## NATIONAL MANAGEMENT COLLEGE, THUDUPATHI.

## PAPER – 3: BUSINESS MATHEMATICS, LOGICAL REASONING AND STATISTICS MONTHLY TEST 7

**Maximum Marks: 50** 

Time Allowed: 1 hour

DATE - 23.02.23

ANSWER ALL						
Again he turne	ted walking 2km straig ed right and walked 1ki n which direction did G B) West	m to reach his house. If opal start walking from	his house is south			
2) . Five boys A , B, C, F, E, are sitting in a park in a circle. A facing South-west, D is facing Southeast, 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			
3) A child goes 50 meter towards South and then turning to his right, he goes 50 meter. Then, turning to his left, he goes 30 meter. Again he turns to his left and goes 50 meter. How far is he from his initial position?						
(a) 30 m	(b) 40 m	(c) 50 m	(d) 80 m			
4) If A×B means A is to the south of B: A+B means A is to the north of B; A%B means A is to the east of B; A $-$ B means A is to the west of B; then in P % Q + R- S, S is in which direction with repect to Q?						
a) south east	b) north east	c) north	west d) so	outh west		
5) one morning after sunrise Nivedita and Niharika were talking to each other face to face at Dalphin crossing. If Niharika"s Shadow was exactly to the right of nivedita, which direction Niharika was facing?						
a)North	b) south	c) East	d)west			

a) South-W	est	b)West		c)South	d)East-	-South
facing the cer Partha or Ras	ntre. Nitish is t	hird to the rigl second to the	nt of Amit	who is not an	re sitting arour immediate nei ird to the left o	ghbor of eith
What is Sidh	u position with	respect to Ke	shab?			
a) second to	the right		b) fifth	to the right		
c) fourth to t	he right		d) seco	nd to the left		
•	ollowing inforn R, S, T and U ar		•			Six
All the sides o	of the hexagon	, so formed ar	e of same	length.		
I . P is not ad	jacent to Q or	R.				
II. S is not ad	jacent to R or <sup>-</sup>	Γ.				
III.Q and R ar	e adjacent.					
IV . U is in the	e middle of S a	nd R.				
Who is at the	same distance	e from S as T is	from S?			
a)Q	b)R		c)S		d)U	
'D'. 'A' is sittir	•	F' is sitting rig	_	_	eft to 'B' but or I' is sitting left t	_

10) Read the following information to answer the given questions:					
1. Pepper Potts, Hulk, Ironman, Hawkeye, Thor, Loki and Black Widow are sitting in a circle.					
2. Pepper Potts, Hulk, Ironman, Hawkeye, Loki and Black Widow are sitting at equal distances from each other.					
3. Ironman is sitting t	wo places right of Loki	, who is sitting	one pla	ce right of Hawkeye.	
4. Pepper Potts forms	an angle of 90° from	Thor and an an	gle of 1	20° from Hulk.	
5. Hulk is just opposit	e Black Widow and is	sitting on the le	eft of Th	or.	
The angle between Tl	nor and Hulk in the clo	ckwise directio	n is?		
a)150°	b) 180°	c) 210°		d) None of these	
11)If red is coded as 6 (a) 9207716	5720 then green would (b) 167129	be coded as (c) 1677209		(d) 1672091	
12) Find the odd man (a) January	out (b) April	(c) July	(d) Oct	ober	
	language " EXAM" is	coded as 39 "	' PAPER	" is coded at 51 then PASS is	
coded as (a) 39	(b) 47	(c) 489		(d) 51	
14) Find the odd mar (a) 5	n out of the series 5, 10 (b) 10	0, 17, 25 (c) 17		(d) 25	
15) Mohan Starts from Point A and walks 1 km towards south, turns left and walks 1 km. Then					
he turns again and wa (a) East	alks 1 km. Now he is fa (b) West	cing (c) North		(d) South-West	
16) 10, 18, 28, 40, 54, (a) 70	.?, 88 (b) 86	(c) 87		(d) 98	
17) 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 starting point?  (a) East  (b) South  (c) West  (d) North					
18) 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) Sou	ıth	

language?	in language MADRAS	is coded as NBESBT	Γ, how BOMBAY is coded in that
(a) CPNCBX	(b) CPNCBZ	(c) CPOCBZ	(d) CQOCBZ
20) 18, 24, 21, 2 (a) 33	7,?, 30, 27 (b) 30	(c) 24	(d) 21
•	T = 34, then how much	is CAR?	
(a) 21	(b) 22	(c) 25	(d) 28
22)If in a certain (a) 2458	language NAME is wr (b) 5842	itten as 4258 then wha (c) 8524	at is coded as MEAN? (d) 5824
23)1, 4, 9, 16, 2	4. 25. 36		
(a) 9	(b) 24	(c) 25	(d) 36
(a) East	(b) West	(c) North	(d) South
25) Given x = 2y	+4 and y=kx+6 are the		(d) South x on y and y on x respectively. Find
25) Given x = 2y the value of k, if	+4 and y=kx+6 are the value of r is 0.5		. ,
25) Given x = 2y the value of k, if a)1/8 b	+4 and y=kx+6 are the value of r is 0.5	lines of regression of a	. ,
25) Given x = 2y the value of k, if a)1/8 b 26) If coefficient	+4 and y=kx+6 are the value of r is 0.5	lines of regression of a )1/2 d)1/4 hen	. ,
25) Given x = 2y the value of k, if a)1/8 b 26) If coefficient a) Regression lin	+4 and y=kx+6 are the value of r is 0.5  1)1/3 c  1 of correlation $r_{xy} = 1$ t	lines of regression of a )1/2 d)1/4 hen	x on y and y on x respectively. Find
25) Given x = 2y the value of k, if a)1/8 b 26) If coefficient a) Regression lin c)b <sub>yx</sub> = 1/b <sub>xy</sub> 27) If a statistics the mathematic	+4 and y=kx+6 are the value of r is 0.5  1)1/3 c  c of correlation r <sub>xy</sub> = 1 the secome identical sprofessor tells his class stest, and all those the	lines of regression of a  1/2 d)1/4  hen  b) Perfect linear  d) all of the aboves, "All those who got at got 100 on mathem	x on y and y on x respectively. Find

