#### SCHOOL EDUCATION DEPARTMENT- T HOOTHUKUDIDISTRICT

#### NMMS- MAT-UNIT TEST- V(2023-2024)

PART - 1: MENTAL ABILITY		பகுதி – 1: மனத்திறன் தோவு		
(For Student of Class VIII)		(எட்டாம் வகுப்பு மாணவர்களுக்கானது)		
Time 90 Minutes	Max Marks 90	நேரம் 90 நிமிடங்கள் மொத்த மதிப்பெண்கள் 90		
INSTRUCTIONS TO CANDIDATES		தேர்வு எழுதுபவர்களுக்கான விதிமுறைகள்		
		வினா நூல் தொகுப்பைத் திறப்பதற்கு முள்		
Read the following instruction car	efully before you open	கொடுக்கப்பட்டுள்ளவிதிமுறைகளைக் கவனமாக		
the Question Booklet.		படிக்கவும்.		
		1. விடைகளை OMR விடைத்தாளில் குறிக்க வேண்டும்.		
1.Answers are to be given on the s	same OMR Answer Sheet.			
a = 1		2இத்தேர்வில் 90 வினாக்கள் உள்ளன. அனைத்திற்கும் கட்டாயம்		
2. There are 90 questions in this bo	ooklet. All are compulsory.	விடையளிக்கப்பட வேண்டும்.		
3 Choose the correct answer from	the ontions given for	3.ஒவ்வொரு வினாவிற்கும் கொடுக்கப்பட்டுள்ள		
3.Choose the correct answer from the options given for each question and darken the corresponding circle		மாற்று விடைகளிலிருந்து சரியான விடையினைக்		
with black ball point pen in the OMR Answer Sheet.		கண்டறிந்துஅதை OMR விடைத்தாளில் உரிய வட்டத்தில்		
Do not mark or x in the OMR sheet.		கருப்புநிற பால்பாயிண்ட் பேனாவினால் திட்ட வேண்டும்.) "v" மற்றும் 'x' ஆகிய குறியீடுகளை OMR		
		விடைத்தாளில்செய்யக்கூடாது.		
4.Since the time allotted for this C	Juestion Paper is very			
limited you should make the best use of it by not		4.இந்த வினாத்தாளுக்கு ஒதுக்கப்பட்டுள்ள கால அளவு மிகக்		
spending too much time on any one question.		குறைவானதாக இருப்பதால் எந்த ஒரு வினாவிற்கும் கூடுதல்		
,	·	நேரத்தைச் செலவழிக்காமல் நேரத்தை மிகச்சிறந்த முறையில் பயன்படுத்தவும்,		
5.If you do not know the answer to any question, do not		பயணபடுத்துக்குய,		
waste time on it and pass on to the next one. If time		5.ஏதாவது ஒரு வினாவிற்கு விடை தெரியவில்லை		
permits, you can come back to the questions, which you		என்றால்அதிலேயே காலவிரயம் செய்யாமல் அடுத்த		
have left in the first instance and attempt them.		வினாவிற்குசெல்லவும், நேரமிருந்தால் முதலில் விட்டுச்சென்ற		
		வினாக்களை முயற்சி செய்யவும்.		
6.Rough work can be done anywh	ere in the Question	6.விடைகளைக் கண்டறிய மேற்கொள்ளும் வழிமுறைகளைவினா		
Booklet but not in the OMR Sheet/loose paper.		நூல்தொகுப்பில் எங்கு வேண்டுமானாலும் செய்து		
		கொள்ளலாம்.omr விடைத்தாளிலோ அல்லது தனித்தாளிலோ		
		செய்யக்கூடாது.		
7. Each correct answer will be awarded one mark.		7. ஒவ்வொரு சரியான விடைக்கும் ஒரு மதிப்பெண்		
	Charat and a tart	வழங்கப்படும்.		
8. Please return the OMR Answer	•			
invigilator after the test. Candidates can retain the		8.தேர்வு முடிந்த பிறகு OMR விடைத்தாளை மட்டும்		
Question Booklet.		அறைக்கண்காணிப்பாளரிடம் கொடுக்கவும். வினாநூல்		
9.Quote your seven digit Roll Num	her without fail for	தொகுப்பை தேர்வர் எடுத்துச் செல்லலாம்.		
any future correspondence.		9.ஏதேனும் கடிதத் தொடர்பு கொள்ள வேண்டிய		
		தழ்நிலைஏற்படின் எழு இலக்க பதிவெண்ணைத் தவறாமல்		
PLEASE TURN OVER THE PAGE AN	D START	குறிப்பிடவும்.		
ANSWERING.		பக்கத்தைத் திருப்பிப் பதிலளிக்கத் தொடங்கவும்.		
-				

