Directions (1-5) Answer the following questions on the basis of the alphabets given below:

> ABCDEFGHIJKLMNOPQRSTU VWXYZ

1. Which letter the 9th to the right of 15th letter from left?

(a) Y (b) X

(c) W (d) T

- 2. In first and second letter change their positions and so do the third and fourth letter, the fifth and sixth letter and so on, which letter will be seventh letter to the right of 11th letter from left?
  - (a) Q (b) P
  - (c) S (d) R
- 3. If the first half of the alphabets were written in the reverse order, which will be the 6th letter to the left of the 10th letter from left
  - (a) K (b) J (d) I

(c) D

- 4. Three of the following four letter combinations are alike in regard to their positions in the alphabets and hence from a group. Which is the one that does not belong to that group?
  - (a) EA (b) TP
- (d) NJ (c) MJ 5. Three of the following four letter combinations are alike in regard to their positions in the alphabets and hence form a group. Which is the one that does not belong to this group?

	-
(a) BY	(b) EV

(c) GT (d) CU

Directions (6-10) In questions, out of the four alternatives, select the one which when substituted for the question mark "?" maintains the same relationship on both sides of the sign (: :).

6.	Himalayan	:	Range :: Pacific : ?	
----	-----------	---	----------------------	--

(a) Sea (b) 1
---------------

(c) .	Rive	er		(d) (	Ocean	

- 7. Bicycle : Mechanical : : Steam engine : ?
  - (a) Heat (b) Temperature
  - (c) Thermal (d) Celsius
- 8. Second : Time : : Gram : ?
  - (a) Length (b) Energy (c) Mass (d) Space

9. Abrupt : Sudden : : Accident : ?	
(a) Calamity	(b) Safety
(c) Mishap	(d) Incident
10. USA : West : :	India : ?
(a) South	(b) North
(c) East	(d) North West
irections (11-15)	In each of the following a

g ques-D tions, select one of the four alternatives which completes the sequence.

11.	BDGKP	
	(a) VC	(b) UZ
	(c) UB	(d) VB
12.	ACFHKM – –	
	(a) OQ	(b) PR
	(c) QS	(d) OR
13.	XZYUWVRTS	
	(a) OPQ	(b) NOP
	(c) OQP	(d) NPO
14.	ZACXWDUF	
	(a) TGIR	(b) VFHS
	(c) TGHS	(d) VFIR
15.	CADGEHKIL	
	(a) OMP	(b) NMP
	(c) ONM	(d) NMO

- 16. In some code language 'Tendularkar' is written as 'ndetaularkr'. What would be the code for 'Rashtrapati' in that language? (a) sharatrtiap (b) shraartitpa
  - (c) sharatrtipa (d) sharartitap
- 17. Five girls are sitting in a row. Pratima is on the right of Mona. Nidhi is on the left of Mona but is on the right of Natasha. Pratima is on the left of Anu. The girl on the extreme left is (a) Anu. (b) Natasha.
  - (d) Nidhi. (c) Pratima.
- 18. Two persons starting from the same point walk in opposite directions, each travelling 15 km. Then one of them turns to his left and walks 15 km, while the other turns to his right and walks 15 km. How far are they from each other now? (a) 15 km (b) 30 km (c) 45 km (d) 60 km
- 19. Read the following statements and answer the question at the end.

(a) Kunal can play cricket but not tennis.

- (b) Rohit can play badminton but not hockey.
- (c) Mukesh can play hockey but not cricket.

(d) Gaurav can play both cricket and hockey. If every person can play two games each, who would be like Gaurav?

(a) Kunal (b) Rohit

(c) Mukesh (d) None of these

Directions (20-24) In these questions there is a definite relationship between the two groups of letters to the left of the sign (: :). Out of the four responses select one and substitute it for the mark (?) Maintain the same relationship in two sets of letters on both sides of the sign (: :).

