, cat  $\rightarrow$  6, 8. From (3)
- cat  $\rightarrow$  6 & frightened  $\rightarrow$  8. From (2) &
- (4) ran 4. Hence from (2) away  $\rightarrow$  5.

- **24.** (a) Code for brown will be 2.
- **25.** (a) away = 5.
- **26.** (d) frightened = 8.
- 27. (b) The code for "the dog was frightened" = 8731.
- **28.** (c) Code for Sky = 1
- **29.** (c) Code for Is =4.
- **30.** (d) Code for Looks = 9
- **31.** (c) Code for Sea = 6
- **32.** (a) Code for Blue = 8
- **33.** (b) Code for Deep = 2

**Directions (Qs. 1 to 19) :** Answer the question independent of each other.

- I am facing West. I turn 45° in the clocwise direction and then 180° in the same direction and then 270° anticlockwise. Which direction am I facing now?
  - (a) South-west (b) South
  - (c) West (d) North-west
- 2. Two buses start from the opposite points of a main road, 150 km apart. The first bus runs for 25 km, takes a right turn and then runs for 15km. It then truns left, runs for another 25km and takes the direction back to reach the main road. In the meantime, due to a minor breakdown, the other bus has run only 35km along the main road. What would be the distance between the two buses at this point?
  - (a) 65 km (b) 80 km
  - (c) 75 km (d) 85 km
- 3. A postman was returning to the post office which was in front of him to the north. When the post office was 100m away from him, he turned to the left and moved 50m to deliver the last letter at Shantivilla. He then moved in the same direction for 40m, turned to his right and moved 100m. How metres away he was new from the post office?
  - (a) 0 (b) 150
  - (c) 90 (d) 100

Directions (Qs. 15 to 17) : Read the in-

formation given below to answer these questions.

Monica started moving from point B tpwards point A exactly an hour after Puran started from A in the opposite direction but at a speed twice as much as that of Puran. By the time Puran covered one sixth of the distance between the points A and B, Monica also covered the same distance.

- 4. The point where Puran and Monica would meet is:
  - (a) Closer to A
  - (b) Exactly between A and B
  - (c) Closer to B
  - (d) Monica and Puran will not meet at all
- 5. How many hours would Puran take to reach B?

(a)	2	(b)	5
(c)	6	(d)	12

- 6. How many more hours would Puran take (compared to Monica) to complete the journey?
  - (a) 4
     (b) 5

     (c) 6
     (d) 7
- 7. A watch read 4.30. If the minute hand points towards the East, in which direction does the hour hand point?
  - (a) North-East (b) South-East
  - (c) North-West (d) North
- 8. A man travels 3 km to the west, turns left and goes 3km, turns right and goes 1 km, again turns right and goes 3km. How far

is he from the starting point?

- (a) 7km (b) 6km
- (c) 5km (d) 4km
- 9. A and B start walking in opposite direction. A covers 3km and B covers 4 km. Then A covers 3km and B cover 4km. Then A turns right and walks 4km while B turns left and walks 3km. How far is each from the starting point?
  - (a) 5km (b) 4km
  - (c) 10km (d) 8km

- 10. Ram walks 10m south from his house, turns left and walks 25m, again turns left and walks 40m, then turns right and walks 5m to reach to school. In which direction the school is from his house?
  - (a) South-west (b) North-east
  - (c) East (d) North
- 11. In a class of 35 students Kiran is placed 7th from the bottom whereas Sohan is placed 9th from the top. Mohan is placed exactly in between the two. What is Kiran's position from Mohan?

(a) 10	(b)	11
(c) 13	(d)	12

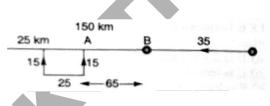
# **Explanations**

1. (a)  $45^{0}+180^{0}-270^{0}=-45^{0}$ 

ie, 45<sup>°</sup> anticlockwise from initial position.

Hence, the required direction is southwest.

2. (a)



Clearly distance between A and B is 65 km

- 3. (c)
- 4. (a) Since A has already moved a distance covered in hour before B starts his journey. Hence when both of them are in motion for the first time distance between A and B = (12x-x) = 11x km.

Relative speed = (x+2x) = 3x km/h

Time when they meet =  $\frac{11x}{3}h$ 

Distance travelled by B when they meet

$$=\frac{11x}{3x}\times 2x=7.33 x \text{ km}.$$

Hence point where Puran and Monica meet is closer to A.

 (d) Time taken by Puran to cover y or 12x km

$$t = \frac{12x}{x} = 12h$$

 (c) Time taken by Monica to cover y or 12 x km.

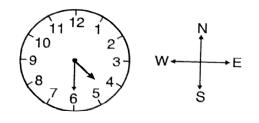
$$t = \frac{12x}{2x} = 6h$$

Hence, Puran takes

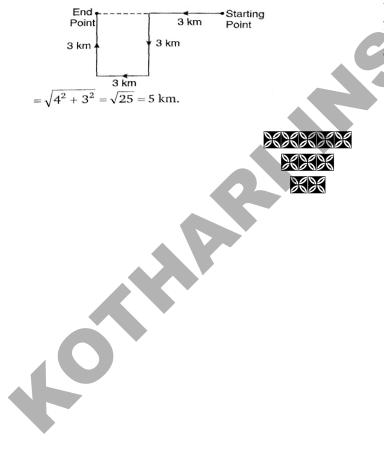
(12-6) = 6 hours more as compared to Monica to complete the journey.

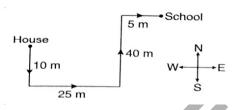
7.

(b) Hour hand points towards south-east. 10. (b) School is in north-east direction.



- (d) Distance between starting point point 8. and end point is 4km.
- 9. (a) Distance of both of them from starting point.





11. (a) Position of Kiran from top=35 - (7-1)=29th

Position of Sohan from top=9th Number of positions between Sohan and Kiran = (29-9-1)=19

Hence Mohan's position will be 9th from Mohan as he is in between Kiran and Sohan.

# **Blood Relation Test**

**Directions (Qs. 1 to 3) :** *Read the following information to answer these questions.* 

- (i)  $A \times B$  means A is the brother of B.
- (ii) A+B means A is the mother of B.
- (iii)  $A \div B$  means A is the son of B.
- (iv) A-B means A is the husband of B.
- 1. Which of the following would mean M is the father of N?
  - (a)  $M \div N + 0$  (b)  $M \times 0 N$
  - (c) A+0+N (d) M-0+N
- 2. Which of the following is definitely true, if N is the son of M ?
  - (a)  $M + N \times 0$  (b) M + N 0
  - (c)  $N \div M$  (d) All true
- 3. Which of the following would mean M is the aunt of N?
  - (a)  $M \times 0 \div N$  (b)  $N + O \times M$
  - (c)  $N \div M + 0$  (d) None of these

**Directions (Qs. 4 to 6):** *Read the information given below to answer these question.* 

> Rama and Mohan are a married couple having two daughters named Smita and Devika. Devika is married to a man who is the son of Madhu and Jeewan. Romila is.the daughter of Aman. Krishna who is Arran's sister is married to Sunil and has two sons Anuj and Ankur, Ankur is the grandson of Madhu and Jeewan.

- 4. How is Krishna related to Devika?
  - (a) Sister-in-law (b) Sister
  - (c) Aunt (d) None of these
- 5. What is the relationship berwe Anuj and Romila?

- (a) Uncle Niece
- (b) Father Daughter
- (c) Husband Wife (d) Cousins
- 6. Which of the following is true ?
  - (a) Anuj is the son of Smita
  - (b) Romila is the cousin of Krishna
  - (c) Madhu is Sunil 's mother-in-law
  - (d) Jeewan is Devika's maternal uncle

**Directions (Qs. 7 to 10):** Study the following carefully to answer these questions.

Adhir Mishra has three children, Urmila, Raghu and Sumit. Sumit married Roma, the eldest daughter of Mr. and Mrs. Mohan. The Mohans married their youngest daughter to the eldest son of Mr. and Mrs. Sharma - and they had two children Sandeep and Shaifali. The Mohans have two more children, Roshan and Bimla, both elder to Sheila. Sohan and Shivendar are sons of Sumit and Roma. Leela is the daughter of Sandeep.

7. How is Mrs. Mohan related to Siimit

- (a) Aunt (b) Mother-in-law
- (c) Mother (d) Sister-in-law
- 8. What is the surname of Sohan ?
  - (a) Sharma (b) Mohan
  - (c) Mishra (d) Raghu
- 9. What is the surname of Leela ?
  - (a) Sharma (b) Mohan
  - (c) Mishra (d) None of these

- 10. How is Shivendar related to Roma's father ?
  - (a) Son-in-law (b) Cousin
  - (c) Son (d) Grandson

**Directions (Qs.11 to 17) :** In a family of six, C is the sister of F, B is the brother of E's husband, D is the father of A and grandfather of F. There are two fathers and three brothers in th,,, family. [May 20011

- 11. As mother is sister of B and has a daughter C. How can A be related to B from among the following?
  - (a) Niece (b) Uncle
  - (c) Daughter (d) Father
- 12. Introducing only son of Kamla?
  - (a) Brother (b) Father
  - (c) Uncle (d) Son
- 13. Anil, introducing a girl in a party, said, She is the wife of the grandson of my mother. How is Anil related to the girl?
  - (a) Father (b) Grandfather
  - (c) Husband (d) Father-in-law

- 14. A and B married couple. X and Y are brothers. X is the brother of A. How Y is related to B ?
  - (a) Brother (b) Brother-in-law
  - (c) Sot (d) Sondn-law
- 15. A man said to a woman, Your mother's husband's sister is my aunt. How is the woman related to the man ?
  - (a) Grand daughter
  - (b) Daughter
  - (c) Sister (d) Aunt
- 16. Showing a lady in the park, Vineet said,'She is the daughter of my grandfather's only son'. flow is Vineet related to that lady?
  - (a) Father (b) Son
  - (c) Brother (d) Mother
- 17. Pointing to a photograph, Arun said she is the mother of my brother's son's wife's daughter.