## MAT

## Unit – Test – 5

- 1. P and Q are brothers. R and S are sisters. P's Son in S's brother. How is Q related to R?
  - a) Father (b) Brother (c) Grand Father (c) Uncle
- Arjun introduces Arul as the son of the only brother of his father's wife. How is Arul related to Arjun?

a) Cousin (b) Son (c) Uncle (d) Son in law

- 3. Pointing to a boy Veena said that the boy is my grand father's only son's son. How is the boy related to Veena?
  - a) Brother (b) Uncle (c) Cousin (d) Son
- 4. N's Brother is M O's wife is N. O's son is P. Who is the mother of P?
  a) N (b) M (c) O (d) Nothing
- 5. Pointing to girl Banu said that she is the daughter of my grandfather's only son. How is the girl related to Banu?
  - a) aunty (b) sister (c) grandmother (d) daughter
- 6. A, B and C are sisters. D is E's brother E is B's son. What is the relationship is A for D?
  - a) Sister (b) uncle's daughter (c) aunt (d) niece

# Questions (7-9)

Rani is son of Rahul. Rani Rahul's sister has a son Ram and a daughter Geetha. RAja is the matunal uncle of Ram

- 7. How is Rani related to Ram?
  - a) Uncle (b) Cousin (c) Father (d) Brother in law
- 8. How is Geetha related to Raja?
  - a) Sister (b) Daughter (c) Nioce (d) Aunt
- 9. What is the relationship of Raja with Rahul?
  - a) Materna Uncle (b) Brother (c) Nephew (d) Father

- 10.Pointing to a photograph of a boy Suresh said. "He is the son of the only son of my mother". How is Suresh related to that boy?
  - a) Brother (b) Uncle (c) Cousin (d) father
- 11.Pointing to a photograph Lata says. "He is the son of the only son of my grandfather." How is the man in the photograph related to Lata?
  - a) Brother (b) Uncle (c) Cousin (d) Data is inadequate
- 12.Deepak said to Nitin. "That boy playing with the football is the younger of the two brothers of the daughter of my father's wife. How is the boy playing football related to Deepak?
  - a) Son (b) Brother (c) Cousin (d) Brother-in-la
- 13.Amit said. "This girl is the wife of the grandson of my mother." How is Amit related t the girl?
  - a) Brother (b) Grandfather (c) Husband (d) Father-in-law
- 14.A is brother of B but B is not the brother of A. What is relation between A and B?
  - a) A Brother B Brother
  - b) A Sister B Brother
  - c) A-Sister B-Sister
  - d) A Brother B Sister
- 15.Rani is Jayanth's sister. Monica is Jayanth's mother. Dinesh is Monica's father. Lata is Dinesh's mother. How is Rani related to Lata?
  - a) Daughter (b) Great grand daughter (c) Grand daughter(d) Great grandmother
- 16.A is the sister of 'B', 'B' is the bother of 'C' and 'C' is the son of 'S'. How is D related to A?
  - a) Son (b) Daughter (c) Uncle (d) Mother
- 17.Pointing to a lady in the photograph Rajesh said "she is my grandmother's only son's mother. How is the woman Related to Jajesh?a) Daughter (b) Grandmother (c) Sister (d) Mother

# Questions 18 – 20

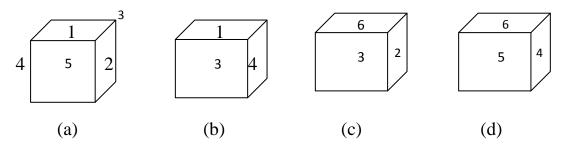
In a family, the relation are given as follows : Answer the questions, that follow.

