

## RRB NTPC Previous Year Question Paper 2016 - Reasoning Ability

**Q.1** A college council is auditioning students for a cultural festival. They must satisfy the following criteria –

1. Student must know at least one dance form.
2. Student must know how to play at least one musical instrument.
3. Student must have good acting skills.

Which one of the following will the council definitely select?

- A. Z is a Bharat Natyam dancer, a violinist but does not have any acting skills.
- B. P plays football, guitar, has acted in road shows and is a classical dancer.
- C. J is a contemporary dancer, a great actor and is planning to learn flute.
- D. A plays sitar, is a hip-hop dancer and does not have any acting skills.

Ans. B

**Solution:** Z cannot be selected as Z does not have any acting skills. P satisfies all the criteria give to be selected in audition.

J cannot be selected as J does not know how to play any musical instrument. A cannot be selected as A does not have any acting skills.

**Q.2** If RESEARCH is \$#!#%\$&@ then SCARE is

- A. !&%\$#
- B. !@%\$#
- C. !\$%#&
- D. !@%#\$

Ans. A

Sol. R=\$, E=#, S=!, A=%,C=& and H=@ SCARE =!&%\$#

**Comprehension :**

The likes and professions of five friends Rosy, Mary, Lily, Andy and Daisy are given. Consider the following information and answer questions based on it.

1. Rosy likes Yellow and is a Student.
2. The Librarian likes Green.
3. Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.
4. Lily likes Brown and the Inspector likes Blue.
5. One of the five is a Principal.

**Q.3** Which colour does the Teacher like?

- A. Blue
- B. Brown
- C. Purple
- D. Green

Ans. B

**Solution:**

NAME	LIKES	PROFESSIONS
Rosy	Yellow	Student
Daisy	Green	Librarian
Mary	Purple	Principal
Andy	Blue	Inspector
Lily	Brown	Teacher

**Comprehension :**

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4. Lily likes Brown and the Inspector likes Blue.
5. One of the five is a Principal.

**Q.4** Who is the Principal?

- A. Daisy
- B. Andy
- C. Mary
- D. Lily

Ans. C

**Solution:**

NAME	LIKES	PROFESSIONS
Rosy	Yellow	Student
Daisy	Green	Librarian
Mary	Purple	Principal
Andy	Blue	Inspector
Lily	Brown	Teacher

As shown in the table above, Mary is the principal

**Comprehension :**

The likes and professions of five friends Rosy, Mary, Lily, Andy and Daisy are given. Consider the following information and answer questions based on it.

1. Rosy likes Yellow and is a Student.
2. The Librarian likes Green.
3. Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.
4. Lily likes Brown and the Inspector likes Blue.
5. One of the five is a Principal.

**Q.5** Which among the following is the wrong pair?

- A. Andy – Inspector
- B. Purple – Principal
- C. Daisy – Green
- D. Rosy – Teacher

Ans. D

**Solution:**

NAME	LIKES	PROFESSIONS
Rosy	Yellow	Student
Daisy	Green	Librarian
Mary	Purple	Principal
Andy	Blue	Inspector
Lily	Brown	Teacher

As shown in the table above, Rosy is a student not a teacher.

**Q.6** Statements followed by some conclusions are given below.

**Statements :**

1. X is 7 meters tall, Y is half as high and Z is 3 times the height of X.
2. P is taller than Z but shorter than A and B.

**Conclusions :**

- I. B is the tallest of all.
- II. The average height of X, Y and Z is less than 10 meters.

Find which of the given conclusions logically follows from the given statements.

- A. Only Conclusion I follows.
- B. Only conclusion II follows.

- C. Both I and II follow.
- D. Neither I nor II follows.

Ans. D

**Solution:** According to statement 1. Height of  $x = 7$  meter, height of  $Y = 3.5$  meter and height of  $Z = 21$  meter According to statement 2. Height of A and B  $>$  height of P  $>$  height of Z So, anyone from A and B is tallest and the average height of X, Y and Z is more than 10. Hence Neither conclusion I nor conclusion II follows

**Q.7** An assertion (A) and a reason (R) are given below. Assertion (A) : Forest cover in the country has gradually decreased. Reason (R) : Encroachment by humans is one of the concerns for the forest department.