28) the follow	28) the following results relate to bivariate data on (x,y):						
$\sum xy=414$ , $\sum x=120$ , $\sum y=90$ , $\sum y^2=300$ , $\sum x^2=600$ , n =30 $$ . Later or , it was known that two pairs of observation ( 12, 11 ) and (6,8) were wrongly taken, the correct pairs of observations being ( 10, 9 ) and (8 , 10 ) . The corrected value of the correlation coefficient is							
a) 0.752	b) 0.76	8	c)0.846	d) 0.9	53		
29) when r=0	then cov (x,y) i	s equal to					
a)+1	b)-1	c)0	С	d)none			
•			•	was 313 with 1940 a factory be Rs. 160/-	as the base year. The their real wages is		
(a) R:	s. 48.40	(b) Rs. 5	1.12				
(c) R	s. 40.30	(d) Non	e of these				
31) . Purchasi	31) . Purchasing power of money is						
(a) Reciprocal of the Price Index Number. (b) Equal to price index number.							
(c) Unequal to	(c) Unequal to price index number. (d) None of these.						
32) Which of	the following m	ethods is use	ed to calcula	ate the Consumer P	rice Index?		
a) Laspeyres	s formula	b)Fisher's fo	ormula c	c)Palgrave's formula	d)None of the above		
33) Index nur	nber for base ye	ar is always	considered	as			
a. 100	b.101		c. 201	d. 10	000		
34) Which is the best suitable measure of central tendency to construct index number?							
a. A.M.	b. G. <b>ľ</b>	M	c. H.M	d. N	1edian		
35) . The prices of commodity in the year 2015 and 2020 were 25 and 30 respectively taking 2015 as base year the price relative is							
(a) 109.8	(b) 110	).25	(c) 113.	25	(d) 83.33		
36) Ravi left home and cycled 10 km towards South, then turned right and cycled 5 km and then again turned right and cycled 10 km. After this he turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?							
A. 10 km	B. 15 km	C. 20	) km	D. 25 km			

37) If A x B means A is to the south of B; A + B means A is to the north of B; A $\%$ B means A is to the east of B; A - B means A is to the west of B; then in P $\%$ Q + R - S, S is in which direction with respect to Q?							
A. South-West	t	B. South-East		C. North-East		D. North-West	
38) Village Q is to the North of the village P. The village R is in the East of Village Q. The village S is to the left of the village P. In which direction is the village S with respect to village R?							
A. West		B. South-West	<u>-</u>	C. Sout	th	D. North-W	est
39) Two regre x is	ssion lir	nes are x + 2y –	5 = 0 &	2x + 3Y – 8 =0.	. If varia	nce of y is 4 then va	riance of
a) 12	b) 16	c) 3 / 1	.6	d) 16 /	3		
40). For a perf	ectly c	orrelated varial	oles, b <sub>xy</sub>	$\tau$ = -0.5 then the	e value (	of b <sub>yx</sub> is	
a) 2	b) -2	c) ±5		d) $\pm\sqrt{2}$			
41`). If the plotted points in a scatter diagram are evenly distributed, then the correlation is							
(a) Zero		(b) Negative		(c) Positive		(d) (a) or (b)	
42. In calculating the Karl Pearson's coefficient of correlation it is necessary that the data should be of numerical measurements. The statement is							
(a) valid		(b) not valid		(c) both		(d) none	
43. Rank correlation coefficient lies between							
(a) 0 to 1		(b) -1 to +1 in	clusive	of these value			
(c) -1 to 0		(d) both					
44. Under Algebraic Method we get ———— linear equations .							
(a) one	(b) tw	0	(c) thre	ee	(d) nor	ne.	
45) The Bowley's Price index number is represented in terms of :							
(a) A.M. of Laspeyre's and Paasche's Price index number.							
(b) G.M. of Laspeyre's and Paasche's Price index number.							
(c) A.M. of Laspeyre's and Walsh's price index number.							

(d) None of these						
46. The quantity Index number using Fisher's formula satisfies :						
(a) Unit Test		(b) Factor Reversal Test.				
(c) Circular Test.		(d) Time Reversal Test.				
47. Purchasing Power	of Money is					
(a) Reciprocal of price	index number.	(b) Equal to price index number.				
(c) Unequal to price index number.		(d) None of these.				
48. The price level of a country in a certain year has increased 25% over the base period. The index number is						
(a) 25	(b) 125	(c) 225	(d) 2500			
49. Consumer Price index number for the year 1957 was 313 with 1940 as the base year 96 the Average Monthly wages in 1957 of the workers into factory be RS 160/- their real wages is						
(a) 48.40 (b) 51.12		(c) 40.30	(d) None of these.			
50. ) Pointing to a photograph, a Man said "His Mother husband's sister is my aunt". Then what is relation between a man and he?						
(a) Son (b) Uncle		(c) Nephew	(d) Brother			