				PREVIOUS
				PAPER
	Ass	istant	Loco I	Pilot
		KOI	КАТА	
	1			
		Sased of	n Memor	·y
1.	Manometer is u	ised to measure-		
	1) Pressure	2) Gravity	3) Humidity	4) Volume
2.	Calorie is the u	nit of-		
	1) Temperature	2) Heat	3) Power	4) Energy
3.	A stratight rod	partially immers	ed in water seems l	bent. Its reason is-
	1) Refraction			
	2) Reflection			
	3) Different tem	perature of water	levels	
	4) High pressure	e of water at the bo	ottom	
4.	Which law stat	es that a liquid in	side a closed system	n exerts equal pressure
	in all directions	\$?		
	1) Boyle's law		2) Pascal's law	
	3) Graham's law	7	4) Gay - Lussac	's law
5.	An electro-mag	gnet is made of-		
	1) Soft iron	2) Copper	3) Hard Steel	4) Zinc
6.	Only two elem	ents are in liquid	state at room temp	perature. They are
	1) Bromine, Iod	ine	2) Hafnium, Me	ercury
	3) Bromine, Me	rcury	4) None of these	2
7.	A stone was dr	opped freely in a	a river flowing dov	wn a bridge. The stone
	takes 2 seconds	in touching the v	water surface. The	height of the bridge is-
	1) 9.8 m	2) 19.6 m	3) 39.2 m	4) Data inadequate
8.	1 micron is equ	al to-		
	1) 0.1 mm	2) 0.01 mm	3) 0.001 mm	4) 0.0001 mm
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9.	The most abundant gas found in earth's atmosphere is-					
	1) Oxygen		2) Carbon dioxid	de		
	3) Hydrogen		4) None of these			
10.	The Chemical f	formula of Caustic	Soda is-			
	1) Na(OH) ₂	2) Na ₂ CO ₃	3) NaOH	4) NaC <i>l</i>		
11.	Air cooler will	be most effective in	n-			
	1) Kolkata	2) Guwahati	3) Puri	4) New Delhi		
12.	A certain dista	nce was covered at	a certain speed. I	f half of the distance is		
	covered in twic	e time, the ratio be	etween new speed	and original speed is-		
	1) 1 : 2	2) 1 : 4	3) 2 : 1	4) 4 : 1		
13.	The number of	electrons in Na ⁺ is	S-			
	1) 11	2) 10	3) 12	4) 13		
14.	The most electr	o negative elemen	t in the following i	IS-		
	1) F	2) C <i>l</i>	3) Br	4) I		
15.	Rh factor is rel	ated to-				
	1) Blood Transfusion2) Atmospheric Pressure					
	3) Blood Pressu	re	4) Space			
16.	A force of 50N	A force of 50N acts on a body and moves the body on a straight path to a				
	distance of 4 m	etres. Find the wo	rk done if the forc	e acts at an angle of 60		
	with horizontal	•	2) 101	1) 2001		
18	1) 100J	2) 300J	3) 10J	4) 200J		
17.	The length of p	endulum is reduce	ed to one fourth. It	ts time period will be-		
10	1) Twice	2) Eight times	3) Half	4) None of these		
18.	An element wh	uch changes the r	ate of a chemical	reaction but does not		
	1) Electrolyte	2) Catalyst	2) Lubricont	1) Litmus		
10	1) Electrolyte	2) Catalyst	3) Lubricant	4) Littlinus		
19.	At constant temperature the volume of a given mass of a gas is inversely					
	1) Charles' Law		2) Boyle's Law			
	3) Avogadro's I	aw	4) Dalton's Law			
20.	The resistance	of an electric circu	it/ implement is m	easured by-		
	1) Meggar	2) Ammeter	3) Ohm-meter	4) None of these		
	-/00					

