Direction Test

Past Trends

Attempt	Total
May 2018	6
Nov 2018	4
Jun 2019	4
Nov 2019	5
Nov 2020	4
Jan 2021	3
Jul 2021	5
Dec 2021	5
Jun 2022	5
Dec 2022	4
Jun 2023	5

Direction Test

Question Requirements	• Here questions consist of a sort of direction puzzle. • A successive follow-up of direction is formulated and • the students are required to ascertain the final direction or • direction with respect to starting points or • other related problems.		
Types of Question	**Type**	**Requirement**	**Remark**
	Type I	Finding final direction	Distance can be ignored
	Type II	Finding the direction with respect to original point	Distances are important
	All other varieties	Multiple	No Remark

MCQs

Exercise	A man starts from a point, walks 4 miles towards north and turns left and walks 6 miles, turns right, and walks for 3 miles and again turns right and walks 4 miles and takes rest for 30 minutes. He gets up and walks straight 2 miles in the same direction and turns right and walks one mile. What is the direction he is facing? a. North b. South c. South-East d. West
Ans: b	
Exercise	Arun started from point A and walked 10 kms East to point B, then turned to North and walked 3 kms to point C and then turned West and walked 12 kms to point D, then again turned South and walked 3 kms to point E. In which direction is he from his start point? a. East b. South c. West d. North
Ans: c	

Exercise **Ans: b**	A tourist drives 10 km towards west and turns to left and takes a drive of another 4 km. He then drives towards east another 4 km and then turns to his right and drives 5 km. Afterwards he turns to his left and travels 6 km. In which direction is he from the starting point? a. East b. South c. West d. North

Exercise
 	
Ans: a
	Raju facing North and moves 20 kms, then he turned to his right and moves 20 kms and then he moves 10 kms in North-East, then he turned to his right and moves 20 kms and then he turned to his right and moves 20 kms and again he turned to his left and moves 20 kms. Now in which direction Raju is facing?
	    a. South-East b. North-East
	    c. South-West d. North-West

Exercise **Ans: d**	Five boys A, B, C, D and E are sitting in a park in a circle. A is facing South-West, D is facing South-East, B and E are right opposite A and D respectively and C is equidistant between D and B. Which direction is C facing? a. West b. South c. North d. East
Exercise (Modified) **Ans: b**	Daily in the morning the shadow of Gol Gumbaz falls on Bara Kaman and in the evening the shadow of Bara Kaman falls on Gol Gumbaz exactly. So, in which direction is Bara Kaman to Gol Gumbaz? a. Eastern b. Western c. Northern d. Southern
Exercise **Ans: b**	If X stands on his head with his face towards south, to which direction will his left-hand point? a. East b. West c. North d. South
PYQ May 18 **Ans: b**	I stand with my right-hand extended side-ways towards South. Towards which direction will my back be? a. North b. West c. East d. South

Exercise
 	
Ans: d
	Roy walks 2 kms to East, then turns North-West and walks 3 kms. Then he turns South and walks 5 kms. Then again, he turns West and walks 2 kms. Finally, he turns North and walks 6 kms. In which direction, is he from the starting point?
	    a. South-East b. North-East
	    c. South-West d. North-West

Example **Ans: c**	Gopal started walking 2 kms straight from his school. Then he turned right and walked 1 km. Again, he turned right and walked 1 km to reach his house. If his house is south-east from his school, then in which direction did Gopal start walking from the school? a. North b. West c. East d. South

MTP **Ans: a**	One evening before sunset, two friends Ravi and Raj were talking to each other face to face. If Ravi's shadow was exactly to his left side, which direction was Raj facing? a. North b. West c. East d. South
MTP **Ans: b**	Kiran walks 2 km towards North then he turns East and walks 10 km. After this he turns North and walks 3 km. Again, he turns towards East and walks 2 km. How far is he from the starting point? a. 10 km b. 13 km c. 15 km d. 17 km

MTP
 	
Ans: c
	Ramu moved 75 meters towards North. He then turned to left and after walking about 25 meters, turned left again and walks 80m. Finally, he turned to the right at an angle of $45°$. In which direction was he moving finally?
	   a. South-East b. North-East
	   c. South-West d. North-West

