

GATE



ALL BRANCHES

GENERAL APTITUDE

Analytical Aptitude



Lecture No: 04

By-Amulya Ratan Sir





TOPICS TO BE COVERED



Arrangements of Data



Table Formation



Questionnaire



Q.

P, Q, R and S are playing a game of carom. P, R and S, Q are partners. S is to the right of R, who is facing West. Then, Q is facing?

A. North



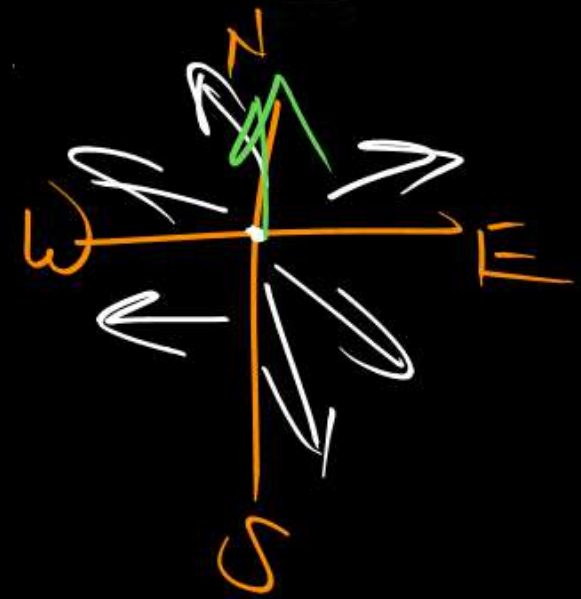
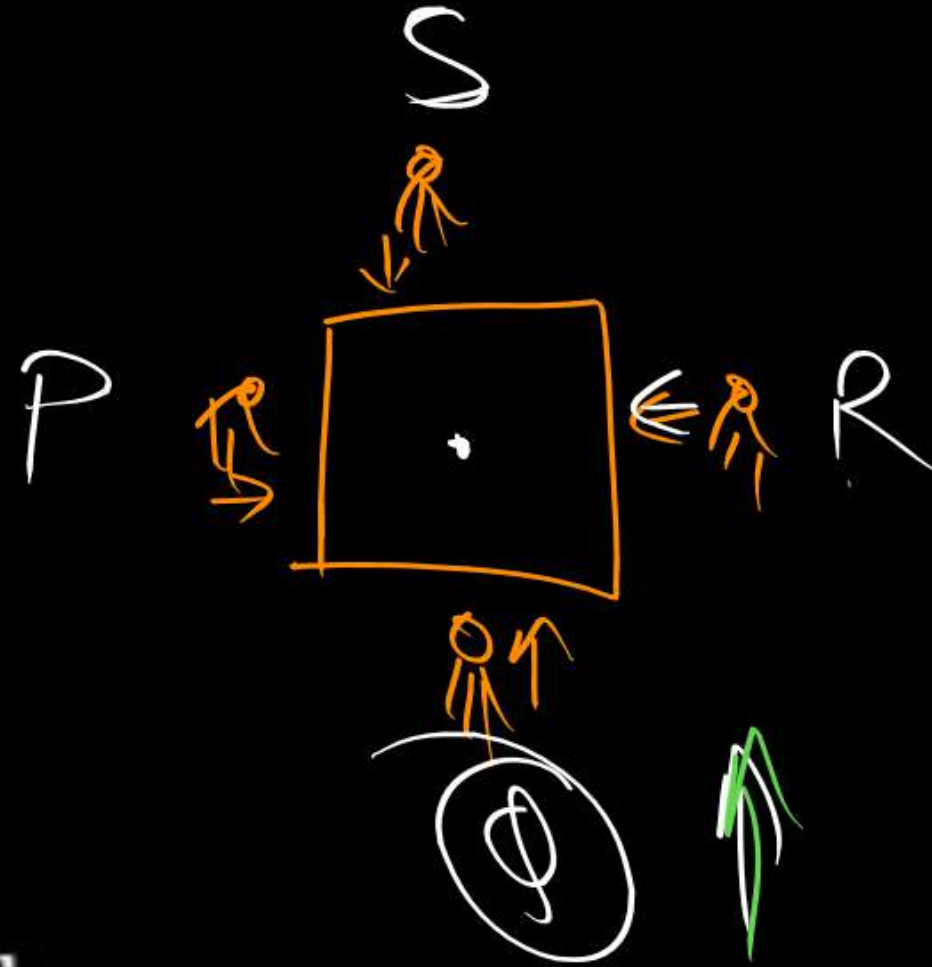
B. South



C. East



D. Can't be determined



Assignment



Q.

