RRB Assistant Loco Pilot and Technician

Model Paper - III

General knowledge, Reasoning, Arithmetic

1.	. The maximum efficiency of full wave rectifier is?					
	a) 40.1 %	b) 81.2 %	c) 90 %	d) 98 %		
2.	R.C. Coupling is u	used for amplificat	ion of the?			
	a) Current	b) Resistance	c) Power	d) Voltage		
3.	A 'PNP' Transisto	or is made of?				
	a) Germanium		b) Silicon			
	 c) Either (a) or (b) The addition of pentavalent impairs a) Holes c) Minority electrons 		d) None			
4.	The addition of p	entavalent impuri	rity to a semi conductor creates?			
a) Holes			b) Free electrons			
c) Minority electrons			c) Majority electrons			
5.	Claw hammer is	mostly used in?				
	a) Fitter trade		b) Tool and Die			
	c) Carpentry		d) Black smithy			
6.	The Unit of capa	citance is?				
	a) Volt	b) Coulomb	c) Farad	d) None		
7.	Good conductor o	of electricity is?				
	a) Copper	b) Iron	c) Aluminum	d) Silver		
8.	Grinding wheels a	re made by?				
	a) Iron & Stone		b) Rod & Sand			
	c) Sand		d) Abrasive & Bo	nd		

9.	We can do reaming after?						
	a) Milling	b) Shaping	c) Drilling	d) Spot facing			
10.	Sine bar is used fo	r checking and sett	ing of?				
	a) Round	b) Triangle	c) Angle	d) Square			
11.	What Drill Size sho	ould be used for M	LO tapping?				
	a) 8.1 mm	b) 8.8 mm	c) 8.6 mm	d) 8.2			
12.	Tie rod is part of w	/hich machine?		CO.			
	a) Planner	b) Shaper	c) Milling	d) Lathe			
13.	If four resistance valve of every resistance is "R" ohm in parallel						
	connection then the total resistance is?						
	a) 4R	b) 2R	c) R	d) R/4			
14.	Which of the following is needed while marking on round job?						
	a) Bolt	b) Block	c) V-Block	d) H-clamp			
15.	The mixture of sol	der wire is?					
	a) Tint Zinc	b) Zinc + Lead	c) Tint Lead	d) None			
16.	Rs.900 are distrib	uted among A, B &	C in the ratio 4: 5:	6 what will be			
	the difference of t	he shares of A and	С?				
	a) Rs. 25	b) Rs. 120	c) Rs. 130	d) Rs. 150			
17.	In a zoo there are	Rabbits and Pigeon	s. If their heads are	e counted these			
	are 90, while their	legs are 224, then	the number of "Pig	geons"?			
	a) 68	b) 70	c) 72	d) 80			
18.	A cistern is filled in	n 9 hrs and it takes	10 hrs when there	is a leak in its			
	bottom. If the cist	ern is full, time to	empty?				
	a) 80 hrs	b) 85 hrs	c) 90 hrs	d) 95 hrs			

19. The average daily wage of X, Y and Z are Rs. 120. If Y earns Rs. 40 more than Z and X earns double of what Z earns, wage of "X" is?

a) Rs. 80
b) Rs. 120
c) Rs. 160
d) Rs. 100

20. The father is seven times older than his son. After 4 years, the sum of their ages would be 50 yrs. The Son's present age?

a) 5 yrs
B) 6 yrs
c) 5 ¹/₄ yrs
d) 9 yrs

21. The S.I unit of Resistance is? a) Joule b) Ohm c) Watt d) Ampere 22. When an iron nail gets rusted weight? c) No change a) Increases b) Decreases d) None If a body of mass "m" moving on circular path of radius "R" with 23. velocity " ω " then the centripetal is? a) $\% \, mV^2$ b) m ω^2 R c) m V^2 d) $R\omega^2$ The element common to all acids? 24. b) Chlorine c) Sulphur a) Oxygen d) Hydrogen Right to Information Act comes in to force in the year? 25. a) 2005 b) 2006 c) 2009 d) 2004 Who among the following "First law officer" of the Government of 26. India? a) Solicitor General b) Attorney General c) Chief Justice d) CAG Who was the second president of India? 27. a) Dr. Zakir Hussain b) V.V.Giri