(i)	U	is	R's	Son	
(ii)	Р	is	Q's	Father	
(iii)	S	is	U's	Mother	
(iv)	R	is	Q's	Brother	
(v)	Т	is	R's	Mother	
18.Grandfather of U					
a)	Р	(b) (	) (c) R	(d) S	
19.T is P's					
a)	Brother		(b) Wife	(c) Mother	(d) Father
20. The relation between R and T					
a)	R	is	T's	Son	
b)	) R	is	T's	Mother	
,	) R ) R		T's T are	Mother Sisters	

21.Two different position of a dice in figure is shown. Here 1 is the opposite side.

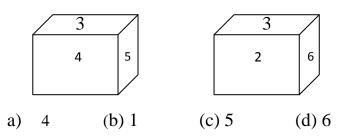


22.A dice is numbered 1 to 6 on its six faces and its different positions are given below.



The number opposite to 3 in figure (c)

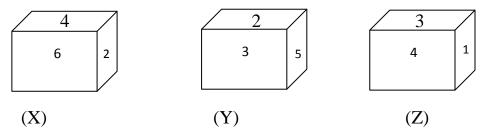
23. A die is thrown two times and its two different positions are given below Identify the number on the face opposite to 3.



24.Two position of a dice are shown below. When 4 is at the bottom, what number will be on the top?

Q.No : 25 - 26

Two position of a dice are given

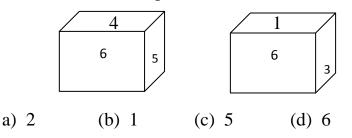


25.The number opposite to 6 is \_\_\_\_\_

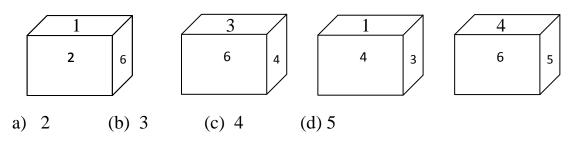
26. The number at the bottom of X is \_\_\_\_\_

27.Two positions of a dice are shown below. Identify the number at the

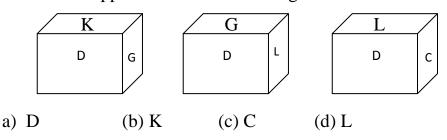
bottom. When the top is 3.



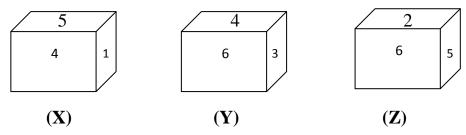
28.Four different positions of dice are shown below. Find out which number is found opposites to the number 1 given in the cube.



29.Four different positions of dice are shown below. Find out which number is found opposites to the number 1 given in the cube.



30.Study the three faces of dice given below. Find the letter of on the face opposite to the letter G?

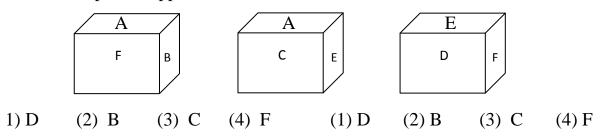


# Directions (an No. 30 – 32)

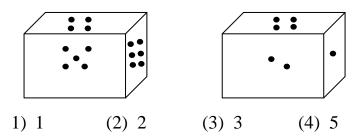
These questions are based on dice named X, Y, Z below. Find the suitable answers of these questions.

- 30. Which number lies at the bottom face of the dice?
  - 1) 2 (2) 2 (3) 3 4 (4)
- 31. Which number lies at the bottom face of the dice 'Y'?
  - 1) 2 (2) 1 (3) 5 (4) 6
- 32. Which numbers are ridden behind the numbers 6 and 5 in the dice 'Z'?
  - 1) 1 and 4 (2) 1 and 3 (3) 4 and 3 (4) 1 and 2

33. The six faces of dice have been marked as A, B, C, D, E and F respective the dice is rolled down three times. The four Posi are given belwo. Find the alphabet opposite to A?

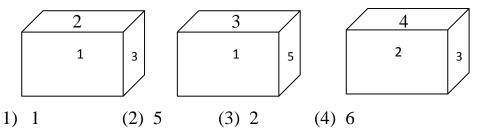


34. Two different positions of dice are shown below find the number of dots on the face opposite to the face bearing 2 clots.

