# **Analytical Reasoning**

#### **Skill Based Questions**

#### 1. Read the following information carefully to answer these questions:

Mayor, Avinash, Govind, Alok, Mahesli, Nikhil and Mohit are seven friends. They are studying engineering in different brandies of Medianical, Chemical, Electronics, Computer Science, IT, Biotech and Electrical, not necessarily in the same order. Each of them also excels in one of the following games: football, cricket, hockey; badminton, sqnasli, volleyball and lawn tennis, again not necessarily in the same order. Govind plays hockey and he neither studies Electrical nor IT. Mahesh studies Electronics and plays volleyball. Mayor studies Biotech and does not play either football or squash. The one who studies Chemical plays cricket. The one who plays football studies Computer Science. Nikhil plays squash. Mohit plays badminton and studies Electrical, Alok does not study Chemical.

#### A. Fill in the blank spaces of the following table.

Friend	Branch	Game
Mayor		
Avinash		
Gaovind		
Alok		
Mahesh		
Nikhil		
Mohit		

### B. Answer the following questions.

(i) Which games does Avinash play?

(ii) What does Nikhil study?

(iii)What does Govind study?

Ans.

## 2. Read the information given below and answer the questions the follow:

A management institute organises a lecture series of six once a month lectures for young entrepreneurs as per the following schedule, with no dates conflicting

Marketing Management	August through January
Economics	April through October
Business Law	January through September
Financial Management	March through June
Accounting	October through April
Personnel Management	October through December

(i) During which month are the fewest lectures given?

(ii) Which is the largest number of lectures that can be attended in a single month?

(iii) Which two series taken together fill the year without overlap?

(iv) During how many months of the year must a student attend to hear all the lectures on Marketing, Economics and Financial Management?

 $(\nu)$  How many lecture series last more than 6 months?

(vi) How many different series can be attended in September, October and November?

(vii) How many different lectures can be attended in January, February and March?

Ans.

.....

**3.** Study the following information carefully and answer the given questions:

H, B, M, T, R, K and D are travelling in a train compartment with III - tier sleeper berth. Each of them has a different profession of Engineer, Doctor, Architect, Pharmacist, Lawyer, Journalist and Pathologist. They occupied two lower berths, three middle berths and two upper berths. B, the Engineer, is not on the upper berth. The Architect is the only other person who occupies the same type of berth as that of B. M and H are not on tire middle berth and their professions are Pathologist and Lawyer respectively. T is a Pharmacist. D is neither a Journalist nor an Architect. K occupies the same type of berth as that Architect.

- (i) Who is the Architect?
- (ii) What is D's profession?
- (iii) Which pair occupies the lower berths?
- (iv) Which group occupies the middle berths?
- (v) What is the Profession and Berth of R?

Ans.

#### Q.2. Network based questions:

#### 1. Answer these questions based on the pipeline diagram below.

The following sketch shows the pipelines carrying material from one location to another. Each location has a demand for material. The demand at Vaishali is 400, at Jyotishmati is 400, at Panchal is 700, and at Vidisha is 200. Each arrow indicates the direction of material flow through the pipeline. The flow from Vaishali to Jyotishmati is 300. The quantity of material flow is such that the demands at all these locations are exactly met. The capacity of each pipeline is 1000.



- (i) The quantity moved from Avanti to Vidisha is
- (ii) The free capacity available at the Avanti -Vaishali pipeline is

(iii)What is the free capacity available in the Avanti - Vidisha pipeline?

Ans.

**2.** Study the information below and answer questions based on it.



Two days (Thursday and Friday) are left for campaigning before a major election, and the city administration has received requests from five political parties for taking out their processions along the following routes.

Congress : A-C-D-E

BJP	:	A-B-D-E
SP	:	A-B-C-E
BSP	:	B-C-E
СРМ	:	A-C-D

Street B-D cannot be used for a political procession on Thursday due to a religious procession. The district administration has a policy of not allowing more than one procession to pass along the same street on the same day. However/ the administration must allow all parties to take out their processions during these two days.

(i) Congress procession can be allowed on.

Ans.	 	

(ii)	Which of the following is NOT true?		
	(a) Congress and SP can take out their processions on the same day.	[	]
	(b) The CPM procession cannot be allo.wed on Thursday.	[	]
	(c) The BJP procession can only take place on Friday.	[	]
	(d) Congress and BSP can take out their processions on the same day.	[	]

# **Q.3.** Think without link:

1. Three persons A, B and C wore shirts of black, blue and orange colours (not necessarily in that order) and pants of green, yellow and orange colours (not necessarily in that order).

No person wore pant and shirt of the same colour. Further, it is given that

- (1) A did not wear shirt of black colour.
- (2) B did not wear shirt of blue colour.
- (3) C did not wear shirt of orange colour.
- (4) A did not wear pant of green colour.
- (5) B wore pant of orange colour.

What were the colours of pant and shirt worn by C, respectively?

Ans.

2. A crofter has to get to his herd of sheep quickly as he has been told they are being attacked by a dog. His sheep are on the other side of a steep hill. He can run over the hill (3 miles) at 4 miles an hour, or take his tractor via an old dirt track which is 5 miles at an average of 6 miles an hour or he can drive his car along a very narrow winding road but this is 14 miles and he can only go at 18 miles an hour on average. Which method should he choose?

Ans. .....

**3.** Who stole the jewelry? There was a burglary in the Silver City jewelry store on Tuesday. A famous jewel was stolen. Three suspects: Robert, Scott, and Tommy were caught and questioned.



 Robert said: I am innocent.

 Scott said: Tummy did not steal.

 Tommy said: I stole it,

 Later on, the police found out two of them lied. Who stole the jewel?

 Ans.

**4.** I visited my math teacher last February. My teacher told me there were 3 groups of students came to his house on that day already. He also told me each group had different numbers of students. He said it was a coincidence that the product of the numbers of students in each group was equal to the visiting date (today's date). He asked me if 1 knew how many people came in each group. I looked at the calendar and found out that there might be 4 possible answers. So I asked my teacher a question. He replied: No. Then I gave him the correct answer. Do you know on what date I visited my teacher? How many people came in each group? What was the question I asked my teacher?

FEBRUARY				
Τ		28%		
	1000			
	n a de		46	
	12			

Ans.	