Rakesh ranks seventh in a class of twenty. What is his rank from the last?

Assignment

$$20 - 7 + 1 = \underline{\underline{14^{\text{th}}}}$$



A.

15th



B.

13th



C.

14th



D.

8th





Q. Priti scored more than Rahul. Yamuna scored as much as Divya. Lotika scored less than Manju. Rahul scored more than Yamuna. Manju scored less than Divya. Who scored the lowest?

A.  Yamuna

C.  Manju

Priti
Rahul

$Y = D$

Manju
Lotika

Manju
Lotika
B.  Lotika

D.  Rahul

Assignment

$Y = D$



Q. Six boys A, B, C, D, E and F are marching in a line. They are arranged according to their height, the tallest are being at the back and the shortest in front.

F is between B and A ✓

$\frac{B}{A}$ F $\frac{A}{B}$

✓ E is shorter than D but taller than C, who is taller than A ✓

E and F have two boys between them

A is not the shortest among them all

Assignment

D
E ✓
C ✓
A ✓
F ✓
B ✓

Q.1 Where is E?

- ☐ A Between A & B ☐ B Between C & A ☒ C Between D & C ☐ D In front of C

Q.2 Who is the tallest?

- ☐ A B ☒ B D ☐ C F ☐ D A

Q.3 If we start from the shortest which boy is fourth one in the line?

- ☐ A E ☐ B A ☐ C D ☒ D C

D
F
C
A



Q. Five courses A, B, C, D and E each of one month duration are to be taught from January to May one after the other not necessarily in same order by lecturers, P, Q, R, S and T.
P teaches course B but not in the month of April or May
Q teaches course A in the month of March
R teaches in the month of January but does not teach course C or D

Assignment

Q.1 Which course is taught by S?

- ☐ A C
 ☐ B E
 ☒ C Either D or C
 ☐ D D

Q.2 Which lecturer's course immediately follows after course B?

- ☒ A Q
 ☐ B P
 ☐ C S
 ☐ D T

Q.3 Which course is taught in the month of January?

- ☐ A C
 ☒ B E
 ☐ C D
 ☐ D Data Inadequate



P teaches course B but not in the month of April or May

Q teaches course A in the month of March

R teaches in the month of January but does not teach course C or D

Month		A	B	C	D	E
April Feb	P	X	✓	X	X	X
March	Q	✓	X	X	X	X
Jan	R	X	X	X	X	✓
	<u>S</u>	X	X	?	?	X
	<u>T</u>	X	X			X



Q.

Five boys took part in a race. Ram finished before Mohan but behind Gopal. Abbas finished before sailesh but behind Mohan. Who won the race?

Assignment



A.

Ram



B.

Gopal



C.

Mohan



D.

Abbas

Gopal

Ram

Mohan

Abbas

Sailesh

Abbas

Sailesh



Q.

In a photograph Shyam is to the left of Madan. Mary is to the right of George, Karim is in between Shyam and Mary.

Who is at the corner?

Assignment

Geo Mary Karim Shyam Madan



A.

Shayam



B.

Mary

Geo

Mary



C.

George



D.

Karim



Q.

Raju and Manoj are ranked 14 and 15 respectively from the top in a class of 30 students. What will be their respective ranks from the bottom.

Assignment



A.

15th & 16th



B.

16th & 15th



C.

17th & 16th



D.

18th & 17th

Raju

$$30 - 14 + 1 = 17^{\text{th}}$$

Manoj

$$30 - 15 + 1 = 16^{\text{th}}$$



Problem Solving



✓
Data Arrangement

word code
(A) is called (B)
code word
(A) means (B)





P, Q, R, S, T and U are six students pursuing their Bachelor degree in six different subjects i.e. English, History, Philosophy, Physics, Statistics and Mathematics. Two of them stay in Hostel, two in Paying guest and remaining two at their Home.

{1} R does not stay as Paying guest and studies Philosophy.

{2} The students studying Statistics and History do not stay as Paying Guest.

{3} T studies Mathematics and S studies Physics.

{4} U and S stay in Hostel.

{5} T stays as Paying Guest and Q stays at Home.



Stat/Hist \rightarrow P.G

- {1} R does not stay as Paying guest and studies Philosophy.
- {2} The students studying Statistics and History do not stay as Paying Guest.
- {3} T studies Mathematics and S studies Physics.
- {4} U and S stay in Hostel.
- {5} T stays as Paying Guest and Q stays at Home.