c) N. Sanjeev Reddy d) S. Radha Krishnan

28.	The period of First Five Year Plan was?					
	a) 1947-1952	b) 1949-1954	c) 1951-1956	d) 1956-1961		
29.	Nobel Prize is not	given is which of th	ne following fields?			
	a) Physics	b) Biology	c) Chemistry	d) Peace		
30.	Wankhede Stadiu	m is situated in?		0		
	a) Mumbai	b) Nagpur	c) Pune	d) Bengaluru		
31.	"The Leaning towe	er of Pisa" is situate	ed in?			
	a) France	b) England	c) Egypt	d) Italy		
32.	Complete the serie	es $11\frac{1}{9}$, $12\frac{1}{2}$, $14\frac{2}{7}$,	$, 16\frac{2}{3}, (\frac{?}{-})?$			
	a) $8\frac{1}{3}$	b) 20	c) $19\frac{1}{2}$	c) $22\frac{1}{3}$		
33.	Complete the serie	es 45, 54, 47,, 4	49, 56, 51, 57, 53?			
	a) 55	b) 48	c) 50	d) None		
34.	In ancient India w	hich of the followir	ng capital of Kalinga	a?		
	a) Ujjain	b) Talcila	c) Toshali	d) Pataliputra		
35.	The Indian valley (Civilization was pri	marily?			
	a) Tribal	b) Urban	c) Rural	d) Local		
36.	The percentage of	oxygen in the atm	osphere is?			
	a) 29 %	b) 78 %	c) 21 %	d) 0.03 %		
37.	"Kanchanaganga"	' mountain peak is	in?			
	a) India	b) Nepal	c) Bhutan	c) Tibet		
38.	Which of the follo	wing is the busiest	t human organ?			

	a) Nose	b) Heart	c) Kidney	d) Liver	
39.	<i>"Kavaratti"</i> is the	Capital of?			
	a) Lakshadweep		b) Daman & Diu		
	c) Dadra & Nagar H	laveli	d) Mizoram		
40.	Following is Best (Conductor of Heat?			
	a) Mercury	b) Silver	c) Leather	d) Benzene	
41.	The oldest mounta	ains in India are		0	
	a) Himalayas	b) Aravallis	c) Naga Hills	d) Siwaliks	
42.	Who was the foun	der of Chola Dynas	sty?		
	a) Vijayalaya	b) Raja raja	c) Rajendra-I	d) None	
43.	Ascorbic acid is?				
	a) Vitamin –D	b) Vitamin –B	c) Vitamin –A	d) Vitamin –C	
44.	Who said "Swaraj	is my birth right an	nd I will have it?"		
	a) Mahatma Gandl	ni	b) Jawaharlal Neh	ru	
	c) Subhash Chandr	a Bose	d) Bal Gangadhar Tilak		
45.	The lion capital at	Sarnath is associat	ed with?		
	a) Ashoka	b) Gopala	c) Bimbisara	d) Ajatasatru	
46.	Sum of the first fif	teen natural numb	ers is?		
	a) 130	b) 110	c) 120	d) 140	
47.	How many odd nu	mbers are there fr	om 1 to 81?		
	a) 42	b) 41	c) 40	d) 43	
48.	$(\sqrt{1})^2 + (\sqrt{2})^2 + (\sqrt{3})^2$	$(\sqrt{4})^2 + (\sqrt{4})^2 = ?$			
	a) 6	b) 8	c) 10	d) 9	