How is Arun related to the lady?

- (a) Cousin
- (b) Daughter-in-law
- (c) Uncle (d) None of these



9.

- 1. (d) M 0 = M is the husband of 0. 0 + N = 0 is the mother of N. From these two we conclude that M is the father of N.
- 2. (d)  $M + N \times 0 = M$  is the mother of N and N is the brother of  $0 \Rightarrow N$  is son of M.

 $M + N - 0 \Rightarrow N$  is the son of M.

 $N \div M \Rightarrow N$  is the son of M.

Hence all the three statements deliver the same conclusion.

3. (d)  $M \times 0 \Rightarrow N = M$  is brother of 0 and 0 is the son of N, hence this statement is not true.

> $N + 0 \times M = N$  is the mother of 0 and 11 0 is the brother of M.

 $\Rightarrow$  N is the mother of M.

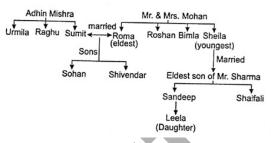
 $N + M + 0 \Rightarrow N$  is the son of M and M is mother of 0 = M is mother of N.

Hence none of the statements concludes M is the aunt of N.

(8 to 10) :

There are four married couple

- 4. (a) Krishna is sister-in-law to Devika.
- 5. (d) From the above chart, it is clear that Anuj and Romila are cousins.
- 6. (c) Madhu is Sunil's mother-in-law.
  (11 to 14) : On the basis of information given in the question we can draw the following family tree.



- 7. (b) Mrs. Mohan is Sumit's mother-in-law.
- (c) Surname of Sohan is Mishra, because Sohan is son of Sumit and Sumit is son of Mishra.

(a) Surname of Leela is Sharma because
 Leela is grand daughter of Mr.
 Sharma.

**11.** (a) Clearly A is niece of B. Sister Mother Daughter

- 12. (b) The only son of Mahesh's father is Mahesh himself. Father of Kamla is Mahesh and Mahesh is father of Kamla.
- 13. (d) The grandson of Anil's mother is son of MAnil thusand wife of Anil's son is daughter in law of, Anil is father-in-law of a girl.
- 14. (b) If X is the brother of A, then Y will also be brother of A. Hence, Y is the brother-in-law of B.
- 15. (c) Woman's mother's husband is father of woman and sister of father is aunty of that woman. Aunty of the woman is also the aunty of man thus, the woman is sister of a man.
- 16. (c) The only son of Vineet's grand father is Vineet's father. The lady is the daughter of Vineet's father, Thus Vineet is brother of that lady.
- 17. (b) Lady is daughter-in-law of Arun.

# **Analytical Reasoning-I**

**Directions (Qs. 1 to 3) :** *Read the information given below to answer these questions.* 

- *(i) There is a group of five girls.*
- (ii) Kamini is second in height but younger than Rupa.
- *(iii) Pooja is taller than Monika but younger in age.*
- *(iv) Rupa and Monika are of the same age but Rupa is tallest among them.*
- (v) Neelam is taller than Pooja and elder to Rupa.
- 1. If they are arranged in the ascending order of height, than who will be in the third position ?
  - (a) Monika
  - (b) Monika or Pupa
  - (c) Rupa (d) None of these
- 2. If they arc arranged in the descendiny, order of their ay,es, then who will be in the fourth position?
  - (a) Monika or Itupa
  - (b) Monika
  - (c) Kamini (d) None of these
- 3. To answer the question "who is the youngest person in the group", which of the given statements is superfluous?
  - (a) Only (i) (b) Only (v)
  - (c) Only (ii) (d) Either (i) or (iv)

**Directions (Qs. 4 to 6) :** *Six products U, V, W, X, Y and Z are to be placed in display windows of a shop. There are six display windows number 1, 2, 3, 4, 5, 6 and one product is to be put in one window. More over U can-* not be immediately to the left or immediately to the right of V, W must be immediately to the left X, Z cannot be in window number 6.

- 4. Which of the following products cannot be placed in the window no. 1
  - (a) V (b) U (c) W (d) X
- 5. If X is placed in window no. 3. W must be placed in which window ?

(a) 2	(b)	1
(c) 4	(d)	5

6. If U is placed in window no. 5, which of the following products must be placed in window no. 6 ?

(a)	W	(b)	V
(c)	Х	(d)	Y

**Directions (Qs. 7 to 9) :** Six products U, V, W, X, Y and Z are to be placed in display windows of a shop. There are six display windows-numbered I, 2, 3, 4, 5, 6 and one product is to be put in one window. Moreover, U cannot be immediately to the left or immediately to the right of V. W must be immediately to the left of X. Z cannot be in window number 6.

7. Which of the following products cannot be placed in window no. 1 ?

(a)	U	(b)	V
(c)	W	(d)	Х

- 8. If X is placed in window no. 3, then W must be placed in which window ?
  - (a) 1 (b) 2
  - (c) 4 (d) 5
- 9. If U is placed in window no. 5, then which of the following products must be

placed in window no. 6?

- (a) V (b) W
- (c) X (d) Y

**Directions (Qs. 10 to 14) ;** *Read information carefully to answer these questions given below it.* 

> There are six teachers A, B, D, E and F in a school. Each of the teachers teaches two subject one compulsory subject and the other optional subject. D's optional subject is History while three others have it as compulsory subject. E and F have Physics as one of their subjects. F's compulsory subject is Mathematic which is an optional subject of both C and E. History and English are A's subjects but in terms of compulsory and optional subjects, they are reverse of those of D's. Chemistry is an optional subject of any one of them. There is only one female teacher in the school who has English as her compulsory subject.

- 10. What is C's compulsory subject Physics ctph?
  - (a) History (b) Physics
  - (c) Chemistry (d) English
- 11. Who is a female member in the group

(a) A	(b)	В
(a) A	(b)	ł

- (c) C (d) D
- 12. Who among the following has same compulsory and optional subjects as those of Fs ?
  - (a) D (b) B
  - (c) A (d) C
- 13. Disregarding which is compulsory and which is the optional subject, who has the same two subjects combination as F?

(a)	А	(b)	В
(c)	Е	(d)	D

- 14. Which of the following groups of teachers has History as the compulsory subject ?
  - (a) B, C and D (b) B, C and D
  - (c) C and D (d) A, B and C

**Directions (Qs.15 to 16) :** In these questions, which one of the given responses would be a meaningful order of the following ?

15.	(1)	Atomic age	(2)	Metallic age
	(3)	Stone age	(4)	Alloy age
	(a)	1, 3, 4, 2	(b)	3, 2, 4, 1
	(c)	2, 3, 1, 4	(d)	4, 3, 2, 1
16.	(A)	Patient	(B)	Diagnosis
	(C)	Bill	(D)	Doctor
	(E)	Treatment		

- (a) D, A, B, C, E (b) A, D, B, C, E
- (c) A, D, C, B, E (d) A, D, B, E, C

**Directions (Qs. 17 to 21) :** *Study the following information to answer these quastions.* 

A black smith has five iron articles A, B, C, D and E each having a different weight.

- (i) A weighs twice as much as B
- *(ii) B* weighs four and a half times as much us C
- (iii) C weighs half as much as D
- (iv) D weighs half as much as E
- (v) E weighs less than A but more than C.
- 17. Which of the following is the lightest in weight ?

(a)	А	(b)	В
(c)	С	(d)	D

- 18. E is lighter in weight than which of the other two articles are not lighter than E ?
  - (a) A, B (b) D, C
  - (c) A, C (d) D, B
- 19. E is heavier than which of the following two articles ?
  - (a) D, B (b) D, C
  - $(c) \quad A,C \qquad \qquad (d) \quad A,B$
- 20. Which of the following articles is the heaviest in weight ?
  - (a) A (b) B
  - (c) C (d) D
- 21. Which of the following represents the descending order of weights of the articles ?
  - (a) A, B, E, D, C (b) B, D, E, A, C
  - (c) A, B, C, D, E (d) C, D, E, BA

**Directions (Qs. 22 to 26) :** Read the following information carefully and answer these questions

> At a party, A, B, C, D and E are sitting in a circle. The group comprises a professor, an industrialist and a businessman. The businessman is sitting in between the industrialist and his wife D. A, the

professor is married to E, who is the sister of B. The industrialist is seated to the right of C. Both the ladies are unemployed.