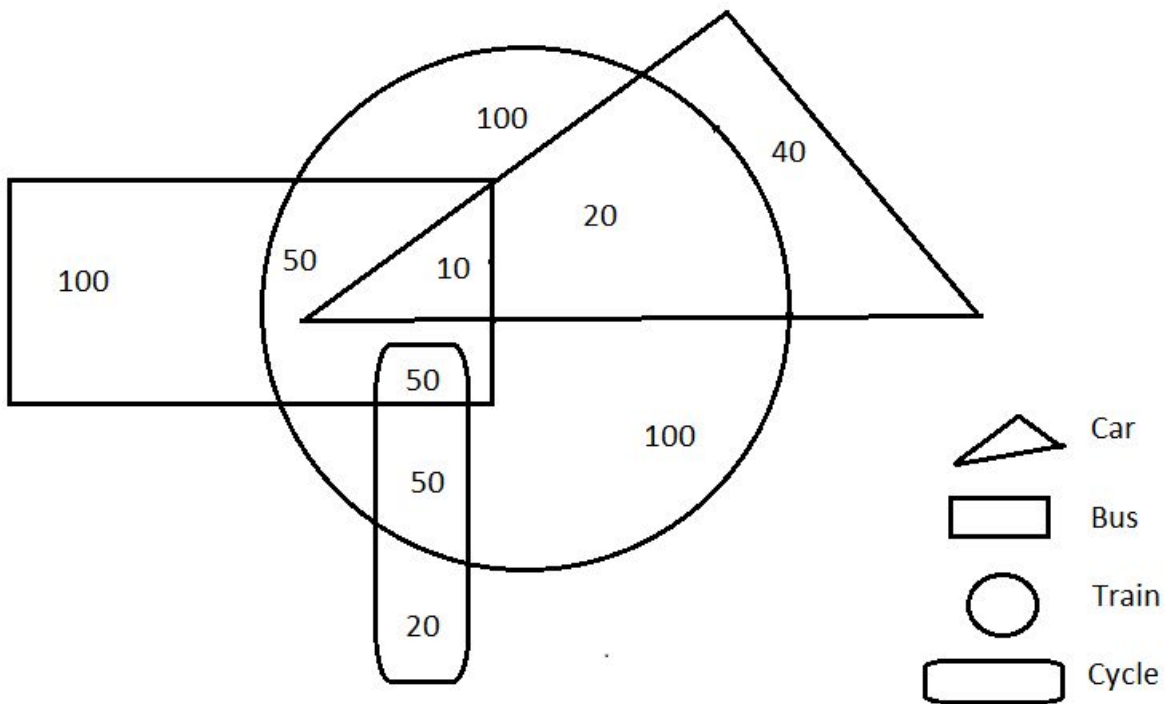
Choose the correct option.

- A. Both A and R are true and R is the correct explanation of A
- B. Both A and R are true, but R is not the correct explanation of A
- C. A is true, but R is false
- D. A is false, but R is true

Ans. A

**Solution:** Both A and R are true and R is the correct explanation of A, as Encroachment by humans is one of the concerns for the forest department because Forest cover in the country has gradually decreased.

**Comprehension :** Study the following diagram and answer questions based on it.



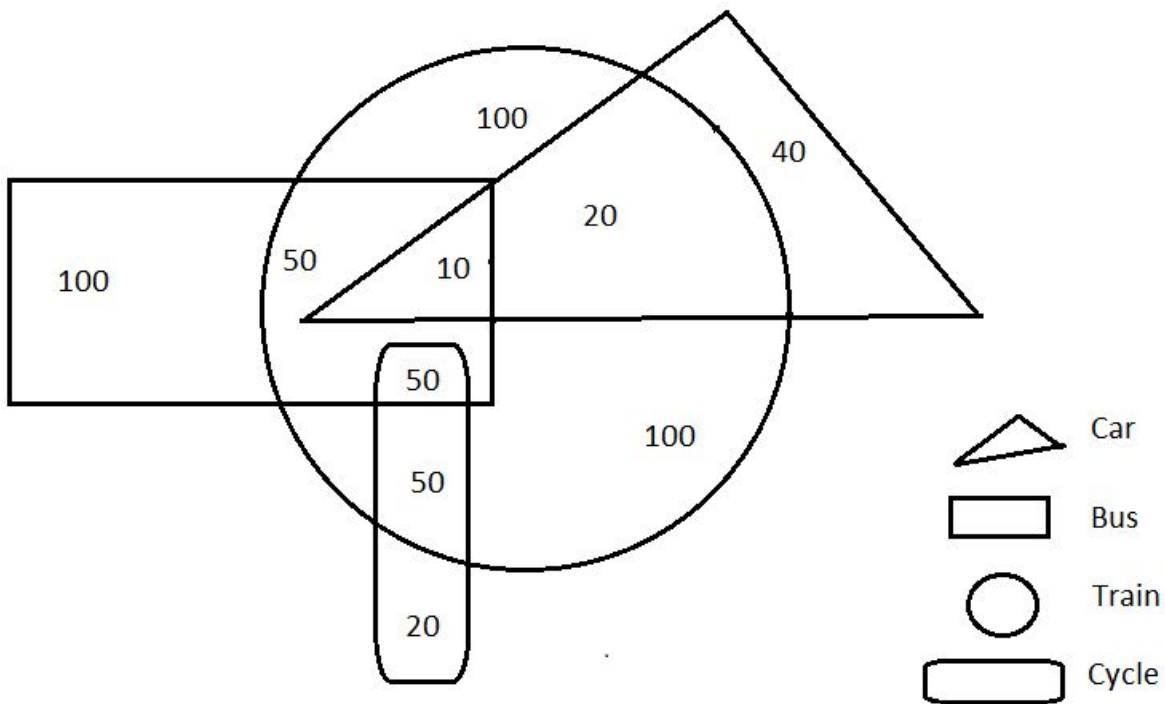
**Q.8** How many people who travel by train also travel by car or bus but not cycle?

