## Puzzle-Test

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This chapter comprises of questions given in the form of puzzles, involving certain number of items, persons or things. You are required to analysis the given information of clue and answer the questions accordingly.

Hints for Handling The Questions:

- Generally, several condition I the form of information are given with the questions. So, do not make hurry to mix all the given information, instead go step by step.
- ✤ To avoid confusion while solving such questions, you should symbolize persons, items by dot, lines etc.

#### Classification Type Puzzles

This type consists of questions in which certain items, belonging to different groups or possessing different qualities are given along with some clues with the help of which the candidate is required to group and analyses the given items and answer the questions accordingly.

- **Directions:** (1 to 3) Read following information carefully and answer the questions given below it:
  - (i) A and B are good in Biology & Chemistry.
  - (ii) A & C are good in Biology & Physics.
  - (iii) C, D & E are good in Physics & History.
  - (iv) C & E are good in Physics & Mathematics.
  - (v) D & B are good in Chemistry & History.
- **Ex 1.** Who is good in Physics, History & Mathematics but not in Biology?

(A) D	(B) C
(C) A	(D) E

**Ex 2.** Who is good in Physics, History, Mathematics and Biology?

(A) C			(B	B) E
(C) D			(Ľ	)) B
TT ·	1 ' D1	•	01	• .

- Ex 3. How is good in Physics, Chemistry & History? (A) C (B) E (C) D (D) B
- Sol. (1 to 3) By given information we can make the following table:

Per	Biology	Chemistr	Physics	History	Math
son		У			s
А	$\checkmark$	$\checkmark$	$\checkmark$	×	×
В	$\checkmark$	$\checkmark$	×	$\checkmark$	×
С	$\checkmark$	×	$\checkmark$	$\checkmark$	$\checkmark$
D	×	$\checkmark$	$\checkmark$	$\checkmark$	×
Е	×	×	$\checkmark$	$\checkmark$	$\checkmark$

- 1. (D) Clearly, E is good in Physics, History & Mathematics but not in biology.
- **2.** (A) Clearly, C is good in Physics, History, Mathematics and Biology
- 3. (C) Clearly, D is good in Physics, Chemistry & History.

#### **Comparison Type Puzzles**

In such type of questions, clues are given regarding comparisons among a set of persons or things with respect to one or more qualities. The candidate is required to analyses the whole information, from a proper ascending/descending sequence and then answer the give questions accordingly.

# Directions: (4 to 8) Read following information carefully and answer the questions given below it:(i) P, Q, R, S and T are five friends.

- (ii) Q is elder to T, but not as tall as R.
- (iii) R is younger to P and is taller to S and T.
- (iv) P is taller to S, but younger to T.
- (v) S is elder to P but is shortest in the group.
- Ex 4. Who among the following is the eldest? (A) P (B) Q
- (C) S (D) None of these Ex 5. Which of the following pairs of students is elder to S?

(A) OP	(B) QR
(C) TP	(D) None of these

- **Ex 6.** Which of the following statements is correct about Q?
  - (i) Q is not the tallest.
  - (ii) Q is shorter to T.

(iii) When they are asked to stand in ascending order with respect to their heights, Q is in the middle.

- (A) Only (i) is correct
- (B) Only (i) and (ii) are correct
- (C) All are correct
- (D) None of these
- **Ex 7.** If U, another friend, is taller than R, how many of them will be between U and T according to their height?
  - (A) One(B) Two(C) Three(D) Cannot be determined
- **Ex 8.** If a selection is to be make among them who would be relatively older and also taller, who among them should be chosen?
- (A) P (B) Q (C) R (D) S Sol. (4 to 8) In te3rms of age, We have: T<Q, R<P, P<T, P<S.
  - So, we have: R < P < T < Q, P < S.
  - In terms of height, we have: Q<R, S<R, T<R, S<P.
- 4. (D) Either Q or S is the eldest.
- 5. (D) It cannot be determined for sure.

- 6. (A) Q is shorter than R. So, Q is not the tallest. Thus,
  (i) is correct. Q and T are shorter than R. So, it cannot be concluded that Q is shorter to T. Thus, (ii) is incorrect. A single definite order of heights cannot be obtained from the give information. So, (iii) is incorrect.
- 7. (D) Since no definite order of height can be obtained, so it cannot be determined for sure how many persons lie between U and T.
- 8. (B) P and R are youngest and so they cannot be selected. S is shorter than two persons P and R. Q is shorter than R only and is also relatively older. So, Q will be selected. T is younger than Q.