49.	If $(\sqrt{3})^x = 1$ then the value of 'x' is?					
	a) 0	b) √3		c) 1	d) $\frac{1}{\sqrt{3}}$	
50.	Which of the follo	wing is the sr	malles	t quantity?		
	a) $-\frac{1}{2}$	b) $\frac{1}{2}$		c) $\frac{1}{\sqrt{2}}$	d) $\frac{1}{(-2)^2}$	
51.	"Mary Kom" is ass	ociated with	?		G	
	a) Wrestling		b) Bo	xing	0.	
	c) Archery		d) We	eight lifting		
52.	Hill: Mountain:: Se	ea:?				
	a) Lake	b) Ocean		c) River	d) Water fall	
53.	Pick the odd one o	out amongst t	the fol	lowing?		
	a) Pink	b) green	2	c) Indigo	d) Violet	
54.	In a code language	e if BCD is wri	itten a	s ABC then UVW	will be written	
as?		R				
	a) XYZ	b) BCD		c) RST	d) MNO	
55.	In a code if 'A' is w	/ritten as 'Z' ,	, 'B' is	written as 'Y' and	'C' is written as	
	'X' then DEF will b	e written as?				
	a) WVU	b) RST		c) SRQ	d) ONM	
56.	Which country has	s the largest i	numbe	er of post offices i	n the world?	
	a) USA	b) China		c) India	d) Russia	
57.	The Eight Schedul	e of the India	an Con	stitution deals?		
	 0. Which of the following is the smaller a) -1/2 b) 1/2 1. "Mary Kom" is associated with? a) Wrestling b) c) Archery c) Archery d) 2. Hill: Mountain:: Sea :? a) Lake b) Ocean 3. Pick the odd one out amongst the a) Pink b) green 4. In a code language if BCD is written as? a) XYZ b) BCD 5. In a code if 'A' is written as 'Z' , 'B' 'X' then DEF will be written as? a) WVU b) RST 6. Which country has the largest numaled a) USA b) China 7. The Eight Schedule of the Indian Complexity of the indian complex			ndamental Rights		
	a) 2 a) 2 a) a) a) Wrestling b) Boxing b) Boxing c) Archery d) Weight lifting b) Boxing c) Archery d) Weight lifting b) Boxing c) Archery d) Weight lifting b) Water fall 3. Pick the odd one out amongst the following? a) A) Water fall 3. Pick the odd one out amongst the following? a) A) Violet 4. In a code language if BCD is written as ABC then UVW will be written S? a) XYZ b) BCD c) RST d) MNO 5. In a code if 'A' is written as 'Z' , 'B' is written as 'Y' and 'C' is written as 'X' then DEF will be written as? a) WVU b) RST c) SRQ d) ONM 6. Which country has the largest number of post offices in the world? a) USA b) China c) India d) Russia 7. The Eight Schedule of the Indian Constitution deals? a)					

58.	 3. Voltmeter is a device used to measure? a) Current b) Resistance c) Potential difference d) None 3. Gobi desert located in which country? a) India b) China c) Asia d) Africa b) China c) Asia d) Africa 					
	a) Current		b) Resistance			
	c) Potential differe	nce	d) None			
59.	Gobi desert locate	ed in which co	ountry?			
	a) India	b) China	c) Asia	d) Africa		
60.	Where would you	see a <i>"TORN</i>	IADO" the most?	0		
	a) Russia	b) China	c) Brazil	d) USA		
61.	The needle of com	pass always	points forwards?			
	a) South	b) North	c) West	d) East		
62.	Titan is a moon of	?	GO			
	a) Saturn	b) Jupiter	c) Mars	d) Uranus		
63.	<i>"Hydrophobia"</i> is	ydrophobia" is associated with?				
	a) Tetanus	b) Meningiti	is c) Rabies	d) Dengue		
64.	The price of pen at	fter a discour	nt of 10 % is Rs. 45 what	is the original		
	price?					
	a) Rs. 50	b) Rs. 55	c) Rs. 60	d) Rs. 47.5		
65.	If 300 is decreased	by 2.5 %, the	e answer is?			
	a) 292.5	b) 296.5	c) 297.5	d) 295		
66.	How many numbe	rs between 1	.01 and 300 are exactly	divisible by both		
	3 and 5?					
	a) 13	b) 14	c) 15	c) 16		
67.	In a clock the angle	e traced by th	ne hour hand in 12 hrs is	5?		
	a) 360 ⁰	b) 180 ⁰	c) 90 ⁰	d) 30 ⁰		