- 22. What is A to B?
  - (a) Brother (b) Uncle
  - (c) Brother-in-law
  - (d) Can't be determined
- 23. A is sitting to the right of :
  - (a) the industralist (b) his wife
  - (c) D
  - (d) Can't be determined
- 24. Who is the industrialist ?
  - (a) D (b) A (c) B
  - (d) Can't be determined
- 25. Who in the group is unmarried ?
  - (a) Professor
  - (b) Industrialist
  - (c) Businessman
  - (d) Can't be determined

26. Who among them must be graduate ?

- (a) B (b) A
- (c) C (d) None of these



**Directions (Qs. 6 to 8) :** On the basis of information given in the questions following tables can be made.

Height	Age
Rupa	Neelam
Kamini	Pooja = Monika
Neelam	Kamini
Pooja	Pooja
Monika	

- 1. (d) Neelam will be at the third position.
- 2. (d) Since positions of Kamini and Pooja keeps verifying. Hence, either Kamini or Pooja will be m the third position.
- **3.** (a) Only (i)
- 4. (d) Since W must be immediately to the left of X, X cannot be placed in the window no. 1.
- (a) Since X is immediately right to W, W must be placed in window no. 2.
- 6. (d) If U is placed in window No. S the following could be the arrangement of display of products.Products : W X V Z U Y

  - Windows : 1 2 3 4 5 6
- 7. (d) Since W must be immediately to the left of X, therefore X cannot be displayed in window no. 1.
- 8. (b) Since W must be immediately to the left of X, therefore W must be displayed in window no. 2.
- 9. (d) If U is placed in window no. 5, thenY will be placed in window number6.

(10 to 15) : On the basis of information
given in the question following
table is prepared

Teachers	Compulsory.	Optional
	Subject	Subject
A	History	English
В	History	Chemistry
С	History	Maths
D (Female)	English	History

- 10. (a) Cs compulsory subject is History.
- 11. (d) D is the female member in the group.
- 12. (d) The compulsory subject of F is the optional subject of C (Maths).
- **13. (c)** It is E who has Physics and Maths as his two subjects.
- 14. (d) A, B and C have History as the compulsory subjects.
- 15. (b) Stone age came first, then came Metallic age followed by Alloy age and finally came Atomic age.
- 16. (d) Patient needs a doctor who diagonoses the disease, this is followed by the treatment and bill is payed for this.

(17 to 21) : On the basis of the information given in five statements the following order of five iron articles in descending order is obtained. A-B-E -D -C

- 17. (c) C is the lightest in weight.
- **18.** (a) A and B are not lighter than E.
- **19.** (b) E is heavier than D and C.
- 20. (a) A is heaviest in the weight.
- 21. (a) A, B, E, D, C is the correct order in descending form.

(22 to 26) : Professor A is married to E and E is the sister of B. Industrialist is married to D. Since, industrialist is seated to the right of C. Hence industrialist can not be A or C. Hence B is an industrialist and C is a businessman.

- A Professor
- B Industrialist
- C-Businessman
- D Unemployed

E — Unemployed

- 22. (c) A is the husband of E and is the sister of B, hence A is the brother-in-law of B.
- 23. (d) No information about its position Is given.
- **24.** (c) B is the industrialist.
- **25.** (c) Businessman is unmarried in the group.
- 26. (b) Since A is professor hence he must be graduate.

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XXXXXX XXXX XXX **Directions (Qs. 1 tol 5) :** *Study the information 0 given below to answer these questions.* 

- (i) Six plays A, B, C, D, E and F are to be organised from Monday to Sturday, ie from 5th to 10th—one play each day.
- *(ii) There are two plays between C and D and one play between A and C.*
- *(iii)There is one play between F and E is to be organised before F.*
- (*iv*) *B* is to be organised before *A*, not necessarily immediately.
- (v) The organisation does not start with *B*.

(b) F

- 1. The organisation would start from which play ?
  - (a) A
  - (c) D
  - (d) Cannot be determined
- 2. On which date the play E is to be organised?
  - (a) 5th (b) 7th
  - (c) 6th
  - (d) Cannot be determined
- 3. The organisation would end with which of the following plays ?
  - (a) A (b) F
  - (c) D
  - (d) Cannot be determined
- 4. On which day the play B is organised?
  - (a) Tuesday (b) Friday
  - (c) Thursday (d) None of these

- 5. Which of the following is the correct sequence of organising plays ?
  - (a) AECFBD (b) DFECBA
  - (c) BDEFCA (d) None of these

**Directions (Qs. 6 to 8) :** *Study the information given below to answer these questions.* 

- I. There is a family of 5 persons A, B, C, D and E.
- II. They are working as a doctor, a teacher, a trader, a lawyer and a farmer.
- III. B, an unmarried teacher, is the daughter of A.
- IV. E, a lawyer, is the brother of C.
- V. C is the husband of the only married couple in the family.
- VI. A, a farmer, is a father of two sons and an unmarried daughter.
- VII. Daughter-in-law of A is a doctor.
- 6. Which of the following is a group of female members in the family ?
  - (a) D and E (b) B and D
  - (c) A, C and E (d) B and C
- 7. Which of the following is the married couple ?
  - (a) C and D (b) A and B
  - (c) A and D (d) 13 and D
- 8. Which of the following is a group of male members in the family ?
  - (a) B and D (b) A, B and C
- (c) A, C and E (d) A, C and D

**Directions (Qs. 9 to 12) :** *Read the following information to answer these questions:* 

- In a family of six persons : A, B, C, D, E and F there are two married couples.
- (2) D is grand mother of A and mother of B.
- (3) C is the wife of B and mother of F.
- (4) F is the grand daughter of E.
- 9. What is C to A?
  - (a) Grandmother (b) Mother
  - (c) Cannot be determined
  - (d) None of these
- 10. How many male members are there in the family ?
  - (a) Three (b) Four
  - (c) Cannot be determined
  - (d) None of the above
- 11. Which of the following is true?
  - (a) A is the sister of F
  - (b) D has two grandsons
  - (c) B has two daughters
  - (d) None of the above
- 12. Who among the following is one of the couples ?
  - (a) DE (b) EB
  - (c) Cannot be determined
  - (d) None of these

**Directions Qs. 13 to 17) :** *Road the following inforarntion carefully In ran ewer those questions.* 

> In a car exhibition, seven cars of seven differnt companies, viz. Cadillac, Ambassador, Fiat, Maruti, Mercedes,

Bedfort and Fargo were displayed in a row, facing cast such that

- (A) Cadiallac car was to the immediate right of Fargo.
- (B) Fargo was fourth of right of Fiat.
- (C) Maruti was between Ambassador and Bedford
- (D) Fiat, which was the third to the left of Ambassador cor was at one of the ends.
- 13. Which of the following was the correct position of the Mercedes ?
  - (a) Immediate right of cadillac
  - (b) Immediate left of Bedford
  - (c) Between Bedfort and Fargo
  - (d) Fourth of the right of Maruti
- 14. Which of the following is definitely true?
  - (a) Fargo car is between Ambassador and Fiat.
  - (b) Cadillac is to the immediate left to Mercedes.
  - (c) Fargo is to the immediate right of cardillac
  - (d) None of the above
- 15. Which cars are on the immediate either sides of the cadillac car ?
  - (a) Ambassador and Maruti
  - (b) Maruti and Fiat
  - (c) Fiat and Mercedes
  - (d) Mercedes and Forgo
- 16. Which of the following is definitely true?
  - (a) Maruti is to the immediate left of Ambassador.
  - (b) Bedford is to the immediate left of

Fiat.

- (c) Bedford is at one of the ends.
- (d) Fiat is second to the right of Maruti.
- 17. Which of the following groups of cars is to the right of Ambassador car ?
  - (a) Cadillac, Fargo and Maruti
  - (b) Maruti, Bedford and Fiat
  - (c) Mercedes, Cardillac and Fargo
  - (d) Bedford, Cadillac and Fargo

**Directions (Qs. 18 to 20) :** *Study the following information to answer the questions.* 

> A family consists of seven members P, Q, R, S, T, U and V. While one of them is a student, the other six follow different professions of Architect, Lawyer, Professor, Manager, Doctor and Engineer. There are two married couples in the family. P and U are Architect and Doctor respectively. S, the father of Q and the grandfather of V, is an Engineer. No lady in the family is an Engineer or a Lawyer. V, who is a Student; is the grandson of T.

- 18. Which of the following is one of the married couples ?
  - (a) QR (b) QU
  - (c) PR
  - (d) Data inadequate
- 19. How is R related to V ?
  - (a) Mother (b) Aunt
  - (c) Sister
  - (d) Data inadequate
- 20. What is Ts profession ?
  - (a) Professor (b) Manager
  - (c) Professor or Manager

#### (d) Doctor

#### **Directions (Qs. 21 to 23) :** *Study information carefully to answer the questions :*

Students joining a certain university can choose from among seven courses : Biology, Astronomy, English Mathematics, History, Chemistry and Psychology. A student can not take both English and Astronomy. Chemistry is a prerequistite for biology and cannot be taken concurrently with biology. A student must take at least two of the three courses, English, History and Psychology. No course may be repeated.

- 21. What is the maximum number of courses that a student can take without violating any of the conditions ?
  - (a) 3 (b) 4
  - (c) 5 (d) 6
- 22. If a student is taking Astronomy and Mathematics and wishes to take four courses, then in how many different ways can the other two courses be taken ?
  - (a) One (b) Two
  - (c) Three (d) Four
- 23. A student, who studied Bilogy in his 10+2 and chooses chemistry, psychology and other courses in the university, could be violating which of the following conditions ?
  - (1) A student cannot take both english and Astronomy
  - (2) A student must take at least wo of three courses, English, History and Pyschology
  - (3) No course can be repeated.