Acc		EN G	HIS T	PHI L	PH Y	STA T	MAT H
P.G	<u>P</u>	<u>U</u>	X	X	X	X	X
Home	Q	X	?	X	X	?	X
Home	R	X	X	<u>U</u>	X	X	X
Host	<u>S</u>	X	X	X	<u>U</u>	X	X
P.G	T	X	X	X	X	X	<u>U</u>
Host	U	X		X	X		X



Q. Who studies English?



R



S



T



None of these



Q. Which of the following combinations of subject and place of stay is not correct?



English-Hostel



Mathematics-Paying guest



Philosophy-Home



Physics-Hostel

Q. Which of the following pairs of students stay at home?

A. PQ

B. QR

C. RS

D. ST

Q. Which subject does Q study?

A. History

C. History or Statistics

B. Statistics

D. None of these

Q. Which of the following pairs of students stay one each at Hostel and at Home?

A. PQ

B. QR

C. RS

D. ST

Writer ~ Q → Tech Rep → 2 T/S Phot → 1 ~~Ph~~
 (+) Q (R) Q/U Tech → 2 Writ → 1 ~~W~~ (R)

P, Q, R, S, T and U are travelling in a bus. There are two Reporters, two Technicians, one Photographer and one Writer in the group. The Photographer 'P' is married to 'S', who is a Reporter. The Writer is married to Q, who is of the same profession as that of U. P, Q, R, S are two married couples and nobody in that group has same profession. U is brother of R.