- A. 50
- B. 70
- C. 80
- D. 100

Ans. C

**Solution:** The people who travel by train also travel by car or bus but not cycle =  $50+10+20 = 80$

**Comprehension :** Study the following diagram and answer questions based on it.



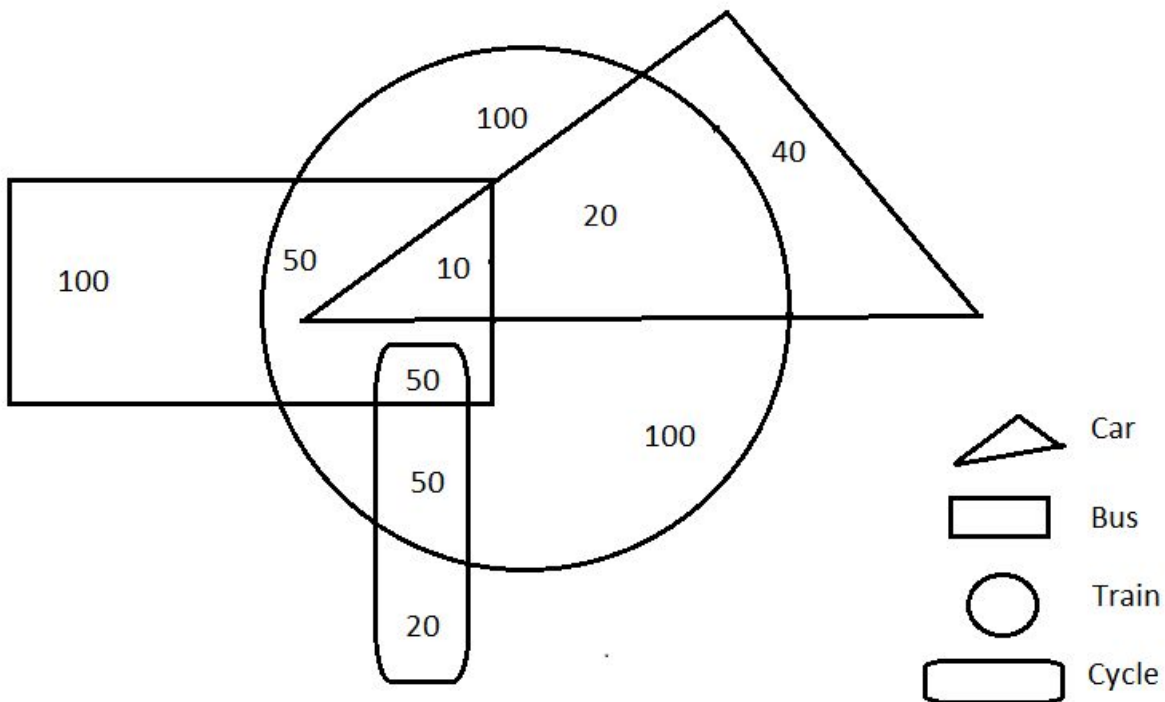
**Q.9** The ratio of total number of train travelers to the people who do not travel by train is

- A. 27/16
- B. 28/16
- C. 37/16
- D. 38/16

Ans. D

**Solution:** The total number of train travelers =  $50+50+50+100+10+20+100= 380$  The people who do not travel by train =  $100+20+40 =160$  Required ratio =  $380/160 = 38/16$

**Comprehension :** Study the following diagram and answer questions based on it.



**Q.10** Which two modes of transport used by people are mutually exclusive?

- A. Car – Bus
- B. Car – Cycle
- C. Bus – Cycle
- D. Cannot be determined

Ans. B

**Solution:** Car and Cycle are two modes of transport are mutually exclusive.

**Q.11** In a certain code language if 41095 is READY and 840327 is FRAILS then 83145 419 is

- A. FEARY RED
- B. FIERY RED
- C. FAIRY RED
- D. FIREY RED

Ans. B



**Solution:** As given in the question, 4=R, 1=E, 0=A, 9=D, 5=Y, 8=F, 3=I, 2=L and 7=S So, 83145 419 is coded as = FIERY RED

**Q.12** Which one of the following does not belong to the group?

- A. Monitor
- B. Keyboard
- C. Webcam
- D. Mouse

Ans. A

**Solution:** All are input device except monitor, Monitor is an output device.

**Q.13** Statements followed by some conclusions are given below.

**Statements :**

1. Most people have orange scooters while some have red ones.
2. People like bright coloured scooters.

**Conclusions :**

- I. People cannot afford bright coloured cars.
- II. Most people prefer orange over other bright colours.