68.	How many days are there in a leap year?						
	a) 367	b) 366	c) 364	d) 365			
69.	Which of the follo	wing is not a prime	e number?				
	a) 97	b) 191	c) 221	d) 441			
70.	The unit digit in ($3^{65} \times 6^{59} \times 7^{71}$) is?					
	a) 1	b) 2	c) 4	d) 6			
71.	Pointing to a Phot	ograph Arun said "	she is the mother o	of my son's			
	wife's daughter",	Arun related to the	e lady?				
	a) Uncle	b) Cousin	c) Father-in-law	d) None			
72.	 a) Oncie b) Cousin c) Father-In-law d) None 72. What will be the difference between the sum of the odd digits and the sum of the even digits in the number 857423? a) 0 b) 1 c) 2 d) 4 						
	 What will be the difference between the sum of the odd digits and the sum of the even digits in the number 857423? a) 0 b) 1 c) 2 d) 4 						
	a) 0	b) 1	c) 2	d) 4			
73.	$\sin 60^{\theta} \cdot \cos 30^{\theta} + \cos \theta$	$s0^{\theta}.sin30^{\theta}=?$					
108. How many days are there in a leap year: a) 367 b) 366 c) 364 d) 365 69. Which of the following is not a prime number? a) 97 b) 191 c) 221 d) 441 70. The unit digit in $(3^{65} \times 6^{59} \times 7^{71})$ is? a) 1 b) 2 c) 4 d) 6 71. Pointing to a Photograph Arun said "she is the mother of my son's wife's daughter", Arun related to the lady? a) Uncle b) Cousin c) Father-in-law d) None 72. What will be the difference between the sum of the odd digits and the sum of the even digits in the number 857423? a) 0 b) 1 c) 2 d) 4 73. sin60 ⁹ .cos30 ⁹ + cos0 ⁹ .sin30 ⁹ = ? a) $\frac{3}{2}$ b) $\frac{5}{2}$ c) 1 d) $\frac{\sqrt{2}}{3}$ 74. $\frac{(569 + 163)^2 \cdot (569 - 163)^2}{569 \times 163} = ?a) 2 b) 4 c) 406 d) None 75. Two numbers are less than a third number by 30% and 37% respectively. How much percent is the second number less than the fist?a) 10 % b) 15% c) 20% d) 25 %$			d) $\frac{\sqrt{2}}{3}$				
74.	$\frac{(569+163)^2 - (56)}{569 \times 163}$	$\frac{9-163)^2}{2}$ =?					
	a) 2	b) 4	c) 406	d) None			
75.	Two numbers are	less than a third nu	umber by 30% and	37%			
	respectively. Hov	v much percent is t	he second number	less than the			
	fist?						
	a) 10 %	b) 15%	c) 20%	d) 25 %			