#### Sequential Order of Things

In these type of questions, some clues are given regarding the order of occurrence of certain events. The candidate is required to analyses the given information, frame the right sequence and then answer the question accordingly.

**Direction:** (9 to 11) Read the following information carefully and answer the question given below it.

(i) Seven books are placed one above the other in a particular way.

(ii) The History book is placed directly above the Civics book.

(iii) The Geography book is fourth from the bottom and the English book is fifth from the top.

(iv) There are two books in between the Civics and Economics books.

**Ex 9.** To find the number of books between the Civics and the Science books, which other extra piece of information is required, from the following?

(A) There are two books between the Geography and the Science books.

(B) There are two books between the Mathematics and the geography books.

(C) There is one book between the English and the Science books.

(D) The Civics book is placed before two books above the Economics book.

**Ex 10.** To know which three books are dept above the English book, which of the following additional pieces of information, if any, is required?

(A) The Economics book is between the English and the Science books.

(B) There are two books between the English and the History books.

(C) The geography book is above the English book.

(D) No other information is required.

**Ex 11.** Which book is placed in the middle of the arrangement? (A) History (B) Civics

(A) History	(B) Civics
(C) Geography	(D) English
to 10) A seculing to	the airron arrestion for

Sol. : (9 to 10) According to the given question from (ii), we get



Since History and Civics cannot be at any other place than this, according to the given conditions. On the basis of this very arrangement, rest of the questions can be solved very easily.

- **9.** (C) Clearly, C gives us the clue that the Science book is placed at the bottom. Thus, we know that there are three books between the Civics and Science books.
- **10.** (D) Clearly, History, Civics and Geography are the three books kept above the English book. To deduce this, no additional information is required.
- **11.** (C) Clearly, Geography is placed in the middle of the arrangement?

#### Selection Based on Given Conditions

In such types of questions, a few essential criteria for selection of a group of items are given. The candidate has to keep these conditions in mind and make the required selection as per the directions given in each question.

**Directions:** (12 to 14) Read the following information carefully and answer the questions given below it: Eight students A, B, C, D, E, F, G and H are planning to enjoy car racing. There are only two cars and following are the conditions: (i) One car can accommodate maximum five and minimum four students.

(ii) A will sit in the same car in which D is sitting but H is not in the same car.

(iii) B and C can't sit in the same car in which D is sitting.

(iv) F will sit in the car of four people only along with A and E but certainly not with G.

**Ex 12.** If H and G are sitting in the same car, who are other two students sitting in the same car?

(A) B and C	(B) C and D
(C) B and D	(D) E and B

**Ex 13.** If E and A are sitting in the same car, which of the following statements is true?

(A) Five students are sitting in the same car

- (B) B is sitting in the same car
- (C) F is not sitting in the same car

(D) G is not sitting in the same car

**Ex 14.** Which of the following statements is superfluous for the above sitting arrangements?

(A) Only (i)	(B) Only (ii)
(C) Only (iii)	(D) Only (iv)

**Sol.** (12 to 14)

Consider two cars I and II. A and D sit in the same car, say I. H is not in the same car i.e. H is in car II. B and C are not in the same car in which D is sitting i.e. B and C are in car II.

Thus, we have:

Car I  $\rightarrow$  A, D, E, F

 $Cr II \rightarrow B, C, G, H$ 

- 12. (A) B and C are sitting in the same car in which G and H are sitting.
- **13.** (D) Clearly, G is not sitting in the car in which A and E are sitting.
- 14. (A) Clearly, statement (i) is not necessary.

#### Family-Based Puzzles

In these type of questions, some clause are given regarding relationship among different members of a family, together with their professions, qualities, dresses, preferences etc. The candidate is required to analyses the whole information and then answer the given questions accordingly.

**Directions:** (15 to 16) Read the given information carefully and answer the questions that follow:

Ratan, Anil, Pinku and Gaurav are brothers of Rakhi, Sangeeta, Pooja and Saroj, not necessarily in that order. Each boy has one sister and the names of bothers and sisters do not begin with the same letter. Pinku and Gaurav are not Saroj's or Sangeeta's brothers. Saroj is not Ratan's sister.