20.	JKLM : LJMK : : TUV	/W:?
	(a) UTWN	(b) VTWU
	(c) VUTW	(d) VTUW
21.	HGIJ: GHHK : : POQ	R:?
	(a) OPPS	(b) QPPT
	(c) OQQS	(d) QOOS
22.	TSQR : XWUV : : ED	BC : : ?
	(a) HIFG	(b) IFGH
	(c) FGIH	(d) IHFG
23.	CFGI: RUTX:: KM	NO : ?
	(a) PMNL	(b) LNMP
	(c) LMNP	(d) PNML
24.	SAFE : TCII : : CLAI	<b>P</b> :?
	(a) DMCR	(b) DMET
	(c) DNES	(d) DNDT

Directions (25-29) Given below are some words in Column I and their equivalent codes in Column II. The letters in the code are not necessarily in the same order as those in the words they stand for. Each letter has only one code. Study the two columns carefully and answer the following questions.

	Column I	Column II
	REAL	uhkc
	IDEA	klug
	SELF	kzxh
	LOAD	uhjl
	FINAL	zupgh
25.	Identify the code f	or word 'DARN'.
	(a) gchz	(b) <i>gupc</i>
	(c) <i>ucpl</i>	(d) uchz
26.	Identify the code f	or the word 'NOISE'.
	(a) <i>xkgjp</i>	(b) <i>ujlzh</i>

(u) Mapp	(0) uji2n
(c) <i>pluxk</i>	(d) ghuxk

27.	Identify the code for	word 'ADORN'.
	(a) <i>ulicp</i>	(b) <i>clipu</i>

- (c) uhlzk
  (d) jzlup
  28. Identify the code for the word 'ORDINAL'.
  (a) khugclj
  (b) ujghzkx
- (c) jkhgzuc
  (d) pgchlju
  29. Identify the code for the word 'SALINE'.
  (a) zxhpgk
  (b) pghkux
  (c) uzghkz
  (d) xukhgz

*Directions (30-34)* These questions are based on the information given below:

Six persons P, Q, R, S, T, and U were playing a game of cards. P's father, uncle, and mother were in one group. There were two women playing. S got more points than T but less than U. Q, who is the mother of P, got more points than her husband.The niece of T got lowest points. The father of P got more points than U, but could not win the game.

30. Who won the game?

	(a) P	(b) Q
	(c) R	(d) S
31.	Who got the lowest	points?
	(a) P	(b) Q
	(c) U	(d) S
32.	Who is the husband	of Q?
	(a) S	(b) R

- (c) T (d) U
- 33. Q was one of the ladies. Who was the other lady?

(a) P	(b) S
() <b>D</b>	(1) 7

- (c) R (d) T
- 34. Who stood second in the game?
  - (a) P (b) Q
  - (c) R (d) T

*Directions* (35-39) In each of the following questions the items are depicted by set of circles on the basis of relationship among items. Match the right set of items with corresponding set of circles. The size of circles does not matter.

35. India : Earth : Jupiter



2







(c)



(d)



39. President : Politician: Scientist



*Directions (40-42)* In each of the following questions some symbols have been used to denote specific relationship. Read these symbols and their relationship carefully before answering the questions.

- $\alpha$  means 'is greater than'
- $\beta$  means 'is smaller than'
- $\gamma$  means 'is equal to;
- $\theta$  means 'is not equal to'
- 40. If A  $\alpha$  B, D  $\beta$  C and B  $\gamma$  C, then (a) B  $\alpha$  C (b) A  $\beta$  B

	(a) D u C	(U) A D D
	(c) A α C	(d) D γ A
41.	If D $\alpha$ C, A $\beta$ B and C	αΒ
	(a) $A \gamma D$	(b) B α D
	(c) $A \gamma C$	(d) $A\beta$ D
42.	If A $\theta$ D, A $\beta$ C and C	γD

•	•
(a) D β A	(b) A β D
(c) A y D	(d) C θ D

*Directions (43-47)* These questions are based on information given below. Read the information carefully and answer the questions.