Find which of the given conclusions logically follows from the given statements.

- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Both I and II follows.
- D. Neither I nor II follows.

Ans. B

**Solution:** Most people have orange scooters as Most people prefer orange over other bright colours, Hence, only conclusion II follows.

**Q.14** A pole is taller than a Giraffe which is taller than a tree. A signal is shorter than a pole but taller than a building which is taller than a Giraffe. Who is the shortest?

- A. Signal
- B. Giraffe
- C. Tree
- D. Building

Ans. C

**Solution:** Pole>Signal >Building>Giraffe>Tree Hence, tree is the shortest.

**Q.15** Find the missing (?) in the series NA, PC, RE, TG, ?, XK, ZM

- A. IV
- B. VI
- C. VII
- D. VJ

Ans. B

**Solution:**  $N+2=P$ ,  $P+2=R$ ,  $R+2=T$ ,  $T+2=V$ ,  $V+2=X$ ,  $X+2=Z$  Similarly,  $A+2=C$ ,  $C+2=E$ ,  $E+2=G$ ,  $G+2=I$ ,  $I+2=K$ ,  $K+2=M$

**Q.16** Rearrange the jumbled letters to make a meaningful word and then select the one which is different.

- A. DNHA
- B. EDAH
- C. THEA
- D. IRHA

Ans. C

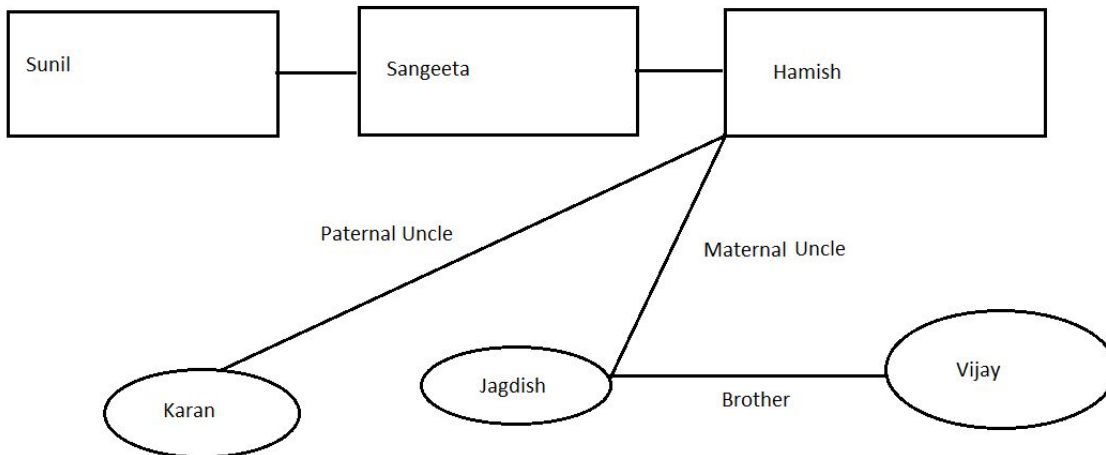
**Solution:** DNHA= HAND, EDAH =HEAD, IRHA= HAIR, THEA=HEAT Since all of them are the part of human body except Heat. So, the answer is heat

**Q.17** Sunil has a son Karna and a sister Sangeeta who is the mother of Jagdish and Vijay. Hamish is Jagdish's maternal uncle. How is Harnish related to Karna?

- A. Brother
- B. Father
- C. Nephew
- D. Paternal Uncle

Ans. D

**Solution:**



**Q.18** If M = 14, TANK = 61, then STARDOM = \_\_\_\_\_

- A. 79
- B. 89
- C. 99
- D. 109

Ans. C

**Solution:** Place of M from Z = 14. TANK = 7+26+13+16 = 62 STARDOM = 8+7+26+9+23+12+14 = 99

**Q.19 Direction:** Study the following diagram and answer question based on it. The diagram represents the favourite ice-cream flavours of kids in a society. The ratio of kids who like both chocolate and vanilla but not strawberry?