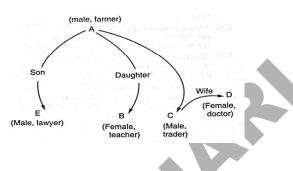
(a) 1 only (b) 3 only	26. Who is good in Studies, Mathematics and
(c) 1 & 2 only (d) 2 & 3 only	Atheletics ?
Directions (Qs. 24 to 29) : These ques-	(a) Asha (b) Beena
tions are based on the following statements.	(c) Charu (d) Deepa
Asha and Charu are good in Mathematics and Athletics. Deepa and	27. Who is good in Atheletics, General Knowledge and Mathematics ?
Asha are good in Atheletics and studies,	(a) Asha (b) Beena
Charu and Beena are good in General	(c) Charu (d) Deepa
Knowledge and Mathematics. Deepa,	28. Who is good in Studies, General
Beena and Ela are good in Studies and	Knowledge and Art but not in Atheletics?
General Knowledge. Ela and deeps are	(a) Asha (b) Beena
good in Studies and Art.	(c) Charu (d) Ela
24. Who is good in Studies, General	29. A is shorter than 13 but much taller that K
Knowledge, Atheletics and Art?	C is the tallest and D is little shorter than
(a) Asha (b) Beena	A. Who is the shortest?
(c) Charu (d) Deepa	(a) A (b) E
25. Who is good in Studies, General	
Knowledge and Mathematics ?	(c) C (d) D
(a) Asha (b) Beena	
(c) Charu (d) Ela	

(1 to 5) : On the basis of information given in the question the following arrangement can be made 5 6 7 8 9 10

Mon. Tue. Wed. Thu. Fri. Sat. D B E C F A

- 1. (c) The organisation would start from D.
- **2.** (b) E is to be organised on 7th.
- 3. (a) The organisation would and with A.
- 4. (a) B is to be organisation on Tuesday.
- 5. (d) None of these.

(6 to 8):



- 6. (b)
- 7. (a) 8. (c)

(9 to 12): On the basis of information given in the question, the following family tree is prepared.

Grand Parents  $E \Leftrightarrow D$ (Couples)

#### (Male) (Female)

 $B \Leftrightarrow C$ 

(Couples) (Male) (Female)

Children  $A \leftrightarrow F$  (Sibling)

(Female)

9. (b) C is the mother of A.

Parents

10. (c) Sex of A is not known.

Hence, number of male members cannot be determined.

- 11. (d) Again, since sex of A is not known, hence none of the statements is correct.
- 12. (a) DE is one of the couples.

(13 to 17): The arrangement of all the seven cars in a row is given below : Fiat Bedfort Maruti Ambassador Fargo
\* \* \* \* \* \*

Cadiallac Merceders

- 13. (a) Mercedes is immediate right of Cadillac.
- 14. (b) Cadillac is to the immediate left of Mercedes.
- **15.** (d) Fargo and Mercedes.
- 16. (a) Statement (a) is true.
- 17. (c) Fargo, Cardillac and mercedes are to the right of Ambassador car.
- **18.** (d) Data are inadequate to answer the question.
- 19. (d) On the basis of information given in the question we can not establish relationship of R & V.
- **20.** (c) T may be a professor or a lawyer.
- 21. (c) A student can take maximum five courses namely-History, Psychology, Chemistry, Mathematics and Astrionomy.
- 22. (a) Only in one way other two courses can be taken. Astronomy, Mathematics, History Psychology.
- 23. (b) Could be violating conditions (3)-

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Chemistry, Psychology and one more subject (History), because English cannot be taken. Chemistry is a prefrequisite for Biology. Hence Chemistry is supposed to be repeated.

- 24. (d) From the above table it is clear that Deepa, is good in Studies, General Knowledge, Atheletics and Art.
- **25.** (b) Wenn is good in studies, General Knowledge and Mathematics.

- **26.** (a) Asha is good in studies Mathematics and Athletics.
- 27. (c) Charu is good in Athletics, General Knowledge and Mathematics. not i Athletics. Height 101. (b) E h
- **28.** (d) Ela is good in studies, G.K. and Art but not in Athletics.
- 29. (b) Height wise ranking in the decreasing order is e etti w given below

 $C \rightarrow B \rightarrow A \rightarrow D \rightarrow E$ 

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# **Sequences and Series**

**Directions (Qs. 1 to 4) :** *Complete the* 6. *following series :* 

- 1. AZ, GT, MN, ?, YB
  - (a) KF (b) RX
  - (c) SH (d) TS
- 2. J2Z, K4X, 17V, ?, H16R, M22P
  - (a) IIIT (b) L11S
  - (c) L12T (d) MIT
- 3. gfe ig eii fei gf ii
  - (a) eifgi (b) figie
  - (c) ifgie (d) ifige
- 4. In a row of children, Bhushan is seventh from the left and Motilal is fourth from the right. When Bhushan and Motilal exchange positions, Bhushan will be fifteenth from the left. What will be Motilal's position from the right ?
  - (a) Eighth (b) Fourth
  - (c) Eleventh (d) Twelfth
- 5. An application was received by inward clerk in the afternoon of a week day. Next day he forwarded it to the table of the senior clerk, who was on leave that day. The senior clerk put up the application to the desk officer next day in the evening. Teh desk officer studied the application and disposed off the matter on the same day ie, Friday. Which day was the application received by the inward clerk?
  - (a) Monday (b) Wednesday
  - (c) Tuesday
  - (d) Previous week's saturday

Which letter should be the ninth letter tothe left of the ninth letter from the right,if the first half of the alphabet of Englishare reversed ?

(a)	D	(b) F
(c)	Е	(d) I

7. The letters of the name of a vegetable are I, K, M, N, P, U. If the letters are rearranged correctly, what is the last letter of the word formed ?

(a) M	(b)	N
(c) K	(d)	Р

**Directions (Qs. 8 to 10) :** In each of the following questions, various terms of a series are given with one term missing as shown by (?) Choose the missing term.

- 8. QPO, SRQ, UTS, WVU, (?)
  - (a) XVZ (b) YXW
  - (c) ZYA (d) VWX
- 9. 19, 2, 38, 3, 114, 4, (?) (a) 228 (b) 352
  - (c) 256 (d) 456
- 10. YEB, WFD, UHG, SKI, (?)

(a)	QOL	(b)	TOL
(c)	QGL	(d)	QNL

**Directions (Qs. 11 to 12) :** In one term in the given number series is term.

1.	11, 5, 20, 12, 40, 20	6, 74, 54
	(a) 5	(b) 20
	(c) 40	(d) 26
$\mathbf{a}$	0 14 26 40 00 14	04 206

- 12. 8, 14, 26, 48, 98, 194, 386 (a) 14 (b) 48
  - (c) 98 (d) 194

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**Directions (Qs. 13 to 14) :** In each of these questions given below, there is a series with one number missing as shown by question mark. This term is given as one of the alternatives. Mark the correct alternative .

une	rnallves. Mark in	e correct allernative.	tions.
13.	4, 9, 25, ?, 169, 2	289, 361	22. 5, 6, 8, 9, 11,
	(a) 49	(b) 74	(a) 15 (b) 12
	(c) 89	(d) 91	(c) 17 (d) 20
14.	2, 5, 10, 17, 26,	37, ?	23. 35, 30, 25, 20, 15, 10,
	(a) 61	(b) 58	(a) 15 (b) 10
	(c) 50	(d) 72	(c) 5 (d) 2
	Directions (14	to 19) : For these ques-	
	_	ience represented by the	
	stion.		(c) 45 (d) 60
15.			25. 5, 7, 9, 11, 13,
	(a) X	(b) Y	(a) 15 (b) 10
	(c) W	(d) U	(c) 8 (d) 6
16.			26. 125, 80, 45. 20,
	(a) Y1170	(b) X17M	(a) 8 (b) 12
	(c) X170	(d) X160	(c) 10 (d) 5
17.			<b>Directions (Qs. 27 to 30) : </b> ]
	(a) 125	(B) 5	In these questions, a series is given which
10	(c) 25	(D) 625	may consist of number, alphabets or a
18.	2, 12, 30, 56, ?,	<i>a</i> . –	mixture of both. You have to identify from
	(a) 116	(b) $5$	the choices given against each question,
10	(c) 90	(d) 86	the next term in the series. $(12, 28, 50.2)$
19.			27. 6, 13, 28, 59 ?
	(a) 100	(b) 104	(a) 111 (b) 122 (c) 112
	(c) 108	(d) 120	(c) $113$ (d) $114$
a awi		<b>20 to 21):</b> Complete the	
seri			(a) XVZ (b) ZYA
20.	ab, b bc		(c) YXW (d) VWX
	(a) cacab	(b) abcca	29. $1, 5, 13, 25, 41$ ?
21	(c) abacd	(d) accbb	(a) $61$ (b) $57$
21.	ababaa	ιυ	(c) 51 (d) 63

aabab

(c) bbaba

(a)

(b) ababb

(d) baaba

Directions (Qs. 22 to 26) : Find the next

term in the given series in each of these ques-

- 30. 3, 10, 29, 66, 127?
  - (a) 164 (b) 187
  - (c) 218 (d) 216
- 31. The sum of six terms of an arithmetic progression is 9 and the sum of the first 9 terms is 6. The sum of the first fifteen terms will be :
- (a) 6 (b) -15 (c) 3 (d) - 3
- 32. The next term of the sequence 1, 3, 6, 10, ..... is :

	A
(a) 12	(b) 15
(c) 16	(d) 20

- 1. (c) First letter moves +6 steps Second letter moves -6 steps
- 2. (d) Last letter in each group is moving one step backward while the middle number is moving + 2, + 3, + 4, + 5, ... steps forward.
- 3. (c)
- 4. (d)
- (b) The senior clerk got the application on Friday.
- 6. (c) The inward clerk got the application on Wednesday.
- 7. (b) The word is PUMPKIN
- 8. (b)  $Q \xrightarrow{+2} S \xrightarrow{+2} U \xrightarrow{+2} W \xrightarrow{+2} Y$   $P \xrightarrow{+2} R \xrightarrow{+2} T \xrightarrow{+2} V \xrightarrow{+2} X$   $0 \xrightarrow{+2} Q \xrightarrow{+2} S \xrightarrow{+2} U \xrightarrow{+2} W$  19 38 114 546 $1 \times 2 \uparrow 1 \times 3 \uparrow 1 \times 4 \uparrow$
- 9. (d) 2 3 4+1 + 1 + 1 + 1
- 10. (a)  $\begin{array}{c} Y \xrightarrow{-2} W \xrightarrow{-2} U \xrightarrow{-2} S \xrightarrow{-2} Q \\ E \xrightarrow{+1} F \xrightarrow{+2} H \xrightarrow{+3} K \xrightarrow{+4} O \\ B \xrightarrow{+2} D \xrightarrow{+3} G \xrightarrow{-2} I \xrightarrow{+3} L \end{array}$
- 11. (c) There are two series in the given series

- Ist series 5, 12, 26, 54  $\Rightarrow$  x 2 + 2 IInd series 11, 20, 40, 74  $\Rightarrow$  x2 - 2 Hence the number 40 should be replaced by 38.
- 12. (b) The series follows the pattern x 2 2. Hence number 48 should be replaced with 50.