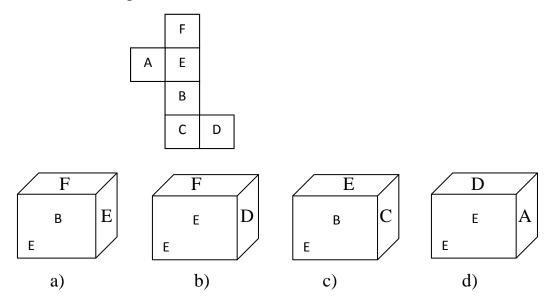


35. Three different positions of dice are shown below. Find out which

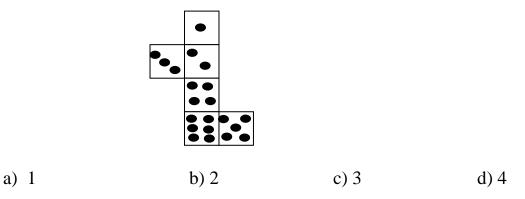
number is found opposite to the number 3 give in the cube?



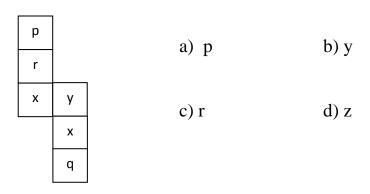
36. Select from the alternative, the box that can be formed by folding the sheet show in figure.



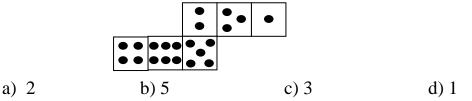
37. When the following figure is folded to form a cube, how many dots would lie opposite the face bearing five dots?



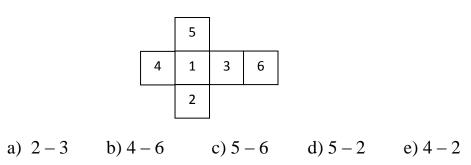
38. When the following figure is folded to form a cube, identifying the faces the side opposite letter X is \_\_\_\_\_\_



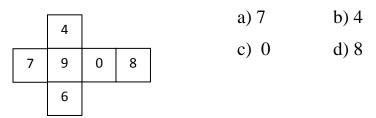
39. How many dots lie opposite face having 6 dots, when the given figure is folded to form a cube.



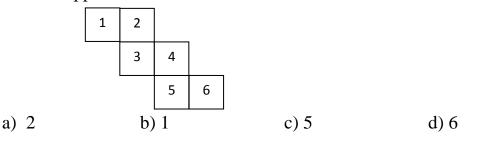
40. When the following figure is folded to form cube then which of the following shows a pair of faces opposite to each other?



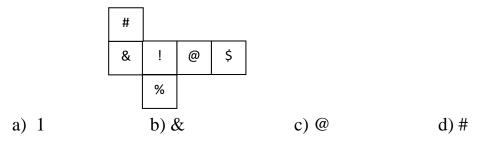
41. When the following figure is folded form a cube. By identify the faces side opposite to number 9 is \_\_\_\_\_



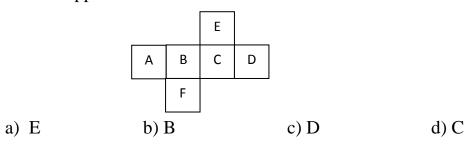
42. When the following figure is folded form a cube. By identify the faces the side opposite to number 4.



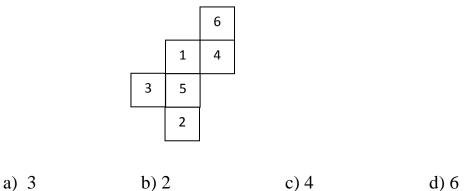
43. By identify the faces the side opposite to symbol \$ is \_\_\_\_\_.

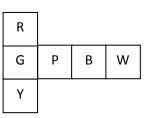


44. A sheet of paper as shown in figure is folded as to form a cube. Which letter is opposite to the face of letter F.

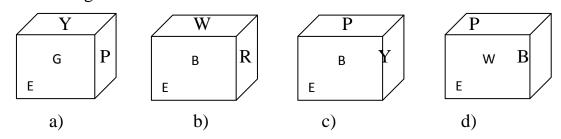


45. When the following figure is folded. By identify the faces, the side opposite to number 5.

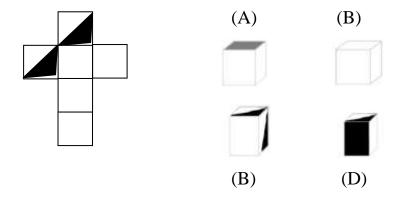




Which of the following cube images does not form a cube, when the above image is folded.