21.	Solenoid is a-					
	1) Shaft		2) Hollow tube			
	3) Tube on which	h wire is coiled	4) Cell			
22.	At a uniform ac	cleration which of	f the motion equation	ons is correct-		
	1) v = u - at		2) $v = u + at$			
	3) s = ut $-\frac{1}{2}$ at	2	4) $u = v + at$			
23.	A body starts fi	rom rest at an acc	eleration of 2m/sec	*2. The distance		
	ered by the bod	y in 2 seconds is-				
	1) 2 m	2) 8 m	3) 4 m	4) 1 m		
24.	The c.g.s. unit o	of density is-				
	1) gm/cm ³	2) gm/cm ²	3) gm/cm	4) kg/cm ³		
25.	When a body is	partially of fully i	mmersed in a liqui	d it experiences		
	in its weight that is equal to the weight of liquid displaced by its imme					
	part. This principle is of-					
	1) Boyle	2) Pascal	3) Terricelli	4) Archimedes		
26.	The unit of force in cgs unit is-					
	1) Newton	2) Dyne	3) ms ⁻²	4) K		
27.	Humidity in the atmosphere is measured by-					
	1) Hydrometer	2) Hygrometer	3) Manometer	4) Pyrometer		
28.	Density of pure water at 4°C is-					
	1) 100 kg./m ²	2) 1000 kg/m ³	3) 1000 gm/cm ³	4) 1000 gm/cm		
29.	Momentum, mass and velocity are related as-					
	1) Momentum	= mass/velo	city			
	2) Momentum	$=$ mass \times ve	locity			
	3) Velocity	$=$ mass \times me	omentum			
	4) Mass	= momentur	$m \times velocity$			
30.	1 second is part of a mean solar day.					
	1) $\frac{1}{84600}$	2) $\frac{1}{85000}$	3) $\frac{1}{86400}$	4) $\frac{1}{80000}$		
31.	The unit of You	ng's Modulus of E	lasticity in MKS sy	vstem is-		
	1) Nm ⁻²	2) N/cm ²	3) Dynes/cm	4) Dynes/cm ²		

32. The property of a metal which reduces its strength when reversal of stress is called- 1) Fatigue2) Creep3) Resilience4) E	it is subjected to Elasticity				
reversal of stress is called-1) Fatigue2) Creep3) Resilience4) H	Elasticity				
1) Fatigue2) Creep3) Resilience4) H	Elasticity				
33. Melting point of cast iron (in °C) is in the range of-					
1) 1150-1300 2) 1800-1900 3) 1450-1600 4) 6	600-700				
34. The buckling loads depend upon-					
1) slenderness ratio2) cross-sectional area	l				
3) modulus of elasticity4) All of the above					
35. 'Anvil' is used in the work of-					
1) Forging2) Welding3) Fitting4) M	Machining				
36. In an electrical circuit resistance is 55 Ohms and current	4 amperes. What				
is voltage?					
1) 220V 2) 13.75V 3) 0 4) 1	110V				
37. Bell metal contains Cu and					
1) A <i>l</i> 2) Sn 3) Zn 4) N	Ni				
38. To produce flat surfaces by a reciprocating type of maching	ine tool is called-				
1) Lathe2) Shaper3) Drill4) M	Milling				
39. Which is the most elastic material?					
1) Rubber2) Timber3) Plastic4) S	Steel				
40. Which of the following has the highest Poisson's ratio?					
1) Steel2) Copper3) Aluminium4) F	Rubber				
41. D.C. Generator works on the basis of-					
1) Faraday's law of e.m.induction 2) Ohm's law					
3) Lenz's law 4) Newton's law					
42. When x = 2, the value of $(0.5 - \frac{1}{x}) = ?$	When x = 2, the value of $\left(0.5 - \frac{1}{x}\right) = ?$				
1) 1.5 2) -1.5 3) 0.5 4) 0	0				
43. What number has to be added to the terms of 3 : 5 to mak	ke the ratio 5 : 6?				
1) 13 2) 7 3) 12 4) 6	6				
44 Find the value of $\begin{bmatrix} 8 & 2 \\ 8 & -2 \end{bmatrix}$					
44. Find the value of $\left\{8 - 2 \times \frac{8}{8+2} \times 5\right\}$					
1) 3 2) 2 3) 6 4) 4	4				