42

- **13. (a)** The series is square of consecutive prime numbers.
- **14. (c)** The given series is  $1^2 + 1$ ,  $2^2 1$ ,  $3^2 + 1$ ,  $4^2 + 5^2 6^2 + 7^2 + 1$ .

Hence the required number is 50.

- **15. (d)** The letters moves +6, +5, +4, +3, +2 steps in alphabetical orders.
- 16. (c) First letter moves two steps, second letter moves two steps, three steps, four steps .... successively and third letter moves third steps in forward direction.
- 17. (a) The missing number is 125.
- **18. (c)** The series progresses with the difference +10, +18, +26, +34, +42, +50, +....
- 19. (b) The difference of the series is
  - x2, x2, x3, x4, x5, x6....

- **20. (a)** cab / abc / bca / cab
- **21. (a)** aabb / aabb / aabb
- 22. (b) The sequence progresses with the following difference +1, +2, +1, +2, +1. Hence the next number would be 12.
- 23. (c) The series moves with a difference of -5.
- 24. (b) The series moves with a difference of +2, +4, +6, +8, +10.
- **25. (a)** The series moves with a difference of +2.
- **26. (d)** The series moves with a difference of -45, -35, -25, -15.
- 27. (b) The series progrenes with a difference of

7, 7 × 24+1=15, 15 × 2 + 1=31

 $31 \times 2 + 1 = 63$ ,

Hence the next digit of the series would be S9+63=122

- 28. (c) This question can be solved by clear observation of the first letter of each group. First letter of each group progre.es with a difference of one letter Q (R) S (T) U (V) W (X) Y. Hence next letter will be V.
- **29. (a)** The series progresses with a difference of +4, +8, +12, +16, +20.
- 30. (c) Difference of each consecutive term of the series is 7. 19, 37, 61. 91. The series of difference moves with the following rule +12. +18, +24, +30. Hence the next number would be 127 +91=218
- **31. (b)** S6 = 9 and So = given,
- 32. (b) The series moves according to the following rule +2, +3, +4, +5.

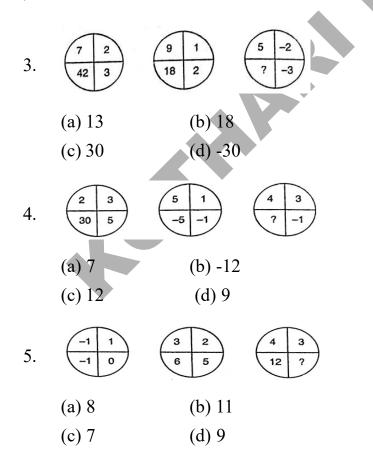
XXXXX XXXX XXX

# **Mathematical Operation**

**Directions (Qs. 12 to 13) :** Use the figure given below to answer these questions.

- 1. What is the number of triangles in the figure ?
  - (a) 30 (b) 27
  - (c) 20 (d) 15
- 2. What is the number of squares in the figure ?
  - (a) 60 (b) 55
  - (c) 50 (d) 42

**Diroctions (Qs. 3 to 5) :** In these questions, choose appropriate number for the quadrant in which the question mark appears



**Directions (Qs. 6 to 12) :** *In these questions, some relationships have been expressed through symbols as shown below :* 

- $\phi$  means less than
- $\Delta$  means not greater than
- means equal to
- + means not equal to
- x means not less than
- = means greater than

Study the meaning of these symbols and pickup the correct answer from the answer choices for each of the questions 24 to 30 :

6.  $x \phi y + z$  implies :

(a) 
$$\mathbf{x} - \mathbf{y} = \mathbf{z}$$
 (b)  $\mathbf{x} \times \mathbf{y} = \mathbf{z}$ 

(c)  $x \Delta y \phi z$  (d)  $x - y \times z$ 

7.  $x \phi y - z$  implies :

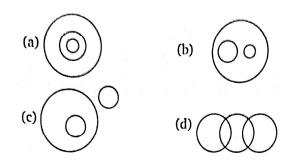
(a) $\mathbf{x} \times \mathbf{y}$ -z	(b) x - y $\times$ z
(c) $x+y \times z$	(d) $\mathbf{x} \times \mathbf{y} = \mathbf{z}$

- 8. x y + z implies
  - (a) x + y + z (b)  $x \phi y z$
  - (c)  $x y \phi z$  (d)  $x \Delta y = z$
- 9. x y = z
  - (a) x + y z (b)  $x \Delta y = z$ (c)  $x + y \phi z$  (d)  $x - y \times z$
- 10.  $x \Delta y$  -z implies
  - (a)  $x = y \times z$  (b) x y = z
  - (c)  $x y \Delta z$  (d)  $x \times y \times z$
- 11.  $x = y \Delta z$  implies :
  - (a)  $x + y \phi z$  (b) x y = z(c)  $x \Delta y \times z$  (d)  $x \Delta y - z$
- 12.  $x + y \Delta z$  implies (a)  $x \phi y = z$  (b) x = y = z
  - (c)  $x = y \Delta z$  (d)  $x \Delta y = z$

1.	(a) There are in all 30 triangles.		$\Rightarrow$	$x+y \times z$
2.	(b) There are in all 55 squares in the figure.	8.	(c) x - y + z	$\Rightarrow$ X=y \ne z
3.	(c) $2 \times 3 = 6$ and $7 \times 6 = 42$ , $1 \times 2 = 2$ and $9 \times 2 = 18$ $\therefore -2 \times -3 = 6$ and $5 \times 6 = 30$ .		$\begin{array}{c} \Rightarrow \\ \Rightarrow \end{array}$	x = y < z
4.	Hence 30 will come in place of? (b) $2 \times 5 = 10$ and $3 \times 10 = 30$ , $-1 \times 5 = -5$ and $-5 \times 1 = 5$	9.	(b) x-y=z ⇒ $\Rightarrow$	$\Rightarrow x = y > z$ x>y <z x <math>\Delta y \times z</math></z 
	$\therefore 4 \times -1 = -4$ and $3 \times -4 = -12$ . Hence - 12 will come in place of ?	28.	(c) x ∆y - z ⇒	$\Rightarrow x = y > z$ $x > y < z$
5.	<ul> <li>(c) 1+ (-1)= 0, 3+2=5 and 4+ 3=7 Hence</li> <li>7 will come in place of ?</li> </ul>	29.	$\Rightarrow$ (a) $x = y \Delta z$	$ \begin{array}{l} x + y \ \phi z \\ \Rightarrow  x = y > z \end{array} $
6.	(c) $x \phi y + z \implies x < y \neq z$ $x \Delta y \phi z \implies x > y < z \implies x < y \neq z$ .		$\Rightarrow$	$x > y < z$ $x + y \phi z$
7.	$\begin{array}{rcl} x \phi y + z & \Rightarrow & x \Delta y \phi z \\ \textbf{(c)} x \phi y - z & \Rightarrow & x < y = z \\ \end{array}$	30.	(c) $x + y \Delta z$	$\Rightarrow x = y > z$ $x > y < z$
	$\Rightarrow \qquad x \neq y \ \ z < z$		$\rightarrow$	$x \Delta y \times z$

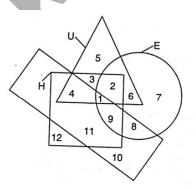
# Venn Diagrams

**Directions (Qs. 1 to 5) :** In these questions choose one of the figures labelled 1, 2, 3 or 4 which best represents the relationship among the items given.



- 1. Mangoes, Apples, Fruits
- 2. Coffee, Tea, Beverages
- 3. Musicians, Men, Women
- 4. Parrots, Birds, Mice
- 5. Fish, Herring. Animals living in water.

**Directions (Qs. 6 to 10) :** In the given diagram the circle stands for the 'educated', square for the 'hardworking' triangle for the 'urban' and the rectangle for the 'honest' people. Different regions in the diagram are numbered from 2 to 13. Study the diagram carefully and choose the correct answer for the following questions :



6. People who are educated and hardworking and honest but not urban

are represented by :

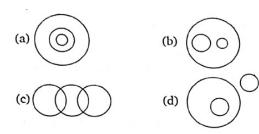
(a) 8	(b) 1
(c) 2	(d) 9

7. Hardworking people, who are uneducated, dishonest and are urban, are represented

- by :
- (a) 2 (b) 4
- (c) 9 (d) 3
- 8. Hardworking, non-urban people who are neither educated nor honest are indicated by :
  - (a) 10 (b) 12 (c) 11 (d) 9
- 9. In the above diagram, which of the following statements is true ?
  - (a) All educated people are urban
  - (b) Uneducated people are either honest or hardworking
  - (c) Some honest people are also hardworking and are educated
  - (d) No person is urban, educated, honest and hardworking
- 10. Region 4 is best described as consisting of :
  - (a) People who are uneducated, urban, hardworkin and dishonest.
  - (b) People who arc urban, hard working, honest and educated.
  - (c) People who are uneducated, urban, honest and hard working.
  - (d) People who are non-urban, honest, uneducated and hard working.