47. From the alternative answers, how does the appear when folded and figure below converted into a cube?



a) A and B b) only B c) B and D d) C and D

48. 'A' walks 10m towards east and 10m to the right. Every time turning to his left he walks 5m, 15m and 15m respectively. How far and in which direction is he now from his starting point?

(1) 10m - West (2) 10m - North

	(3) $5m - West$	(4) $5m - North$
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49. I am facing west. I turn  $45^{\circ}$  in the clockwise direction again  $180^{\circ}$  in clockwise direction and then turn  $270^{\circ}$  in anticlockwise direction. I which direction am I facing now?

(1) West (2) North – West (3) South (4) South – West

46.

- 50. Mr.X is facing West. He turns 45<sup>°</sup> in the anti clockwise direction and then 180<sup>°</sup> in the clockwise direction. Which direction is he facing now?
  (1) East (2) North West (c) North East (d) South West
- 51. I walked 10m towards the East of my house. Then turned North and walked 15m straight then turned West and walked 10m. How far am I from my house now?
  - (1) 35m (2) 5m (3) 15m (4) 25m
- 52. At present the age of the son is 10 years, 2 years age, his fathers was 4 times as old as him. What is the present age of his father?
  - (1) 32 (2) 34 (3) 36 (4) 40

tpdhf;fs; (vz;.53 – 54) Sakthi drives 2km towards south from his house and turns left and drives another 2 km. Then he again turns left and goes 6 km straight then turns right and drives for another one km to reach his bank.

### 53. How far is his bank from his house?

(1) 11 km (2) 7 km (3) 8 km (4) 5 km

54. In which direction is the bank from his house?

(1) North (2) North – East (3) East (4) North – West

55. Ragu walks 20km towards East. He turns left and walks 40km. He again turns left and walks 20km. Finally he mores 20 km after turning to the left. How far is he from his starting point?

(1) 20 km (2) 60 km (3) 50 km (d) 100 km

56. One morning after sunrise, vani was standing facing a pole. If the shadow of the pole fell exactly to her right. Which direction was she facing?

(1) North (2) South (3) East (d) West

- 57. A man is facing North and turns  $45^{\circ}$  in the clockwise direction and then  $180^{\circ}$  in the anticlockwise direction which direction is the facing now?
  - (1) North East (2) South East
  - (3) South West (4) North West
- 58. A man walked 30m towards East, took a right turn and walked 40m. At which direction is he from the starting point.
  - (1)North East (2) South East
  - (2) South West (4) North West
- 59. A girl is facing North first turns  $90^{\circ}$  in the clockwise direction and then  $120^{\circ}$  in the anticlockwise direction which direction is she facing now?
  - (1) South East (2) North East
  - (3) North West (4) South West
- 60. A man walks a distance of 3 kms towards North, then turns to his left and walks for 2 kms. He again turns left and walks for 3 kms. At this point he turns to his right and walks for 3 kms. At what distance is he from the starting point?
  - (1) 5 km (2) 2 km (3) 3 km (4) 1 km

# **Direction : (Question No.61-64)**

Based on the given information answer the question 1&4.

Akilan, Nilavan, valavan, Mukilan, Vimalan and Maran are sitting in a circle facing the centre.

- i. Mukilan is sitting opposite to Valavan and second to left of Vimalan
- ii. Nilavan is sitting opposite to Maran
- iii. Mukilan is sitting to the right of Akilan.
- iv. Nilavan is not sitting near Vimalan.
- 61) Who is left of Vimalan?
  - a) Maran b) Valavan c) Nilavan d) Akilan

62) Who is the right of the Valavan?

a) Vimalan b) Akilan c) Nilavan d) Mukilan

- 63) Who is sitting between Mukilan and Vimalan?a) Akilan b) Valavan c) Maran d) None
- 64) Who are sitting in the clockwise direction from Akilan?
  - a) Mukilan, Maran, Vimalan, Valavan, Nilavan
  - b) Nilavan, Valavan, Vimalan, Maran, Mukilan
  - c) Mukilan, Nilavan, Vimalan, Valavan, Maran
  - d) Maran, Valavan, Vimalan, Nilavan, Mukilan

Direction (Question No: 65-69) Read the information carefully and answer the following

Ramya, Oviya, Saranya, Kaviya and Iniya sit in a circle.