- (A) 5
- (B) 7
- (C) 12
- (D) 15

- A. (B)
- B. (C)
- C. (D)
- D. (A)

**Ans. C**

**Solution:**

We will take the ice creams in the circle and square but not in the triangle. =15

**Q.20** The ratio of kids who like vanilla to those who like chocolate is :

- (A) 12/30
- (B) 39/45
- (C) 27/45
- (D) 39/55

- A. (B)
- B. (D)
- C. (C)
- D. (A)

Ans. B

**Solution:** The answer is 39/45

**Q.21** How many kids like strawberry but not vanilla?

- (A) 4
- (B) 5
- (C) 7
- (D) 3

- A. (B)
- B. (C)
- C. (A)
- D. (D)

Ans. B

**Solution:**

We will count the the ice creams inside the triangle but outside the square. = 7

**Q.22** If TREK = 8346 and FAMILY = 209175 then REALITY will be

- (A) 3427185
- (B) 3407185
- (C) 3409175
- (D) 3490185

- A. (B)
- B. (D)
- C. (C)
- D. (A)

Ans. A

**Solution:**

T - 8  
R - 3  
E - 4  
K - 6  
F - 2  
A - 0  
M - 9  
I - 1  
L - 7  
Y - 5

The code for REALITY will be R - 3

E - 4

A - 0

L - 7

I - 1

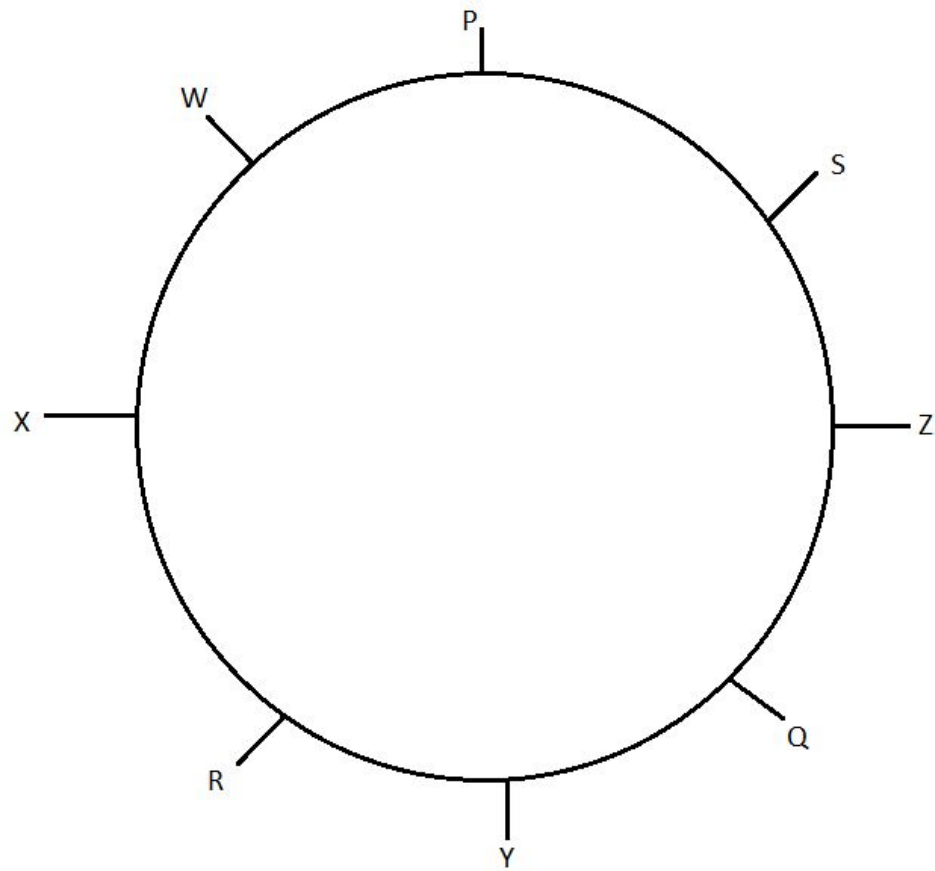
T - 8

Y - 5

Hence, the correct answer is option A.

**Q.23 Direction:** P, W, Q, X, R, Y, Z And S sit randomly in a circle facing each other. Consider the following information and questions based on it

- 1) Y sits exactly between Q and R
- 2) P does not sit next to either X or Z
- 3) Z is right of Q
- 4) S sits third from the left of X and the right of Y.