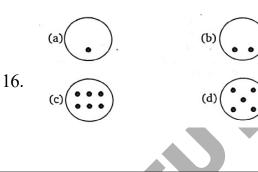
#### Directions (Qs. 11 to 16): In these ques-

tions, identity from the figures labelled o to d the one which best expresses the relationship between the elements given in each question.



- 11. Parrots, Birds, Mice
- 12. River, Canal, Perennial sources of water.
- 13. Rings, Ornaments, Diamond rings

- 14. Coffee, Tea, Beverages
- 15. Judge, Thief, Criminal



- 1. (c) Both Mangoes and Apples are fruits.
- **2.** (b) Both coffee and Tea are Beverages.
- 3. (d) Some men may be musician and some women may be musician. And men and women are not related.
- 4. (c) Parrots are birds and men arc not related to the section of birds.
- (c) Fish comes under the category of animals living in water and herring is not related to it.
- 6. (d) Number 9 is common to educated, hard working and honest represented by circle, square and rectangle respectively.
- 7. (d) Number 3 is common to square and triangle representing hard working and urban people respectively.
- 8. (b) Clearly number 12 is not common to any other figure hence shows the

only hardworking people.

- 9. (c) Clearly, some honest people are also hardworking and are educated.
- **10. (c)** Region 4 is representing people who are uneducated urban, honest and hardworking.
- 11. (d) Parrots are birds and mice do not have any relation with the category of birds.
- 12. (b) Both are perennial source of water.
- 13. (a) Rings come under the category of ornaments and diamond ring comes under the category of rings.
- 14. (b) Both Tea and Coffee are Beverages.
- 15. (d) Thief is a criminal and Judge does not relate to this category.
- **16.** (c) Figure (c) correctly represents the relationship of all the four figures.



# Syllogism

**Directions (Qs. 1 to 3) :** In these questions, there are two statement A and B followed by two conclusion numbered i and II. Decide which of the two given conclusions logically follows from the two given statements, disregarding commonly known facts.

Mark your answer as :

- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If neither I nor II follows.
- (d) If both I and II follow.

### 1. Statements :

- A : Alcoholic drinks are injurious to health.
- B : All old women drink whisky

### **Conclusions :**

- I. : All old women have poor health.
- II.: All young women are in good health.

2. Statements:

- A : All ants are hardworking.
- B : Some ants are lazy.

## **Conclusions** :

- I. : All lazy are hardworking.
- II. : All hardworking are lazy.

## 3. Statements :

- A : All rivers are mountains.
- B : Some rivers are deserts.

## **Conclusions :**

- I. : Some mountains are deserts.
- II. : Some deserts are not mountains.

**Directions (Qs. 4 to 6) :** In these questions, two statements are given, followed by two inferences A and B, Assume the statements

- to be true, mark your answer as :
  - (a) If only inference I follows.
  - (b) If only inference II follows.
  - (c) If both I and II follow.
  - (d) If neither I nor II follows.
- 4. All P's are Q's.
  - All Q's are R's. So,
  - I. All P's are R's.
  - II. All R's are P's.
- Some words are sharp. All swords are rusty. So,
  - I. Some rusty things are sharp.
  - II. Some rusty things are not sharp.
- 6. All liqour is water.

No water is bitter. So,

- I. No liquor is bitter.
- II. No bitter things is liqour.

**Directions (Qs. 7 to 16) :** In these questions, you ore given two statements A and B followed by two conclusions (I) and (II). You have to take the two statements to be true even if theyseem to be at variance from commonly known facts. You are to 1 decide which of the given conclusions definitely follows from the given statements. Indicate your answer as :

- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If both I and II follow.
- (d) If neither I nor II follows.
- 7. Statements :
  - A: Some books are cars
  - B: Some cars are boxes

#### **Conclusions :**

- I: Some books are boxes
- II : Some boxes are books.

#### 8. Statements :

- A: All goats are parrots.
- B: All parrots are crows.

#### **Conclusions :**

- I : All crows are goats.
- II : All goats are crows.

#### 9. Statements :

- A : Some papers are pens.
- B : Some pencils are pens.

### **Conclusions :**

- I : Some pens are pencils.
- II : Some pens are papers.

#### 10. Staiements :

- A : Some kings are queens.
- B : All queens are beautiful.

### **Conclusions :**

- I : All kings are beautiful.
- II : All queens are kings.

### 11. Statements :

- A : Some hens are crows.
- B : All crows are horses.

## **Conclusions** :

- I : Some horses are hens
- II : Some hens are horses.

## 12. Statements :

- A : All books are pencils
- B : All pencils are flowers.

## **Conclusions :**

- A : All books are flowers.
- B : Some pencils are not books.

#### 13. Statements :

- A : Some books are pencils,
- B : Some pencils are pens.

### **Conclusions :**

- I. Some books are pens
- II : Some pens are books.

### 14. Statements :

- A : All horses are bullocks.
- B : All bullocks are parrots.
- Conclusions :
- I : All horses are parrots.
- II : All parrots are horses.

## 15. Statements :

- A : All flowers are leaves.
- B : Some leaves are birds.

## **Conclusions** :

- I : Some birds are flowers.
- II : Some leaves are flowers.

## 16. Statements :

- A : All windows are doors.
- B : No door is wall.

## **Conclusions :**

- I: No windows is wall.
- II : No wall is door.

## **Diroctions (Qs. 17 to 21) :** In these qestions there are two statements followed by three conclusions numbered I, II and You have to take the given statements to be true even if they seen to be at variance from commonly known facts and then decide which of the given conclusion logically follows, from the given statements.

### 17. Statements :

Some years are decades.

All centuries are decades.

#### **Conclusions :**

- I. Some centuries are years.
- II. Some decades are years.
- III. No century is a year.
- (a) Only either I or III and II follow
- (b) Only II & III follow
- (c) Only I follows
- (d) Only II follows

#### 18. Statements :

All Shares are debentures.

No debenture is an equity.

Conclusions :

- I. No equity is a share.
- II. Some debentures are shares.
- III. No share is an equity.
- (a) Only I follows (b) Only II follows
- (c) All follow (d) Only III follows

#### 19. Statements :

All nets are jets.

All jets are sets.

#### **Conciusions :**

I. All jets are nets.

- II. Some sets are neither nets nor jets.
- III. No set is a net.
- (a) Only I follows

- (b) Only III follows
- (c) Only II follows
- (d) None follows

#### 20. Statements :

All cities are towns.

Some cities are villages.

Conclusions :

- I. All villages are towns.
- II. No village is a town.
- III. Some villages are towns.
- (a) Only III follows
- (b) Only I follows
- (c) Only II follows
- (d) None of these

### 21. Statements :

Some tables are chairs. Some chairs are beds.

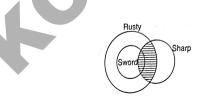
#### **Conclusions :**

- I. Some tables are beds
- II. Some chairs are beds.
- III. Some villages are towns.
- (a) Only either I or II follows
- (b) Only III follows
- (c) Only II follows
- (d) None follows

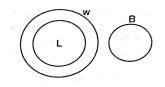


7.

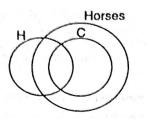
- (c) None of the conclusions follow as it can not be said that all old women have poor health and also we can not say definitely, on the basis of statements, that all young women are in good health.
- 2. (c) Conclusion (I) does not follow because the term lazy is distributed in the conclusion but it is not distributed in the statement. Likewise conclusion (II) does not follow as the term hardworking is not distributed in the statement.
- (a) Statement A can be converted into I type "some mountains are rivers". Now both the statements are of I type. Hence no mediate inference can be drawn from them.
- 4. (a) Only conclusion (1) follows.
- (a) If both the statements are positive, conclusion is always positive, hence conclusion (II) is ruled out. From the figure conclusion (I) "Some rusty things arc sharp" follow.



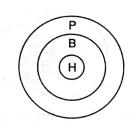
6. (c) From the figure drawn on the basis of statements both the conclusions follow.



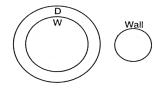
- (d) Both the conclusions are mediate inference and do not follow as middle term "cars" is not distributed in the statements.
- **8.** (b) Only conclusion (II) follows.
- 9. (c) Conclusion (I) is immediate inference drawn from statement B. Conclusion (II) is immediate inference drawn from statement A. Both the conclusion are valid.
- 10. (d) Conclusion (II) is immediate inference and dory not follow from the statement (A). Conclusion (1) is mediate inference and does not follow.
- 11. (c) From the figure both the conclusions"some horses are hens" and "some hens are horses" are valid.



- 12. (a) Only conclusion (I) follows.
- 13. (d) Middle term "pencils" is not distributed. Hence none of conclusions of mediate inference follows.
- 14. (a) From the figure only conclusion (I).All horses are parrots" is valid.



- 15. (b) Conclusion (II) immediate inference drawn from statement A and follows. Conclusion (I) is mediate inference but does not follow because middle term leaves is not distributed in the statement.
- 16. (c) Both the conclusions are valid from 19. (c) the statements.