Ex 15.	Pooja's Brother is?	
	(A) Ratan	(B) Anil
	(C) Pinku	(D) Gaurav
Fw 16	Which of the following	ora brothar and

- Ex 16. Which of the following are brother and sister?(A) Ratan and Pooja(B) Anil and Saroj(C) Pinku and Sangeeta(D) Gaurav and Rakhi
- **Sol.** (15 to 16) As given that the names of brothers and sisters do not begin with the same letter and Pinku and Gaurav are not Saroj or Sangeeta's brothers, Pinku cannot be the brother of Pooja and Hence he is the brother of Rakhi

Now we have that gaurav cannot be the brother of Saroj, Sangeeta or Rakhi. Therefore Gaurav is the brother of Pooja. As given that Saroj is not Ratan's ister and Rakhi and Pooja can also not be the sister's of Ratan (From above conclusions), Ratan is the brother of Sangeeta. Anil will have to be the brother of Saroj as this is the only valid combination left. Therefore, we have this table finally.

- **15.** (D) Clearly, Pooja's brother is Gaurav.
- 16. (B) Clearly, Anil and Saroj are brother and sister.

#### Miscellaneous Puzzles

This section contains puzzles which at the first look seem too difficult to solve, as they contain a lot of jumbled information covering many aspects at the same time. The candidate is required to work out the given information and prepare clear, classified data from the same so as to be able to answer the give questions.

**Ex 17.** The ages of Mandar, Shivku, Pawan and Chandra are 32, 21, 35 and 29 years, not in order, Whenever asked they lie of their own age but tell the truth about others.

(i) Pawan say, "My age is 32 and Mandar's age is not 35"

(ii) Shivku says, "My age is to 29 and Pawan's age in not 21"

(iii) Mandar says, "My age is 32."

What is Chandra's age?

(A) 32 years	(B) 35 years
(C) 29 years	(D) 21 years

Sol. (A) from the first statement, it is clear that Pawan's age is not 32 years and Mandar's age in not 35 years. From the second statement, it is clear that Shivku's age is 29 years and Pawan's age is not 21 years. Thus, from these two statements we get Pawan's age as is 35 years. Now from the third statement, Mandar's age is not 32 years. Thus, Mandar's age is 21 years. Hence, we get Chandra's age as 32 years.

#### EXERCISE

**Directions:** (1 to 5) Read the following information carefully and answer the questions given below it.

(i) Five professors (Cr. Joshi, Dr. Davar, Dr. natrajan, Dr. Choudhary and Dr. Zia) teach five different subjects (zoology, physics, botany, geology and history) in four universities (Delhi, Gujarat, Mumbai, and Osmania). Do not assume any specific order.

(ii) Dr. Choudhary teaches zoology in Mumbai University.

(iii) Dr. natrajan is neither in Osmania University nor in Delhi University and he teaches neither geology nor history.

(iv) Dr. Zia teaches physics but neither in Mumbai University nor in Osmania University.

(v) Dr. Joshi teaches history in Delhi University.

(vi) Two professors are from Gujarat University.

(vii) One professor teaches only one subject and in one University only.

1.	Who teaches geology	Who teaches geology?		
	(A) Cr. Natrajan	(B) Dr. Zia		
	(C) Dr. Davar	(D) Dr. Joshi		
2.	Which university is D	r. Zia from?		
	(A) Gujarat	(B) Mumbai		
	(C) Delhi	(D) Osmania		
3.	Who teaches botany?			
	(A) Dr. Zia	(B) Dr. Davar		
	(C) Dr. Joshi	(D) Dr. Natrajan		
4.	Who is from Osmania University?			
	(A) Dr. Natrajan	(B) Dr. Davar		
	(C) Dr. Joshi	(D) Dr. Zia		
5.	5. Which of the following combinations			
	(A) Delhi University – Dr. Zia			
	(B) Dr. Choudhary – Geology			
	(C) Dr. Davar – Mum	(C) Dr. Davar – Mumbai University		
	(D) Dr. natranjan – G	ujarat University		

**Direction:** (6 to 10) Use the information given below to answer the question.

(i) Seven students P, Q, R, S, T, U and V take a series of tests. (ii) No two students get similar marks. (iii) V always scores more than P. (iv) P always scores more than Q. (v) Each time either R scores the highest and T gets the least, or alternatively S scores the highest and U or O scores the test. If S is ranked sixth and Q is ranked fifth, which of the following can be true? (A) V is ranked first or fourth (B) R is ranked second or third. (C) P is ranked second or fifth. (D) U is ranked third or fourth If R gets most, V should be ranked not lower than (A) second (B) third (D) fifth (C) fourth If R is ranked second and Q is ranked fifth, which of the following must be true? (A) S is ranked third (B) T is ranked sixth (C) P gets ranked sixth (D) V is ranked fourth If S is ranked second, which of the following can be true?

(A) U gets more than V.

6.

7.

8.

9.