45.	The sum of three consecutive numbers is 18; find the sum of the next three					
	consecutive nu	mbers?				
	1) 24	2) 30	3) 27	4) 35		
46.	$log_5 125 = x; x$	= ?				
	1) 25	2) 3	3) 2	4) 5		
		1 (.	1) . 5			
47.	Find the value	of x in $(2^2) \frac{1}{3} (2^2)$	$(x + \frac{1}{2}) = 2^{-5}$			
	1) -4	2) +4	3) -2	4) +2		
48.	A two digit nur	nber is 7 times the	e sum of its two dig	gits. The number that is		
	formed by reve	ersing its digits is	18 less than the or	iginal number. What is		
	the number?					
	1) 52	2) 42	3) 62	4) 27		
49.	A sum of mone	y becomes Rs. 20,9	925 in 2 years and l	Rs. 24,412.50 in 5 years.		
	Find the rate o	f interest and the	sum of money			
	1) 8%, Rs.17,560 2) 6.25%, Rs.18,6			500		
	3) 7%, Rs.18,000 4) 6.75%, Rs.17,775					
50	Find the sum f	nation which has				
50.	Find the Sum I	raction which bec	$\frac{1}{2}$ when define	ommator is increased		
	by 4; the same fraction becomes $\frac{1}{8}$ when the numerator is reduced by 5.					
	$1)\frac{3}{5}$	2) $\frac{3}{8}$	3) $\frac{6}{8}$	4) $\frac{6}{12}$		
51.	Lux is the unit	of				
	1) magnetic flux	X	2) frequency			
	3) sound intensi	ty	4) level of illum	nination		
52.	$\mathbf{MISTAKE} = 9'$	765412, NAKED =	= 84123 then STAI	N = ?		
	1) 65478	2) 98175	3) 89483	4) 68194		
53.	$\mathbf{GAMBLE} = \mathbf{IC}$	CODNG; FLOWE	$\mathbf{CR} = \mathbf{?}$			
	1) GMPXFS	2) HNQYGT	3) GMPVDS	4) None of these		
54.	Ram started from his house and walked 2km North, then 3 km west and finally 6 km south. How far is he from his house?					
	1) 5 km	2) 11 km	3) 4 km	4) 7 km		
55.	Arrange the f	ollowing words i	n the order they	appear in an English		
	dictionary?	U	·			
	1. Literature	2. Little	3. Liberty	4. Library		
	1) 4, 3, 2, 1	2) 3, 4, 1, 2	3) 2, 1, 3, 4	4) 4, 3, 1, 2		
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56.	Insert the missing numbers-					
	2 6 $?$	2				
	54 18 81	27				
	1) 3 and 9	(2) 5 and 18	3) 6 and 12 (12)	4) 3 and 21		
57	Which tool is us	xed for chinning?	5) 0 und 12	-) 5 and 21		
	1 Chisel	2 Drill	3 Pliers	4 Hammer		
58	"PICO" means.		5.1 11015	T. Hummer		
50.	1) 10^{-15}	2) 10-9	$3) 10^{-12}$	4) 10-6		
59	$\frac{1}{1} nanometre - $	2) 10)	5)10	7) 10		
57.	1) 10^{-7} m	. 2) 10^{-8} m	3) 10-9 m	4) 10^{-6} m		
60	The relation bety	2) 10 m	\mathbf{V} frequency (f) a	+) 10 m $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$		
00.	The relation betw	veen wave velocity (γ), frequency (f) af	iu wave - iengui (70) is-		
	1) $V = f\lambda$	2) $\lambda = Vf$	3) f = $\frac{\kappa}{V}$	4) f = λV		
61.	100K = ?					
	1) 170°C	2) –173°C	3) –273°C	4) 273°C		
62.	At 1.45 PM, the	hour hand will be	in the direction-			
	1. North - west	2. South - east	3. West	4. North - east		
63.	House, bedroom	and bathroom are b	best represented by	which venn diagram?		
	\frown					
			(\bigcirc)	4) ()		
64.	If the 26 th Aug	ust in a month is 1	Friday, then the r	number of Tuesdays in		
	that month will	be-	• /	·		
	1) 4	2) 5	3) 6	4) None of these		
65.	If the diameter o	f a sphere is 6 meter	rs, its hemisphere w	vill have a volume of-		
	1) 36π	2) 72π	3) 18π	4) None of these		
66.	What part of an	n hour elases from	4.56PM to 5.32 P	M?		
	. 1	. 3	. 3	. 1		
	$1)\frac{1}{4}$	$2)-\frac{1}{4}$	$3){5}$	$4) - \frac{1}{2}$		
67.	"Newton's Disk	" when rotated raj	pidly appears			
	1) Yellow	2) White	3) Black	4) Green		
68.	Red Hematite is	s the ore of				