- 17. (a) Middle term decades is not distributed hence no definite conclusion of mediate inference can be drawn. However conclusions (I) and (III) make a complementary pair of inference, hence either (I) or (III) follows. Conclusion (II) is immediate inference drawn from statement I. Hence option (a) is the correct option.
- 18. (a) All shares are debentures can be converted into some debentures are share. Hence conclusion (H) follows. Now middle term is

distributed in the statement, hence mediate inference can be drawn. Conclusion (I) & (II) are negative conclusions which follow if one of the statements is negative. Hence all follow.

- 9. (c) Conclusion I does not follow because there are some jets which are not nets. Conclusion II is true from the given figure but it is not true if all the circles concide hence it does not follow. Conclusion III does not follow. Hence none of the conclusions follows.
- 20. (a) From the figure, it is clear that conclusion (I) does not follow. Also conclusion (II) does not follow. Conclusion (III) follows as "Some villages are towns". Hence option (a) is the correct option.
- 21. (d) Middle tenii "chairs" is not distributed. Hence no conclusion of mediate inference follows. Moreover, conclusion III is immediate infetence n and does not follow from statement 2.

2626262626 262626 2626

# **Statement and Assumption**

**Directions (Qs. 1 to 5) :** Each of these questions has a statement followed by three assumption numbered I, II and Consider the statement and the assumptions to decide which of the assumptions is implicit in the statement.

1. **Statement :** The residents of the locality wrote a letter to the Corporation requesting to restore normalcy in the supply of drinking water immediately as the supply at present is just not adequate.

#### **Assumptions:**

- I. The Corporation may not take any action on the letter.
- II. The municipality has enough water to meet the demand.
- III. The water supply to the area was adequate in the past.
- (a) Only I and III are implicit
- (b) Only II and III are implicit
- (c) Only II is implicit
- (d) Only III is implicit
- Statement : We must be prepared to face any eventuality and all the assignments must be completed as per their schedule
   Director tells the Faculty members.

#### **Assumptions :**

- I. There is possibility of a serious eventuality.
- II. Dates are fixed for all the assignments.
- III. Faculty members are supposed to complete all the assignments.
- (a) Onlu I is implicit
- (b) Only DT is implicit
- (c) None is implicit

- (d) All are implicit
- 3. **Statement :** The telephone company informed the subscribers through a notification that those who do not pay their bills by the due date will be charged penalty for every defaulting day.

#### Assumptions :

- I. Majority of the people may pay their bills by the due date to avoid penalty.
- II. The money collected as penalty may set off the losses due to delayed payment.
- III. People generally pay heed to such notices.
- (a) All are implicit
- (b) Only I and HI are implicit
- (c) Only II and III are implicit
- (d) None of the above
- 4. Statement : In view of the recent spurt in sugar prices in the open market, the government has asked the dealers to release a vast qantity of imorted sugar in the open market.

#### **Assumptions :**

- I. The dealers will follow the government directive.
- II. The sugar prices will come down.
- III. The price of indigenous sugar will remain unchanged
- (a) Only I and II are implicit
- (b) Only I and III are implicit
- (c) Only II and III are implicit
- (d) None is implicit

5. **Statement:** In the the recently held All India Commerce Conference, the session on Management of Service Sector in India' surprisingly attracted large ement number of participants and also received a very good media coverage in the leading newspapers.

#### **Assumptions :**

- I. People were not expecting such an encouraging response for service sector.
- II. Service sector is not managed properly in India.
- III. Media is always very positive towards service sector.
- (a) Only I is implicit
- (b) Only I and III are implicit
- (c) Only II and III are implicit
- (d) All are implicit

**Directions (Qs. 6 to 10) :** In each question, a statements is followed by two assumptions numbered I and II. Consider the statement and the following assumptions to decide which of the assumptions is implicit in the statement. Mark your answer as :

- (a) If only assumptions I is implicit
- (b) If either I or II is implicit
- (c) If only assumption II is implicit
- (d) If neither I nor II is implicit

#### 6. Statement :

Like a mad man,

I decided to follow him.

#### Assumptions :

- I. I am not a mad man.
- II. I am a mad man.
- 7. Statement : If it is easy to become an

engineer, I don't want to be an engineer.

#### **Assumptions :**

I. An individual aspires to be professional.

- II. One desires to achieve a thing which is hard earned.
- 8. **Statement :** All the employees are notified that the organisation will provide transport facilities at half the cost from the nearby railway station to the office except those who have been provided with travelling allowance.

#### Assumptions :

I. Most of the employees will travel by the office transport.

II. Those who are provided with travelling allowance will not read such notice.

#### 9. Statement :

An advertisement of a Bank 'Want to open a bank account! Just dial our 'room service' and we will come at your doorsteps."

#### **Assumptions :**

- I. There is a section of people who require such services at their home.
- II. Now-a-days banking has become very competitive.

#### 10. Statement :

I can take you quickly from kanpur to Luknow by my cab but then you must pay me double the normal charges.

#### **Assumptions :**

- I. Normally, it will take more time to reach Luknow from Kanpur.
- II. People want to reach quickly but they will not pay extra money for it.

- (d) It is very dearly implicit in the 5. statement that the water supply to the area was adequate in the past.
- **2.** (d) All the assumptions are implicit.
- **3.** (a) All the assumptions are implicit.
- 4. (a) Since order has been delivered by the government hence it will be attended by the dealers. Moreover, release of vast quantity of imported sugar will being down the price.

5. (c)

Only (II) and (III) are implicit in the statement.

- 6. (a) The word 'like' makes only assumption I implicit.
- 7. (c)
- 8. (d)
- 9. (a)
- 10. (d)

XXXXXXX XXXX XXX

# Statement and Conclusion

**Directions (Qs. 1 to 3) :** In each of these quesctions, ihnto is o shstomont fallawad by tbron conclusionl, Stats; whether the conclusions are implicit in the given statement.

- 1. The classic My Fair Lady was based on the play pygmalion by G.B. Shaw.
  - I. My Pair Lady was the, nercen adaptation of the play.
  - II. G. B. Shaw was a playwright.
  - III. My Pair Lady tells the story of Liza Doolittle and Henry Higgins.
  - (a) Only I is implicit
  - (b) Only II is implicit
  - (c) I and iII are Implicit
  - (d) None is implicit
- 2. The Unit Trust of India (UTI) informed SEBI that it would now have to cut the interest rates in its assured return monthly income plans.
  - I. Assured return is a contradiction as far as UTI is concerned.
  - II. Investors would feel cheated if that happens
  - III. SEBI is a regulatory body
  - (a) Only I is implicit
  - (b) Only II is implicit
  - (c) I and II are implicit
  - (d) None is implicit
- 3. A casual look through the news letters of different mutual funds (MFs) would make one feel that MFs are chock a block full of cash.
  - I. A deeper look would reveal that it is

not so.

- II. MFs are full of cash.
- III. There are more than one Mutual Funds today.
- (a) Only I is implicit
- (b) Only II is implicit
- (c) Only III is implicit
- (d) None is implicit

**Directions (Qs. 4 to 44) :** In these questions, two statements are given followed by two conclusions I and II. You have to consider both the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions is/ are definitely drawn from the given statements.

Answer 1 .if only I follows.

Answer 2 if only H follows

Answer 3 if neither I nor II follows Answer 4 if both I and II follows.

4. **Statements :** When it rains, usually X does not go out. X has gone out.

#### **Conclusions :**

- I. It is not raining.
- II. X has some urgent business to transact.
- (a) 2 (b) 1
- (c) 3 (d) 4
- 5. Statements : In a Golf Club, all the members are not active players of the game but all of them are rich. Mrs. X is a member.

#### **Conclusions :**

- I. She is a golfer.
- II. She is rich.

- (a) 1 (b) 3
- (c) 2 (d) 4

#### 6. Statements:

All employees of company A have identity cards. Ram is an employee of company A.

#### **Conclusions :**

- I. Ram has an identity card.
- II. Ram is the General Manager of the Company.
- (a) 2 (b) 1
- (c) 4 (d) 3
- 7. **Statements :** If there is shortage in the production of onions, the price of onions will go up. Price of onions has gone up.

#### **Conclusions :**

- I. There is shortage in the production of onions.
- II. Onions were exported.
- (a) 3 (b) 2
- (c) 1
- 8. Statements :

If all players play to their full potential, we will win the match. We have won the match.

(d)

#### **Conclusions** :

- I. All players played to their full potential.
- II. Some players did not play to their full potential.
- (a) 2 (b) 3
- (c) 1 (d) 4
- 9. **Statements :** Some businessmen are rich. Soman is rich.

#### **Conclusions :**

I. Soman is a business man.

- II. Soman has a big farm.
- (a) 2 (b) 3
- (c) 4 (d) 1
- 10. **Statements :** All persons who own a house or car should file Income Tax return. Shiela files her income tax returs.

#### **Conclusions:**

- I. Shiela owns a house or a car.
- II. Shiela neither owns a house nor a car.
- (a) 2 (b) 1 (c) 3 (d) 4
- Statements : In order to be selected for cricket team, a person should be either a good batsman or a bowler. Shyam is selected for the team.

#### **Conclusions** :

- I. Shyam is a good batsman.
- II. Shyam is not a good bowler.
- (a) 4 (b) 3
- (c) 1 (d) 2
- 12. **Statements :** Without rains the crops will notbo The crops were good.