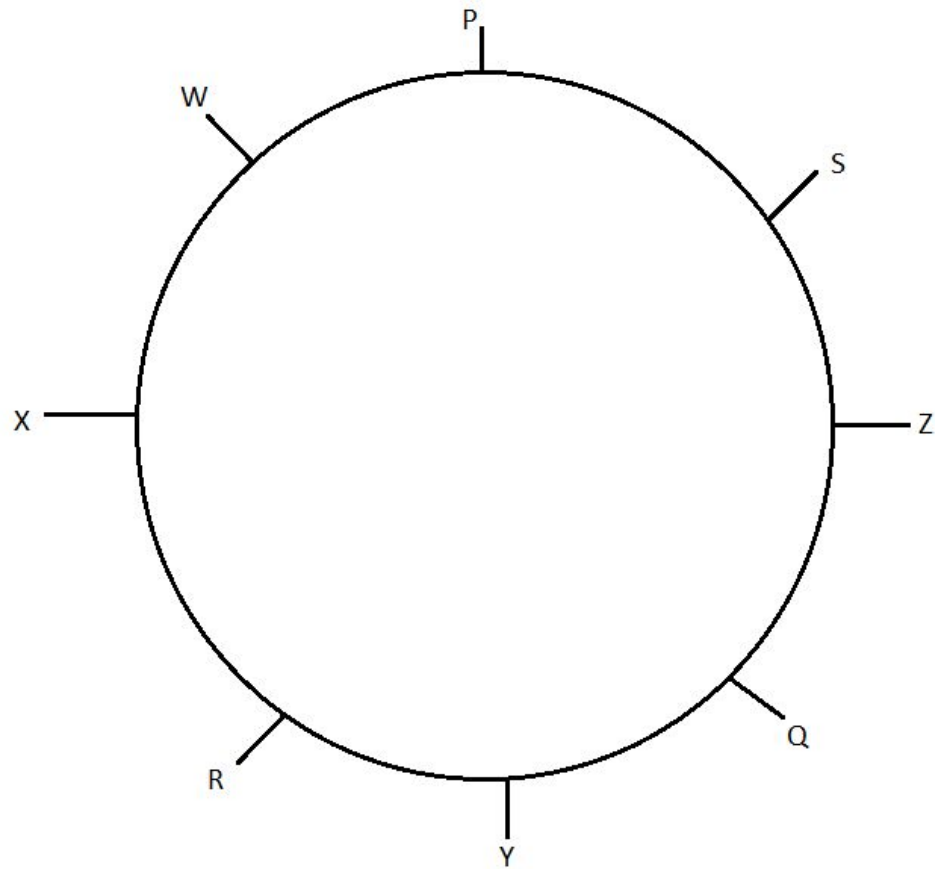
Who sits to the left to S?

- (A) Z
- (B) X
- (C) P
- (D) Q

- A. (B)
- B. (D)
- C. (A)
- D. (C)

Ans. C

**Solution:**



Z sits to the left of S. Hence, option C is correct.

**Q.24** If they all are facing outside the circle, W would be the left of.

- (A) X
- (B) S
- (C) P
- (D) Can not determine

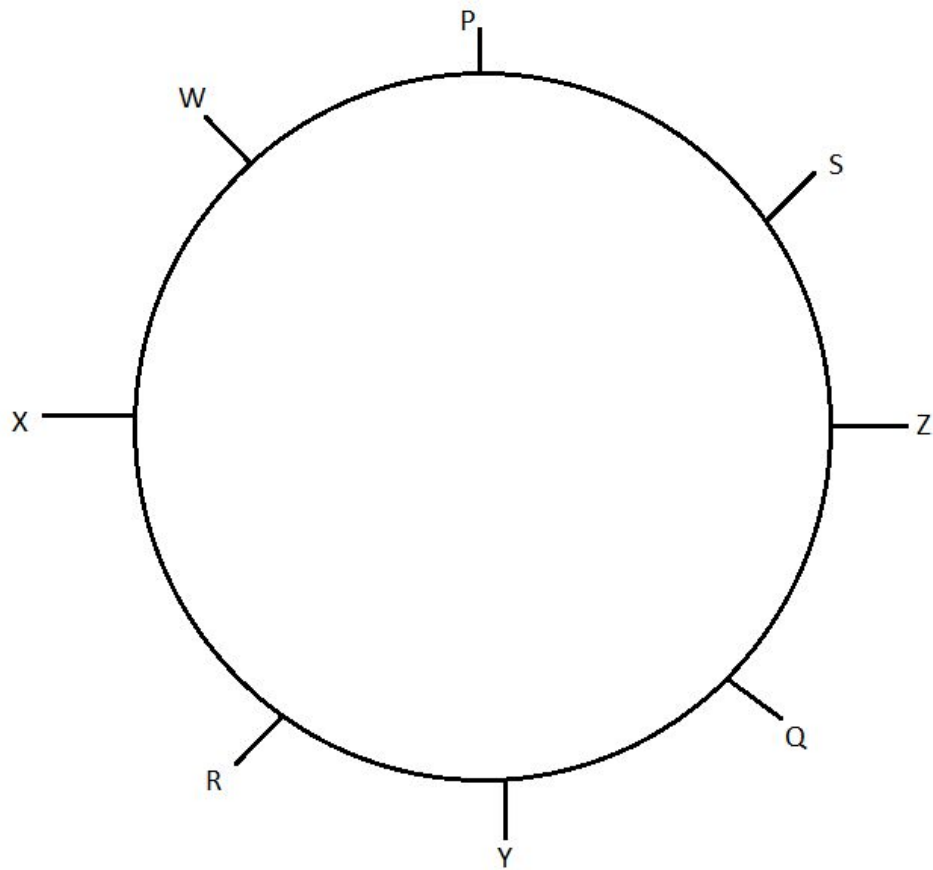
- A. (B)
- B. (C)
- C. (D)