I. There are seven floors in a building occupied by A, B, C, D, E, F and G (not in the same order as given

- II. F and G live on the two extremes.
- III. B is one floor below D but two floors above G
- IV. C lives between A and F
- V. D lives between A and B
- VI. E lives one floor above G
- 43. Who lives on the top-most floor? (a) F (b) G
- (c) C
  (d) D
  (d) D
  (e) G
  (f) G
  (f) G
  (g) C
  (h) D
  (g) G
  (h) D
  (h) D
  (h) C
  <
- (c) B (d) E 46. A lives between (a) D and B (b) D and E
  - (c) C and D (d) B and G
- 47. Who lives below F? (a) C (b) A
  - (a) C (b) A (c) D (d) B

Directions (48-49) These questions are based on the following statements.

- I. P + Q mean P is the mother of Q
- II.  $P \div Q$  mean P is the father of Q
- III. P Q mean P is the sister of Q
- 48. Which of the following represents "M is the daughter of R "?
  - (a)  $\mathbf{R} \div \mathbf{M} + \mathbf{N}$  (b)  $\mathbf{R} + \mathbf{N} \div \mathbf{M}$
  - (c)  $R M \div N$  (d) None of these Which of the following constants (2.1)
- 49. Which of the following represents "M is the sister of R"?
  - (a)  $\mathbf{R} \div \mathbf{M} + \mathbf{N}$  (b)  $\mathbf{R} + \mathbf{N} \div \mathbf{M}$
  - (c) R M N (d) R M + N
- 50. Rama told Manju : This girl is the youngest daughter of the brother-in-law of my friend's mother. How is the girl related to Rama's friend?
  - (a) Cousin (b) Daughter
  - (c) Niece (d) Friend
- 51. In a row of six persons, D and C are immediate neighbours of E. B is a neighbour of A only. A is fourth from F. Who are on the two end points?
  (a) F and B
  (b) B and D
  (c) C and A
  (d) F and C
- 52. B is twice as old as A but twice younger than F. C is half the age of A but is twice older than D. Which two persons form the pair of the oldest and youngest?

(a) F and D	(b) B and D
(c) C and A	(d) F and C

- *Directions* (53-57) In each of the following questions there are four items. You have to strike the odd man out.
- 53. (a) SouthAmerica (b) SouthAfrica (c) Asia (d) Australia
  54. (a) Pacific (b) Indian (c) Atlantic (d) Caspian
  55. (a) Football (b) Volleyball (c) Basketball (d) Cricket
  56. (a) Mother Teresa (b) Rabindranath Tagore
  - (c) Gandhiji
  - (d) Amartya Sen
- 57. (a) Onion (b) Tomato (c) Potato (d) Garlic.
- 58. In the following series how many digits are there which have an odd number immediately preceding it and an even number immediately following it:

27253489716532984358731

- (a) 5 (b) 6
- (c) 4 (d) 3
- 59. If + means , means  $\times$  ,  $\times$  means  $\div$  and  $\div$  means +. Which of the following is the value of  $14 \times 2 + 2 \div 3 5$ ?

(a) 19	(b) 20
(c) 22	(d) 23

Directions (60-69) In the following questions, numbers in the cells of each figure follow some rule. Identify the number which when substituted for the question mark (?) maintains that rule. Encircle its serial number on the answer sheet.

(b) 9

(d) 11

60.	10	7	8	
	6	12	10	
	?	6	10	
	(a) 7	7		
61.			- /	1







71. If PQ means 45, QR mean 56, QS mean 58, then RPSQ is
(a) 6845
(b) 6485

· · · ·		
(c) 5648	(d)	5684
(a) 0845	(D)	0485

72. In a certain language' Saye tur Ahea kip' stands for the statement 'Hema is very beautiful', 'Naye Ahter kip Ane tur' stands for' Daughter Neena is very smart', 'Din Saye Naye tur Mir' Stands for 'Rima is beautiful and smart', and 'tylaq deed din Naye tur Saye' stands for 'Beauty and Smart are qualities admired'. Which of the following words stands for 'Hema'?