#### **Conclusions :**

- I. There were rains.
- II. Crops were good due to good fertilizers.
- (a) 1 (b) 2
- (c) 4 (d) 3
- 13. **Statements :** According to the evolution theory, evolved from a monkey. X is a monkey.

#### **Conclusions** :

- I. X can become a man.
- II. Man can become a monkey.
- (a) 1 (b) 3
- (c) 2 (d) 4

8.

- (a) The statement speaks about the play and writer and not about the story of the play.
- 2. (d) On the basis of the statement we can not cone:hide anything an given in the three conclusions. Ifence none follows.
- (c) The use of the word different mutual funds clarifies the existence of more than one mutual funds today.
- 4. (c) It is given that when it rains, X does not go out, but reverse of It may or may not be true. Hence none of the conclusions is a valid conclusion in the light of the statement.
- 5. (c) It is clear that all the members are necessarily rich hence Mrs. X, being a member, will definitely be rich.
- 6. (b) Ram, being the employee of company A, has an identity card.
- 7. (c) Clearly there is shortage in the production of onions.

- (c) Given, the match can be won only if all players play to their full potential. Since match has been won this implies that all players played to their full potential.
- 9. (b) It is given that some businessman are rich which im plies that some rich are businessman. Hence So man may or may not be a businessman.
- 10. (c) Besides owning a car or house there may be other requirements for filling an income tax. Hence nothing can be concluded on the basis of statement given.
- 11. (b) No conclusion is logical as Shyam is selected it implies that he is a good batsman or a bowler.
- **12.** (a) Clearly conclusion I follows.
- 13. (b) Both the conclusions are invalid as nothing can be said in view of the statement.



# Argument/Course of Action and Assertion

**Directions (Qs. 1 to 3) :** Each of the questions given betotv is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong 'argument and which is a 'weak' argument. Give your answer as :

- (a) If only argument I is strong
- (b) if only argument II is strong
- (c) If either I or II is strong
- (d) If neither I nor II is strong
- 1. **Statement :** Should personal tax be abolished in India ?

#### **Arguments :**

- I. Yes. It will motivate people to earn more.
- II. No. Individuals must learn to share their wealth with other people.
- 2. **Statement :** Should high chimneys be installed in industries ?

#### **Arguments** :

- 1. Yes. It will motivate people to earn more.
- II. No. Individuals must learn to share their wealth with other people.
- 3. **Statement :** Should judiciary be independent of the executive ?

#### Arguments :

- I. Yes, This would help curb the unlawful activities of the executive.
- II. No. The executive would not be able to take bold measures.

Directions (4 to 8) : In each equestion, a

statement is followed by three course of action numbered I, II and Ill. Assume everything in the statement to be true. Decide which of the three given suggested course of actions logically follows for pursuing.

4. **Statement:** In one the worst accidents on a railway level crossing, fifty people died when a bus carrying them collided with a running train.

#### **Courses of Action :**

1. The train driver should immediately be suspended.

- II. The driver of the bus should be tried in court for negligence on his part.
- III. The railways authorities should be asked to man all its level crossings.
- (a) None crossing
- (b) Only III follows
- (c) Only I and II follow
- (d) Only II and III follow
- 5. **Statement :** There was a spurt in criminal activities in the city during the recent festival season.

#### **Courses of Action :**

- I. The police should immediately investigate into the causes of this increases.
- II. In future the police shold take adequate precautions to avoid recurrence of such a situation during festivals.
- III. The known criminals should be

arrested before any such person.

- (a) None follows
- (b) OnlyII and III follow
- (c) Only I and II follow
- (d) All follow

#### 6. Statement :

A mass mortality of shrimps in ponds on entire Andhra coast has recently been reported due to the presence of a virus.

#### **Courses of Action :**

- I. The water of the ponds affected should immediately be treated for identifying the nature of the virus.
- II. The catching of shrimps from the ponds should temporally be stopeed.
- III. The fishermen should be asked to watch for the onset of such phenomenon in nature.
- (a) Only I follows
- (b) All follow
- (c) Only I and II follow
- (d) Only II and III follow
- 7. **Statement :** The weather bureau has through a recent bulletin forecast heavy rainfall during the next week which may cause water logging in several parts of the city.

#### **Courses of Action :**

- I. The bulletin should be given wide publicity through the mass media.
- II. The civic authority should keep in readiness the pumpping system for removal of water from these parts.
- III. The people should be advised to stay indoors during the period.

- (a) None follows
- (b) Only II follows
- (c) Only I and II follow
- (d) Only II and III follow
- 8. **Statement:** The world will have to feed more than 10 billion people in the next century, of whom half will be in Asia and will eat rice as their staple food.

#### **Courses of Action :**

- I. More funds should immediately be allocated for rice research to help ensure adequate supplies.
- II. The people in Asia should be encourged to change their food habits.
- III. The rice should be grown in count ties outside Asia to meet the demand.
- (a) Only I and II follow
- (b) All follow
- (c) Only II and III follow
- (d) Only I and II follow

**Directions (Qs. 9 to 12) :** In each of these questions, i there s a statement followed by two courses of action 1 and II. Assume everything in the statement to be true and then decide which of the two suggested courses of action logically follows Mark your answer as :

- (a) If only course of action I follows
- (b) If only course of action II follows
- (c) If neither I nor II follows
- (d) If both I and II Mlow
- 9. **Statement :** Every year, at the beginning or at the end of the monsoons, we have some cases of conjectivities, but this year, it seems to be a major epidemic witnessed after nearly four years.

Courses of Action :

- I. Precautionary measures should be taken after every four years to check this epidemic.
- II. People should be advised to drink boiled water during rainy season.
- 10. **Statement :** Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post-shipment export credit dominated in foreign currency at international interest rates from January this year.

#### **Courses of Action :**

- I. The officers concerned in the commercial banks are to be suspended.
- II. The RBI should be asked to stop giving such directives to commercial banks.
- 11. **Statement :** Court take too long in deciding important disputes of various departments.

#### **Courses of Action :**

- I. Courts should be ordered to speed up matters.
- II. Special poivers should be granted to officers to settle the disputes concerning their department.
- 12. **Statement :** The chairman stressed the need for making education system more flexible and regretted that the curriculum has not been revised in keeping with the pace of the changes taking place.

#### **Courses of Action :**

I. Curriculum should be reviewed and revised periodically.

II. System of education should be made more flexible.

**Directions (Qs. 13 to 22) :** *Study the two statement, the Assertion and the Reason given in each of the following questions. Then mark your answer as* 

- (a) If both 'A' and IV are true and 'IV is the coract explanation of 'A'
- (b) If both 'A' and `R' are true but 'R' is not a correct explanation of 'A'
- (c) If 'A' is tote but le is false,
- (d) if both 'A' mul le arc false,
- 13. Assertion (A): Comets belong to the solar system.

**Reason (R) :** All comets come near the sun after regular intervals,

14. Assertion (A) : When a body is dipped in a liquid fully or partially, there Is a decrease in its weight.

**Reason (R) :** The decrease in weight is due to the higher density of the displaced liquid.

15. Assertion (A) : An iron ball floats on mercury but gets immersed in water.

**Reason (R) :** The specific gravity of iron is more than that of mercury.

16. Assertion (A) : No food material normally enters the wind pipe during swallowing.

**Reason (R) :** When we swallow, the back portion of our tongue covers the opening of the wind pipe.

17. **Assertion (A) :** There is rainbow in the sky only after rains.

**Reason (R) :** Water drops suspended in the air break up sun rays into seven

colours.

18. Assertion (A) : Prices can be brought down by increasing production.

**Reason (R) :** It is so because supply of the goods is made more than its demand.

19. Assertion (A) : Alexander could not advance across the Beas river.

**Reason (R) :** His army was completely exhausted.

20. Assertion (A) : Tides indicate the regular and periodic rise and fall in sea level.

**Reason (R) :** Tides are caused by the gravitational pull of the moon and the

- sun.
- 21. Assertion (A) : Indian president is the head of the state.

**Reason (R) :** Indian Parliament consists of the president, Lok Sabha and Rajya Sabha.

22. Assertion (A) : When a person is standing in a lift which is either at rest or moving up or moving down with uniform speed, he does not find any apparent change in his weight.

**Reason (R) :** The reaction of the floor of the lift is equal to his weight.

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- (b) Very fact that the income of people is increasing in India implies that people are encouraged to earn more inspite of personal tax. So, I is weak argument H is strong as it is worthwhile ideal.
- 2. (a) Even without high chimneys in industries the pollution reaches to the upper atmosphere. So II is not strong. The argument I is strong as non-installation of high chimneys will increase pollution levels at ground level and this endongering the lives of people.
- 3. (a) Judiciary act on a check on the activities of the executive. This requires that the judicary is independent of the executive. Therefore, argument I is strong. Argument II is not strong.
- 4. (c)
- 5. (b)
- 6. (c)
- 7. (d)
- 8. (d) 21. (b)

- 9. (c) Precautionnty measures after every four yeats does not have any impact on the problem. Likewise drinking boiled water does not reduce the problem to any extent. Hence none of the courses of action follows.
- **10. (c)** None of the options is a correct course of action.
- 11. (d) Both the actions can help in speedy disposal of the pending cases. Hence both the actions follow.
- 12. (d) Both the actions are related with the solution of problem. Hence both are strong.
- **13. (c)** A is trite but R is false.
- **14. (c)** A Is true but It Is raise,
- 15. (c)
- **16. (a)** It is correct explanation of A.
- **17. (a)** Both. A and It are true and A is the crirrecr explanation of
- 18. (a)
- 19. (d) 20. (a)
- )1 (h)
- 22. (a)
- XXXXX XXX XX

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