D. (A)

Ans. B

**Solution:**



If all are facing outside the circle, W would be left of P. Hence, option B is correct.

**Q.25** X sits between-

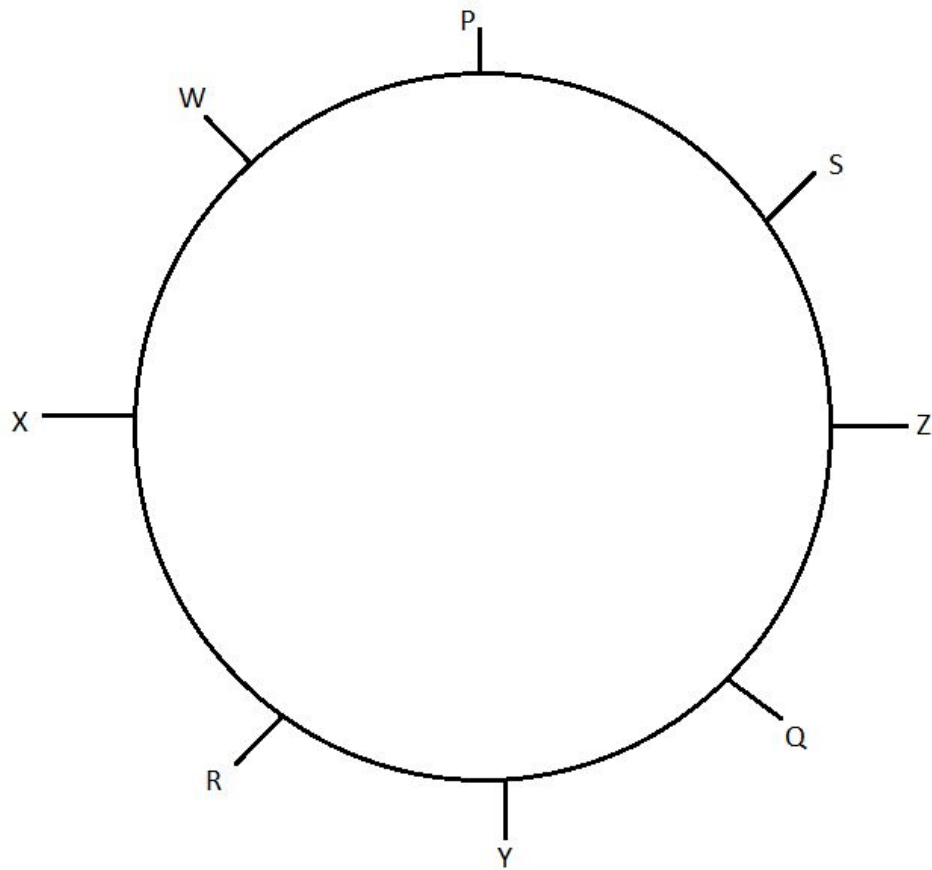
- (A) R and Q
- (B) W and R
- (C) Q and Y
- (D) S and W

- A. (C)
- B. (D)
- C. (B)

D. (A)

Ans. C

**Solution:**



X sits between W and R. Hence, option C is correct.\

**Q.26** Statement followed by some conclusions are given below

**Statements :-**

- 1) Some football players are cricketers
- 2) All hockey players love football though some are cricketers

**Conclusions :-**

- I. Some hockey players who are cricketers play football to.
- II. There is at the most one cricketer who plays football and hockey