	1) Copper	2) Zinc		3) Aluminium	4) Iron	
69.	Specific Latent heat of vapourization of water is-					
	1) 540 calories	′ gm	2) 8	80 calories/ gm		
	3) 540 k.calorie	es/ gm ²	4) 8	30 k.calories/ gm ²		
70.	What percent	of CO ² by vo	lume	constitutes the at	nosphere?	
	1) 1% 2)	0.03%	3.0	.1% 4)	2%	
71.	Which Gupta	ruler was cro	owned	with the title of `	Vikramaditya?	
	1) Chandragupta-I		2) (2) Chandragupta-II		
	3) Skundgupta		4) \$	Samudragupta		
72.	The father of]	Rabindrabha	nath T	agore was-		
	1) Ratindranath		2) I	2) Dwarkanath		
	3) Avanindranath		4) I	4) Devendranath		
73.	Which of the following filmstars was lovingly called "Dadamuni"?					
	1) Sanjeev Kumar		2) A	2) Asit sen		
	3) Ashok Kumar		4) H	4) Kishore Kumar		
74.	The unit to me	easure the spe	eed of	ships is-		
	1) mile	2) kmph		3) knot	4) mph	
75.	National Defence Academy is situated in-					
	1) Dehradun		2) 1	New Delhi		
	3) Kharagwasala		4) N	4) Nasik		
76.	Dhanpat Rai i	s popularly k	nown	as-		
	1. Nirala	2. Hari Au	ıdh	3. Bachchan	4. Premchand	
77.	The Khajuraho temples are situated in-					
	1) Madya prade	esh		2) Uttar Prades	h	
	3) Rajasthan			4) Bihar		
78.	The famous "O	Gateway of In	dia" i	s situated in		
	1) Mumbai	2) Agra		3) New Delhi	4) Kolkata	
	Which has nin	k colour ?				
79.	which has phi			2) Vistoria Man	orial	
79.	1) India Gate			2) Victoria Men	101141	

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	1) Sikhism	2) Hinduism	3) Buddhism	4) Jainism		
81.	Status of Liberty is situated in-					
	1) Spain	2) UK	3) US	4) Italy		
82.	Who is called B	haratendu?				
	1) Rabindranath		2) Premchand			
	3) Hrishchandra		4) Bachchan			
83.	Euro is the curr	ency of				
	1) Germany	2) New Zealand	3) Canada	4) Mexico		
84.	NaCl is the chemical formula of-					
	1) Urea	2) Salt	3) Baking soda	4) Lime		
85.	Seismology is th	e scientific study o	f			
	1) Earthquake		2) Weather coditi	ons		
	3) Volcanoes		4) Rocks			
86.	Who was the las	st viceroy of India?				
	1) C.Rajgopalach	nari	2) Lord Wavell			
	3) Lord Canning		4) Mountbatten			
87.	Haldiya oil refin	nery is situated in-				
	1) Bihar	2) Jharkand	3) Orissa	4) W.Bengal		
88.	Which of the fol	lowing cities is als	o called Prayag?			
	1) Lucknow	2) Allahabad	3) Patna	4) Nasik		

ANSWERS

1-1; 2-2; 3-1; 4-2; 5-1; 6-3; 7-2; 8-3; 9-1; 10-3; 11-4; 12-2; 13-2; 14-1; 15-1; 16-1; 17-3; 18-2; 19-2; 20-3; 21-3; 22-2; 23-3; 24-1; 25-4; 26-2; 27-2; 28-2; 29-2; 30-3; 31-1; 32-1; 33-3; 34-4; 35-2; 36-2; 37-2; 38-1; 39-4; 40-1; 41-1; 42-4; 43-2; 44-2; 45-3; 46-2; 47-1; 48-2; 49-2; 50-3; 51-4; 52-1; 53-2; 54-1; 55-2; 56-1; 57-1; 58-3; 59-3; 60-1; 61-2; 62-4; 63-3; 64-2; 65-3; 66-3; 67-2; 68-4; 69-1; 70-2; 71-2; 72-4; 73-3; 74-3; 75-3; 76-4; 77-1; 78-1; 79-3; 80-3; 81-3; 82-3; 83-1; 84-2; 85-1; 86-1; 87-4; 88-2.