(a)	Saye	(b)	Ahea
-----	------	-----	------

(c) Kip (d) Ahter

*Directions (73-77)* In each of the following questions some symbols have been used to denote specific relationships. Find the relationship which can definitely be deduced from the two relationships given at the top.

- $\alpha$  stands for 'greater than'
- $\beta$  stands for 'less than'
- $\gamma$  stands for 'not greater than'
- \$ stands for 'not less than'
- $\theta$  stands for 'equal to'

73.	If $2x \alpha 4y$ and $4x \theta 6z$ , t	then
	(a) $z \theta y$	(b) <i>z</i> \$ <i>y</i>
	(c) $z \beta y$	(d) <i>z</i> α <i>y</i>
74.	If $2y \ \theta \ 4z$ and $3z \ y x$ ,	then
	(a) $y \beta x$	(b) <i>x</i> θ <i>y</i>
	(c) $y \alpha x$	(d) $y \$ x$
75.	If $3x  \theta \ 4z \text{ and } y \ a \ 4z$ ,	then
	(a) $x \theta y$	(b) $3x \theta y$
	(c) $3x \beta y$	(d) $3x \alpha y$
76.	If $4x - y$ and $3y - 2c$ , the	ien
	(a) $6x \theta 2c$	(b) $6x \beta c$
	(c) $4x \alpha c$	(d) 6 <i>x</i> α <i>c</i>
77.	If $2y \ \theta z$ and $2y - 3z$ , the	nen
	(a) $3y \theta x$	(b) $3y \beta x$

(c)  $3y \alpha x$ 

*Directions (78-79)* In the following questions a figure is followed by its four mirror images. Select the *correct* image.

(d) 3*y* \$ *x* 



80. A square transparent paper with a line pattern is shown below. When the paper is folder on the dotted line, how would the line pattern appear in the folded form?



Directions (81-89) In each of the following questions, you have to find which one of the four figures given will come after given Problem Figures so that the given pattern of series is continued?

MAT-1.indd 5

81. Problem Figures



## 86. Problem Figures

$\square$	Х	X	=	
x =				X =
	=	= △	Х	

**Answer Figures** 

$\triangle$	Х	Х		=	Х		
	=		=		$\bigtriangleup$	X △	=
(;	a)	(	(b)	1	(c)	(d	l)

87. Problem Figures



Answer Figures



88. Problem Figures



*Directions (90-95)* In each of the following questions the second figure in the first unit of the Problem Figures bears a certain relationship to the first figure. Similarly, one of the figures in the Answer Figures bears the same relationship to the first figure in the second unit. You are, therefore, to the locate the figure which would fill up the blank space.

(c)

(d)

(b)

(a)





**Answer Figures** 



94. Problem Figures



*Directions* (96-100) In each of the following questions in three out of four pairs of figures, the first element is related to the second element in the same particular manner. Spot out the pair in which this relationship does *not* exist:



		Ansv	vers				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	)       4. (c)         )       14. (a)         )       24. (d)         )       34. (c)         )       34. (c)         )       54. (d)         )       54. (d)         )       54. (d)         )       54. (d)         )       64. (d)         )       74. (a)         )       84. (b)	5. (d) 15. (a) 25. (c) 35. (c) 45. (d) 55. (d) 65. (b) 75. (c) 85. (d)	6. (d) 16. (a) 26. (a) 36. (c) 46. (c) 56. (c) 66. (d) 76. (d) 86. (d)	7. (c) 17. (b) 27. (a) 37. (d) 47. (a) 57. (b) 67. (c) 77. (b) 87. (a)	8. (c) 18. (b) 28. (d) 38. (d) 48. (a) 58. (b) 68. (d) 78. (a) 88. (d)	9. (c) 19. (a) 29. (b) 39. (b) 49. (c) 59. (b) 69. (c) 79. (c) 89. (d)	10. (c) 20. (b) 30. (b) 40. (c) 50. (a) 60. (a) 70. (d) 80. (c) 90. (b)