- $(B) \ V \ gets \ more \ than \ S$
- (C) P gets more than R
- (D) P gets more than V.
- **10.** If V is ranked fifth, which of the following must be true?
  - (A) S scores the highest
  - (B) R is ranked second
  - (C) T is ranked third
  - (D) Q is ranked fourth

Direction: (11 to 15) Study the following information carefully and answer the questions given below it: (i) Eleven students A, B, C, D, E, F, G, H, I, J and K are sitting in a row of the class facing the teacher. (ii) D, who is to the immediate left of F, is second to the right of C. (iii) A, is second to the right of E, who is at one of the ends. (iv) J is the immediate neighbour of A and B and third to the left of G. H is to the immediate left of D and third to (v) the right of I. 11. Who is sitting in the middle of the row? (A) C(B) I (D) G (C) B 12. Which of the following groups of friends is sitting to the right of G?

(A) IBJA	(B) ICHDF
(C) CHDF	(D) CHDE

- **13.** In the above sitting arrangement, which of the following statements is superfluous?
  - (A) i (B) ii
  - (C) iii (D) All information's are required
- **14.** Which of the following statements is true in the context of the above sitting arrangements?
  - (A) There are three students sitting between D and  $\,\,\widetilde{}\,\,G.$
  - (B) G and C are neighbours sitting to immediate right of H.
  - (C) B is sitting between J and I.
  - (D) None of these
- **15.** If E and D, C and B, A and H & K and F interchange their positions, which of the following pairs of students is sitting at the end?

(A) D and E	(B) E and F
(C) D and K	(D) K and F

**Directions:** (16 to 20) Answer the questions based on the following information.

Six plays A, B, C, D, E and F are to be staged, one on each day starting from Monday to Saturday. The schedule of plays is to be in accordance with the following.

- (i) A must be staged a day before E.
- (ii) C must be staged on Saturday.

(iii) B must be staged on the day following the day on which F is staged.

(iv) D must be staged on Friday only and should not be immediately preceded by B.

16. Which of the following plays immediately follows B?

(A) A	(B) C
(C) D	(D) E

- Which of the following plays immediately follows D
  (A) E
  (B) F
  (C) C
  (D) B
- 18. Play D is between which of the following pairs of plays?(A) A and E(B) E and E

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

- 19. Which of the following is the schedule of plays, with the order of their staging from Monday to Saturday?
  (A) E, A, B, F, D, C
  (B) F, B, A, E, D, C
  (C) F, A, B, E, D, C
  (D) None of these
- **20.** If play D can be staged on any day of the week and all other conditions remain the same, then which of the following is true.
  - (A) D has to be staged before A
  - (B) F has to be staged before A  $% \left( A^{\prime}\right) =0$
  - (C) A has to be staged before B
  - (D) No unique schedule is possible

Directions: (21 to 25) Study the following information carefully and answer the questions that follow: A team of five is to be selected from amongst five boys A, B, C, D and E and four girls P, Q, R and S. Some criteria for section are: (i) A and S have to be together (ii) P cannot be put with R. (iii) D and Q cannot go together (iv) C and E have to be together (v) R cannot be put with B. Unless otherwise stated, these criteria are applicable to all the questions below: 21. If two of the members have to be boys, the team will consist of: (A) ABSPQ (B) ADSQR (C) BDSRQ (D) CESPQ If R be one of the members, the other members of 22. the team are: (A) PSAD (B) QSAD (C) QSCE (D) SACE 23. If two of the members are girls and D is one of the members, the members of the team other than D are: (B) PQCE (A) POBC (C) PSAB (D) PSCE 24. If A and C are members, the other members of the team cannot be: (A) BES (B) DES (C) ESP (D) POE 25. If including P at least three members are girls, the members of the team other than P are: (A) QSAB (B) QSBD (C) QSCE (D) RSAD

Directions: (26 to 30) Study the following information carefully and answer the question given below it: (i) A, B, C, D, E and F are six members in a family in which there are two married couples. (ii) E, a teacher is married to the doctor who is mother of C and F. (iii) B, the lawyer is married to A (iv) A has one son and one grandson. (v) Of the two married ladies one is a housewife (vi) There is also one student and one male Engineer in the family. 26. Who is A related to C? (A) Grand father (B) Mother (C) Sister (D) Grand mother 27. Who among the following is the housewife? (A) A (B) B (C) D (D) None of these 28. How is C related to F?