Q U
 Tech

Photo ← P ~ S → Rep

Q. Which of the following is pair of Technicians?

A. RS

B. SU

C. PT

D. QU

Q. How is R related to U?

A. Brother

B. Sister

C. Uncle

D. Can't determine

Q. Which of the following is pair of husbands?

A. QP

B. QS

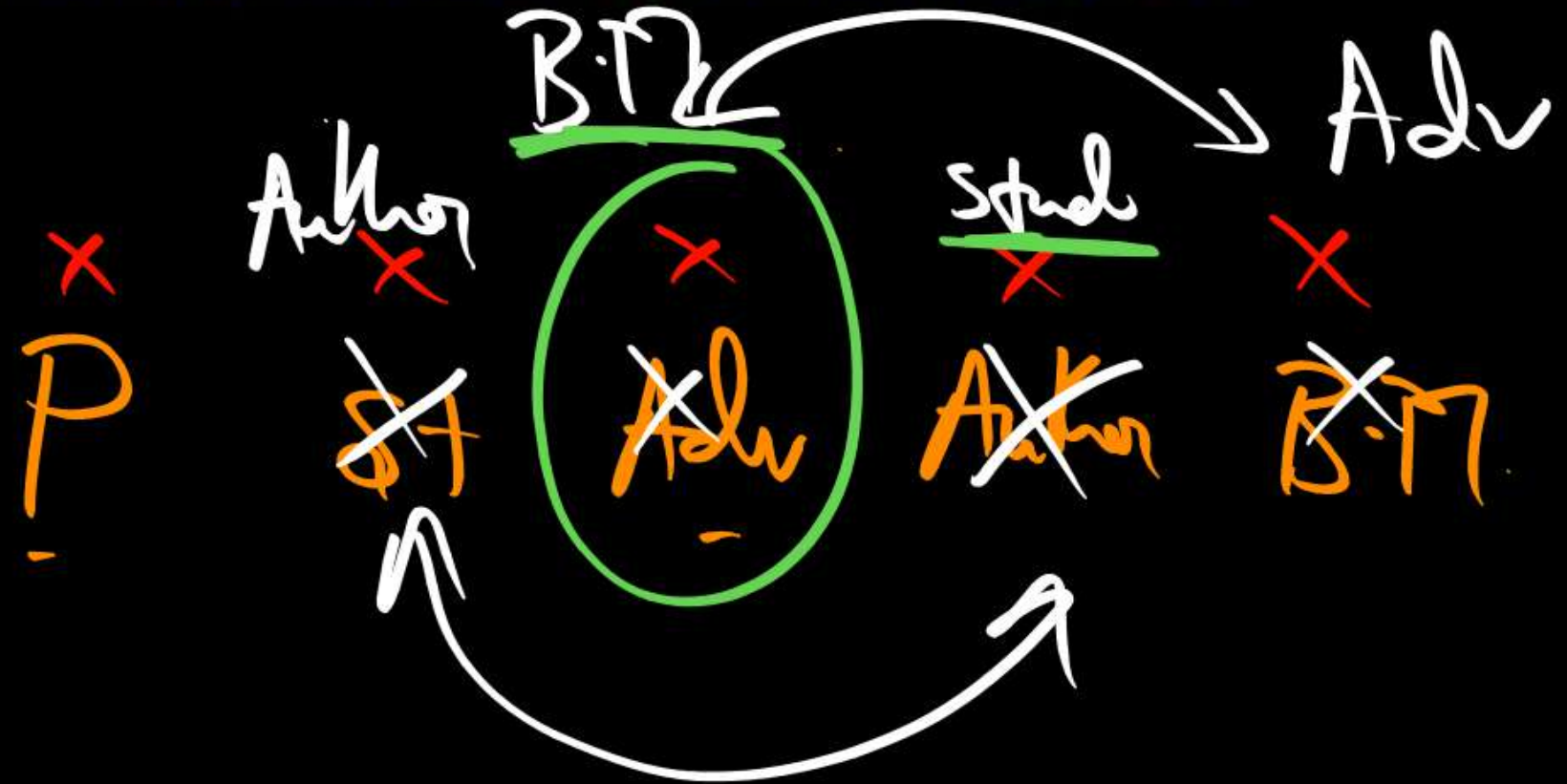
C. PR

D. Can't determine

Q.

St Adv

Five person are standing in a queue. One of the two persons at the extreme end is a Professor and the other is a Businessman. An advocate is standing to the right of a Student. An Author is to the left of the Businessman. The Student is between the Professor and the Advocate.



Q. Who is in the middle of the queue?

✓
Adv ~~Stu~~

Q. If Advocate and the Businessman exchange their positions,
also the Author and the Student, then who will be standing
to the left of the student?

~~Adv~~ B.M

Q.

There are six teachers A, B, C, D, E and F in a school. Each of the teachers teaches two subjects, one compulsory subject and other optional subject. D's optional subject was History while three others have it as compulsory subject. E and F have Physics as one of their subjects. F's compulsory subject is Mathematics 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 just reverse of those of D's. Chemistry is an optional subject of only one of them. The only female teacher in the school has English as her compulsory subject.

D's optional subject was History while three others have it as compulsory subject. E and F have Physics as one of their subjects. F's compulsory subject is Mathematics 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 just reverse of those of D's. Chemistry is an optional subject of only one of them. The only female teacher in the school has English as her compulsory subject.

E/F → Phy

Hist → 3 Comp



	<u>Comp</u>	Optional
A	Hist	Eng
B	Hist	Chem
C	✓ Hist	Math
D	Eng	Hist
E	Phy	Math
F	Math	Phy

F

E

F

A red ring with black segments, resembling a film reel or a target, positioned to the left of the text.


Q. What is C's compulsory subject?

History

A red ring with black segments, resembling a film reel or a target, positioned to the left of the text.

Q. Who is a female member in the group?

D

A red ring with black segments, resembling a film reel or a target, positioned to the left of the text.

Q. Disregarding which is the compulsory which is the optional subject, who has same two subject combination as F?

E



Assignment



Q.

Five persons P, Q, R, S and T belongs to five different cities Jabalpur, Bhopal, Hyderabad, Raipur and Delhi. They are invited to deliver a seminar on different subject Viz., Chemistry, Physics, Mathematics, History and Economics but not necessarily in the same order.

P who belongs to Bhopal gives seminar on Economics.

The person who gives seminar on Physics belongs to Jabalpur.

T does not give seminar on Chemistry or History but belongs to Hyderabad.

S does not belongs to Raipur but gives seminar on Chemistry and History is the option of R.



Q1. Who belongs to Raipur?

Q2. Physics seminar will be given by?

Q3. T gives seminar on?

Q4. S belongs to which city?

Q5. Who belongs to Jabalpur?

Assignment



Q. On a shelf are placed six volumes side by side labeled A, B, C, D, E and F. Three volumes B, C and E have green covers while the other volumes have yellow covers. A, D and B are new volumes while the rest are old volumes. A, C and B are law reports, while the rest are Gazetteers.

Which volume is new, yellow covered and a Gazetteer?

- A) E B) D C) C D) A

Which two volumes are old Gazetteers?

- A) E and F B) D and B C) C D) F

Which is green covered, old and a law report volume?

- A) E B) D C) F D) C

Assignment



Prashant Arora has three children – Sangeeta, Vimal and Ashish. Ashish married Monika, the eldest daughter of Mr. and Mrs. Roy. The Roys married their youngest daughter to the eldest son of Mr. and Mrs. Sharma, and they had two children name Amit and Shashi. The Roys have two more children, Roshan and Vandana, both elder to Veena. Sameer and Ajay are sons of Ashish and Monika. Rashmi is the daughter of Amit.

Assignment

Q1. What is the surname of Rashmi?

Q2. How is Sameer related to the father of Monika?

Q3. What is the surname of Sameer?

Q4. How is Mrs. Roy related to Ashish?