PYQ Nov 20 **Ans: b**	One day Ram left home and cycled 10 km southward, turned right and cycled 5 km and turned right and cycled 10 km and turned left and cycled 10 km. How many kms will he have to cycle to reach his home straight? a. 10 b. 15 c. 20 d. 25
PYQ Nov 20 **Ans: a**	A man is facing west, he turns $45°$ in the clockwise direction and then another $180°$ in the same direction and then $270°$ in the anti-clockwise direction. Which direction is he facing now? a. South-West b. North-West c. West d. South
PYQ Dec 21 **Ans: a**	The hour hand of a clock is in west direction when time is 3 o'clock. What is the direction of minutes hand when time is 6:45? a. East b. North c. West d. South
PYQ Jun 19 **Ans: c**	A person facing North moves $70°$ in clockwise direction. He again moved $300°$ in clockwise direction. In which direction is he facing now? a. North – West b. South – East c. North – East d. South – West
PYQ Jul 21 **Ans: c**	One morning after sunrise, Vikram and Shailesh were standing in a down with their back towards each other. Vikram's shadow fell exactly towards left hand side. Which direction was Shailesh facing? a. South – West b. West c. South d. East-South

PYQ Nov 20 **Ans: a**	A man can walk by having long, medium and short steps. He can cover 60 meters by 100 long steps, 100 meters by 200 medium steps and 80 meters by 200 short steps, he walks taking 5000 long steps, then he turns left and walk by taking 6000 medium steps. He then turns right and walk by taking 2500 short steps. How far (in meters) is he away from his starting point? a. 5000m b. 4000m c. 6000m d. 7000m
PYQ Jan 21 **Ans: d**	Ms. N walks 10km towards North from there she walks 6km towards South. Then she walks 3km towards East. How far and in which direction is she with reference to her starting point? a. 4km West b. 6km West c. 3km East d. 5km North East
PYQ Jul 21 **Ans: b**	There are four towns P, Q, R and T. Q is the South – West of P, R is to the East of Q and South – East of P and T is to the North of R in line with QP. In which direction of P is T located? a. North b. North-East c. East d. South-East

Chp9: Number Series, Coding, Decoding, Odd Man Out

Past Trends	

Attempt	Total
May 2018	3
Nov 2018	5
Jun 2019	4
Nov 2019	6
Nov 2020	6
Jan 2021	5
Jul 2021	5
Dec 2021	6
Jun 2022	7
Dec 2022	6
June 2023	5

Basics		

Number Series	• In this type of questions, we need to identify the missing term of the series real according to a **specific pattern** of the series rule to form its code. • The students are required to detect the missing number of the series and answer the questions accordingly.	
Alphabet Series	• Alphabet series consists of letters of the alphabet placed in a specific pattern.	
Coding and Decoding	• Coding: converting original message into code • Decoding: converting code into original message • Types: Number Coding, Letters Coding etc.	
Odd Man Out	• In these questions, four or five elements are given, out of which one does not belong to the group, we need to identify it.	
Classification of MCQs	Quickly Identifiable	Pattern which can be identified instantly during exams
	Not Quickly Identifiable (Advance)	Pattern which required lot of thinking and even after that there is no surety that it will click on spot

MCQs	

Example	2, 7, 16, _____, 46, 67, 92 a. 31 b. 29 c. 26 d. None

Ans: b (difference of difference)

Example	Find the wrong term: 9, 29, 65, 126, 217, 344 a. 65 b. 126 c. 217 d. 29

Ans: d (cube + 1)

Example	If in a certain language MYSTIFY is coded as NZTUJGZ, how is MENESIS coded in that language?
	a. NFOFTJT b. NZUJTZG c. ZUINTJ d. None

Ans: a (+1 for all letters)

Example	If in a certain language CARROM is coded as BZQQNL, which word will be coded as HORSE?
	a. GNQRD b. GQRDE c. IPSTF d. GNQDR

Ans: c (Coding -1 & Decoding + 1)

Example	In a certain code, MENTION is written as LNEITNO. How is PRESENT written in that code?
	a. OERESTN b. TNESREP c. OTRSNEE d. None

Ans: a (First letter -1 and other are pair swapping)