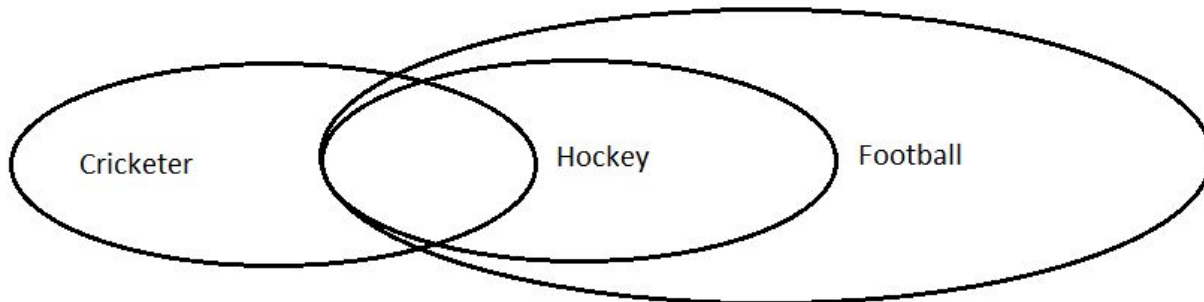
Find which of the given conclusions logically follows from the given statements -

- (A) Only conclusion I follow
- (B) Only conclusion II follows
- (C) Both I and II follow
- (D) Neither I nor II follow

- A. (D)
- B. (B)
- C. (C)
- D. (A)

Ans. D

**Solution:**



**Conclusions :-** I. Some hockey players who are cricketers play football to. -( true) shown in the above figure.

II. There is at the most one cricketer who plays football and hockey -(false) Hence, option D is correct.

**Q.27** In a certain code, if GREAT is coded as JOEJK then ZEBRA is coded as

- (A) BCBRA
- (B) BCBAR

- (C) CBBRA
- (D) CBBAR

- A. (A)
- B. (B)
- C. (C)
- D. (D)

Ans. D

**Solution:** G (+3) J R (-3) O E -- E A (+9) J T (-9) K Similarly, Z (+3) C E (-3) B B -- B R (+9) A A (-9) R

Hence, the correct response is option D.

**Q.28** Find the missing (?) in the series? TUS, QRP, ?, KLJ, HIG

- (A) ONM
- (B) MNO
- (C) NOM
- (D) MON

- A. (D)
- B. (C)
- C. (A)
- D. (B)

Ans. B

**Solution:** 1st letter - T (-3) Q (-3) N (-3) K (-3) H 2nd letter - U (-3) R (-3) O (-3) L (-3) I 3rd letter - S (-3) P (-3) M (-3) J (-3) G Therefore, the correct option is B.

**Q.29** If Q = 10 and FAX = 50, then XEROX = ?

- (A) 45
- (B) 46
- (C) 49
- (D) 50

- A. (A)
- B. (D)

C. (B)

D. (C)

Ans. D

**Solution:**

Q = 10 ( from the bottom)

FAX = 50 (sum of below number)

F = 21

A = 26

X = 3

So, the code for XEROX is -

X = 3

E = 22

R = 9

O = 12

X = 3

Xerox = 3 + 22 + 9 + 12 + 3 = 49

Option D is correct.

**Q.30** Statements followed by some conclusions are given below.

**Statements:**

1) Some electricians are plumbers

2) All plumbers are mechanics

**Conclusions :**

I. Some mechanics are electricians or plumbers

II. Not all electricians are mechanics

Find which of the given conclusions logically follows

(A) Only conclusion I follows

(B) Only conclusion II follows

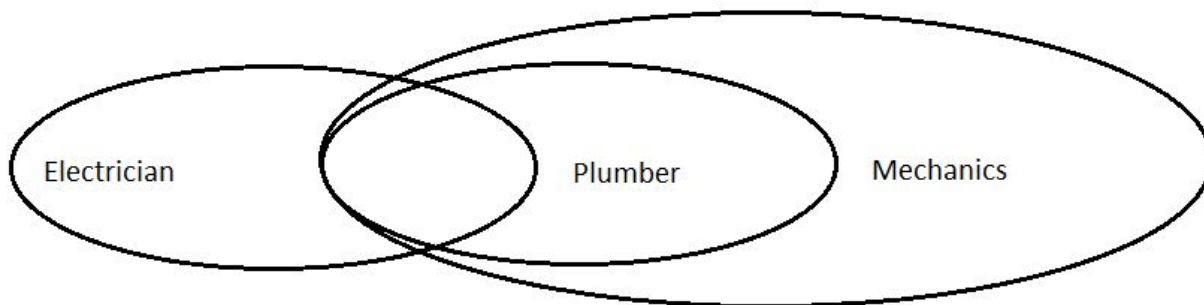
(C) Both I and II follows

(D) Neither I nor II follows

- A. (A)
- B. (D)
- C. (C)
- D. (B)

Ans. C

**Solution:**



**Conclusion:** I. Some mechanics are electricians or plumbers. - ( true) as shown in the diagram. II. Not all electricians are mechanics. - ( true) clearly mentioned in the diagram. Hence, option C is correct response.