(A) Brother(B) Sister(C) Brother or Sister(D) None of these

29.	Which	of	the	following	represents	the	group	of
	s in t	the f	amily?					
		0						

(A) ADC	(B) ADF
(C) BEC	(D) Data inadequate

30.	Which	of	the	following	is	true	about	the	grand.
	Daughter in the family?								
	(A) She is a lawyer		(B	) She	is a stu	Ident	,		

(C) She is an engineer (D) None of these

- 31. A vagabond runs out of cigarettes. He searches for the stubs, having learnt that 7 stubs can make a new cigarette, good enough to be smoked, he gathers 49 stubs, If he smokes 1 cigarette every three-quarters of an hour, how long will his supply last?
  (A) 5.25 hr
  (B) 6 hr
  (C) 4.5 hr
  (D) 3 hr
- 32. Six roads lead to a country. They may be indicated by letters X, Y, Z and digits 1, 2, 3. When there is a storm, Y is blocked. When there are floods X, 1 and 2 will be affected. When road 1 is blocked, Z also is blocked. At a time when there are floods and a storm also blows, which road(s) can be used?
  (A) Z and 2
  (B) Only Z
  (C) Only 3
  (D) Only Y
- **Directions:** (33 to 37) Five students A, B, C, D, & E of a class secured distinction in four subjects English, Science, Maths and Sanskrit as: A and C secured distinction in English and Science. B, E and E secured distinction in Science and Sanskrit, while A, D and E Secured distinction in English and Maths. If A and C secured distinction in Science and English then find out the correct alternatives for each
  - question. (NTSE Stage-I/Raj./2007)
- **33.** The student who secured distinction in all the four subjects is -

(A) A	(B) E
(C) C	(D) D

**34.** The students who secured distinction in English, Science and Maths are -

(A) A, B	(B) D, E
(C) A, E	(D) C, D

**35.** The Student who secured distinction in three subjects except Maths is-

(A) A	(B) B
(C) C	(D) D

**36.** The Student who secured distinction in Sanskrit and Science but not in Maths and English is-

(A) B	(B) C
(C) D	(D) E

**37.** The Student who secured distinction in only English and Maths is-

(A) C	(B) B
(C) D	(D) A

- Directions: (38 to 42) The following question are based of the information given. Study the information carefully and answer the questions. (i) There are five students L, M, N, O and P in a class (ii) L studies Physics, English and Chemistry (iii) M and N study Chemistry and Psychology (iv) O and L study Biology and Sanskrit (v) P and M study Hindi and English (NTSE Stage-II, 2007) 38. Who among the following students studies maximum number of subjects? (A) O(B) N (C) L (D) P 39. Which subject is studied by only one student? (A) Biology (B) Hindi (C) Physics (D) Sanskrit 40. Which two subjects are studied by more than 2 students? (A) English and Hindi (B) Chemistry and Hindi (C) Physics and Sanskrit (D) Chemistry and English 41. Who are the students studying only two subjects? (A) L and O (B) O and P (C) L and P (D) M and N 42. Who are not studying Biology, Sanskrit and Physics? (A) M, N and P only (B) N and O only (C) M and N only
  - (D) M, N and O only
- **Directions:** (43 to 47) Read the following information and then find out the answers to the questions that follow.
  - (i) Mansi, Gautami, Roza, Farida and Akshada who are teachers in a school teach different subjects.
  - (ii) Mansi and Gautami teach Hindi and English.
  - $(\ensuremath{\textsc{iii}})$  Roza and Farida teach English and Geography.
  - (iv) Farida and Mansi teach Maths and Hindi.
  - (v) Akshada and Gautami teach History and Marathi.

### (NTSE Stage-II, 2008)

**43.** Who among them teach the maximum number of subjects?

	(A) Mansi and Akshada			(A) History	(B) Maths	
	(B) Gautami and Farida			(C) Marathi	(D) English	
	(C) Roza and Gautami		46.	Which of the following pair of teachers teacher		
	(D) Farida and Mansi			Marathi?		
44.	Who among them teaches	three subjects?		(A) Askhada - Mansi	(B) Akshada – Roza	
	(A) Mansi	(B) Gautami		(C) Mansi - Gautami	(D) Gautami - Akshada	
	(C) Farida	(D) Akshada	47.	The common subject that	Gautami and Roza teach is	
45.	The common subject that Mansi, Gautami and Roza			(A) Hindi	(B) History	
	teach is			(C) English	(D) Maths	

## **ANSWER KEY**

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	С	Α	D	B	D	D	С	B	Α	Α	B	С	D	С	С
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	Α	С	D	B	D	Α	D	С	D	Α	D	Α	С	D	В
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	B	С	B	С	С	Α	С	С	С	D	B	Α	B	Α	D
Que.	46	47													
Ans.	D	C													