Example	Find wrong term: 1, 5, 14, 30, 51, 55, 91
	a. 5 b. 55 c. 51 d. 91

Ans: c (Gap of squares)

Exercise	120, 80, 40, 45, ?, 15
	a. 15 b. 20 c. 25 d. 30

Ans: d (RIP Logic – splitting terms)

Exercise	1, 1, 4, 8, 9, ?, 16, 64
	a. 27 b. 28 c. 32 d. 40

Ans: a (alternate squares cubes)

Exercise	1, 2, 6, 7, 21, 22, 66, ?, 201
	a. 69 b. 68 c. 67 d. 69

Ans: c (+1 ×3)

Exercise	2, 3, 3, 5, 10, 13, 39, ?, 172, 177
	a. 42 b. 44 c. 43 d. 40

Ans: c (+1 ×1, +2 ×2, ...)

Exercise	8, 28, 116, 584, ?
	a. 1752 b. 3502 c. 3504 d. 3508

Ans: d (×3 + 3, ×4 + 4, ×5 + 4 ...)

Exercise	5, 2, 7, 9, 16, 25, 41, ___
	a. 65 b. 66 c. 67 d. 68

Ans: b (every new term is the sum of last two terms)

Exercise	If RED is coded as 6720 then GREEN would be coded as
	a. 9207716 b. 167129 c. 1677209 d. 1672091

Ans: c (letter position + 2 then reverse order)

Exercise	If MEKLF is coded as 91782 and LLLJK as 88867, how can IHJED is coded as?
	a. 97854 b. 64512 c. 54610 d. 75632

Ans: c (letter position starting from D as 0, E as 1 and so on)

Exercise	In a certain code '256' means 'you are good', '637' means 'we are bad' and '358' means 'good and bad'. Which of the following represents 'and' in that code?
	a. 2 b. 5 c. 8 d. 3

Ans: c (common words in sentences can be linked with common digit)

Exercise	835, 734, 642, 751, 853, 981, 532
	a. 751 b. 853 c. 981 d. 532

Ans: a (first digit is the sum of next two digits)

PYQ Jun 19	Find the next term: 7, 23, 47, 119, 167
	a. 211 b. 223 c. 287 d. 319

Ans: c (square of prime number – 2)

MTP	Find missing term of letter series A, CD, GHI, ___, UVWXY
	a. LMNO b. MNO c. MNOP d. NOPQ

Ans: c (alphabet sequence with gap and increasing number of alphabets in every next term)

MTP	In a certain code, "CLOUD" is written as "GTRKF". How is "SIGHT" written in that code?
	a. UGHHT b. UHJFW c. WFJGV d. WGJHV

Ans: d (+3, -1, +3, -1 and reverse order)

MTP	In a certain code "SOUTHERN" is written as "UVPTMQDG". How is MARIGOLD written in that code?
	a. JSBCNFKS b. JSBNHPME c. JSBNCKNF d. NBSKCJNF

Ans: c (+1 for first four terms, -1 for next four terms then reverse order for each half)

MTP	If system is coded as 131625 then TERMS will be coded as?
	a. 62251 b. 62451 c. 64251 d. 62415

Ans: b (option-based mapping)

MTP	The missing term of the series 11, 10, ___, 27, 66.5, 198.5
	a. 14 b. 16 c. 21 d. 19

Ans: a (×1-1, ×1.5-1, ×2-1, …)

PYQ Jan 21	Find the missing term: P 3 C, R 5 F, T 8 I, V 12 L, ?
	a. Y170 b. X17M c. X170 d. X160

Ans: c (+2+2+3, +2+3+3, +2+4+3, …)

PYQ Nov 20	Find wrong term in G4T, J10R, M20P, P43N, S90L
	a. M20P b. P43N c. J10R d. G4T

Ans: c (x2+1, x2+2, x2+3, x2+4)

MTP	In a certain code KAVERI is written as VAKIRE. How is MYSORE written in that code?
	a. EROSYM b. SYMORE c. SMYERP d. SYMERO

Ans: d (half half reverse)

PYQ Jun 19	Which of the following is odd one 4, 12, 44, 176, 890………..
	a. 4 b. 12 c. 44 d. 176

Ans: c (x2+4, x3+6, x4+8, x5+10)