- i) Ramya is between Iniya and Saranya
- ii)Oviya is immediate left to Kaviya
- iii)Ramya is third to the right of Oviya
- iv) Kaviya is left to Saranya
- 65) Who is between Ramya and Oviya?
  - 1) Saranya 2) Kaviya 3) Iniya 4) None

66) Who is immediate right to Iniya?

- 1) Kaviya 2) Ramya 3) Saranya 4) Oviya
- 67) Who is between Oviya and Saranya?
  - 1) Iniya 2) Kaviya 3) Ramya 4) None
- 68) Who is second to the right of Ramya?
  - 1) Iniya 2) Oviya 3) Kaviya 4) Saranya
- 69) The sequence of persons from the left of Kaviya
  - 1) Saranya, Ramya, Iniya, Oviya
  - 2) Oviya, Iniya, Ramya, Saranya
  - 3) Saranya, Iniya, Ramya, Oviya
  - 4) Oviya, Ramya, Iniya, Saranya

Direction : (Question No : 70-74)

A, B, C, D, E and F are sitting in a Circulare table facing each one.

i) C is between A and E

ii)B is between D and F

iii) E and D sits opposite to each other

iv) F is immediate left to B.

70)Who is immediate right to C?

1) A 2) E 3) D 4) B

71)Who is second to the right of A?

1) D 2) B 3) F 4) E

72)Who is facing B?

1) A 2) E 3) C 4) D

73)Who is facing F?

1) D 2) C 3) B 4) A

74)Who is the immediate left of E?

1)F 2)C 3)A 4)D

Direction (Question No: 75-78) For the given situation, answer the questions 75-78

Six Persons A, B, C, D, E and F are sitting in a circle, B is between F and C; A is between E and D; F is to the left of D.

75) Who is between A and F?

1) D 2) B 3)E 4) C 76)Who is between B and C?

1) A 2) None 3) D 4) E

77) Who is right to E?

1) A 2) C 3) B 4) D

78) Who is left to E?

1) A 2) C 3) B 4) D

79)A,B,C,D,E and F are sitting in a closed circle facing the centre. A is facing D.C is between A and B F is between A and A, F is immediate left of E, Who is to the immediate left of B ?

1) A 2) C 3) D 4) E

80)P,Q,R,S and T are sitting in a circle facing the centre. R is immediate left of T.P. is between is S and T Who is to the immediate left of R?

1) P 2) Q 3) S 4) T

# **Direction : (Question No 81 – 83)**

Five students and their teacher are sitting in a circular table at an equal distant. Read the following instructions and answer the questions.

- a) Ram is sitting opposite to Rahim and at two places right of Rahul
- b) Robin is exactly opposite to Rahul and immediate left to Rohan

c) Ramesh, their teacher is also sitting at the table

81) Who is the only person sitting between Ram and Rohan

1) Robin2) Ramesh3) Rahul4) Rahim

82)Ram is sitting to the

a) Left of Ramesh b) right of Robin 3) Leftof Robin 4) Right of Rahim

83) The angle subtended by Ramesh and Rahim at the Centre of the table is

1)  $60^{\circ}$  2)  $120^{\circ}$  3)  $90^{\circ}$  4)  $180^{\circ}$ 

### **Direction : Question No 88 – 88**

Read the following information carefully and answer the questions given below

I. Six persons A,B,C,D,E and f are sitting in two rows three in each .

II. D is a diagnolaly opposite to C.

III. B is opposite to E.

IV. E is sitting between A and C.

V. F is to the right of B.

84. Which of the following are sitting diagonally opposite to each, other than D and C?

1) B, C (2) A, F (3) E,D (4) A, D

85. Who is facing C?

1) A (2) E (3) F (4) D

86. Which of the following are in one of the two rows?

1) A, E, C (2) D, B, C (3) F, E, C (4) A, E, B

87. Which of the following are in same row?

1) D and F (2) B and E (3) D and A (4) F and C

88. If B and E are interchanging their positions, who is the right of E?

1) A (2) C (3) D (4) F

Direction : (Question No: 89 – 90)

There are five friends A, B, C, D and E sitting in a row A is to the right of B and E is to theleft of C and right of A. B is to the right of D.

89. Who is in the Middle?

1) A (2) B (3) D (4) E

90. Who is in second position from left?

1) E (2) B (3) C (4) D