76. Material used for making Bushes?

	a) White metal	b) Brass		c) Gun metal	d) C.I
77.	Bench vice spindle	has?			
	a) V-threads		b) Sq	uare threads	
	c) Acme threads		d) No	one	
78.	B.S.W thread has	thread angle	of?		
	a) 60 ⁰	b) 45 ⁰		c) 37 ⁰	d) 55 ⁰
79.	Lip clearance angle	e in a drill is l	kept?		0
	a) 30 ⁰	b) 45 ⁰		c) 15 ⁰	d) 25°
80.	How many tool he	eads can be r	nount	ed on planer mac	hine?
	a) 4	b) 1		c) 3	d) 2
81.	Ratio of worm & v	varm wheel i	n divio	ling head is?	
	a) 12 : 1	b) 24 : 1		c) 40 : 1	d) 80 : 1
82.	A device that conv	erts from de	cimal	to binary system	is called?
	a) CPU	b) Decoder		c) Converter	d) Encoder
83.	Which of the follo	wing operati	on car	not be done on r	nilling machines?
	a) Cutting splines		b) Cu	tting gears	
	c) Cutting helical g	roove	d) Ge	ar shaping	
84.	The limits of Hole	are 25.00 an	d 25.0	21 and that of a s	haft are 25.022
,	and 25.032 the typ	pe fit is?			
1	a) Interference	b) Clearance	е	c) Transition	d) None
85.	Shafts transmittin	g power at ri	ght an	gle to each other	are connected
	a) White metal b) Brass c) Gun metal d) C.I Bench vice spindle has? a) V-threads b) Square threads c) Acme threads d) None B.S.W thread has tread angle of d) None B.S.W thread has tread angle of d) AS ⁰ c) 37^0 d) 55^0 Lip clearance angle in a drill is kept? a) 30^0 b) 45^0 c) 37^0 d) 25^0 How many tool b 45^0 c) 15^0 d) 25^0 How many tool b 45^0 c) 15^0 d) 25^0 How many tool b) $24 : 1$ c) $40 : 1$ d) $80 : 1$ A device that converts from deviation from d) None A device that converts from deviation for difference b) $Cutting gears$ c) Cutting splines b) $Cutting gears$ c) Cutting helical grove d) $Gear$ shapping The limits of Hole $ze 25.00 z = 1$				
	a) Helical gears	b) Spur gea	rs	c) Bevel gears	d) Spiral gears

A force "F" acts on a body with an angle " θ " to the horizontal then its 86. vertical component of force is? c) $\frac{F}{SinA}$ d) $\frac{F}{CocA}$ a) F Sinθ b) F Cosθ 87. Turning water tap is an example of? a) Force b) Torque c) Couple d) Moment The relation between coefficient of friction and angle of friction is? 88. b) μ =tan⁻¹ θ c) $\mu = \sin \phi$ a) μ =tan ϕ d) μ=cosφ If the efficiency of a machine is 100% then it is called? 89. a) Simple machine b) Ideal machine c) Lifting machine d) None The centre of gravity of hemi sphere from the base if *r* = radius of the 90. sphere? d) $\frac{r}{3}$ b) $\frac{3r}{8}$ a) $\frac{4r}{3\pi}$ 91. Which of the following is a class – I lever? a) Pliers b) Nut cracker c) Tongs d) None Scalar is a type of physical quantity having magnitude but lacking? 92. a) Weight b) Magnitude d) Acceleration c) Speed The rate of change of angular velocity is named by? 93. a) Displacement b) Angular Acceleration c) Angular Distance d) None 94. If m = mass of a body and v = velocity then the kinetic energy of body is?

a) mv^2 b) $\frac{1}{2}mv^2$ c) $2mv^2$ d) mv

95.	The force of attraction between nuclear and electron is?				
	a) Centripetal		b) Centrifugal		
	c) Torque		d) Impulsive force		
96.	If f = frequency the	en the time p	eriod (t _p) is?		
	a) f ²	b) 1/f	c) f	d) None	
97.	One kilogram-met	er = Joule	es?	2	
	a) 9	b) 9.81	c) 8.9	d) 8.91	
98.	The time period of	a second's p	endulum is?	~	
	a) 1 sec	b) 2 sec	c) 3 sec	d) 4 sec	
99.	One horse power =	= kgfm/s	sec?		
	a) 70	b) 73	c) 74	d) 75	
100		. .			

100. If a body falls freely from a height "h" then the velocity to reach the ground?

a) $\sqrt{2gh}$	b) \sqrt{gh}	c) √ <i>3gh</i>	d) <i>2gh</i>
	5		
G			
N			

	Keys									
	1	b	21	b	41	b	61	b	81	С
	2	С	22	а	42	а	62	а	82	b
	3	С	23	b	43	d	63	С	83	b
	4	d	24	d	44	d	64	а	84	а
	5	С	25	а	45	а	65	а	85	С
	6	С	26	b	46	С	66	а	86	а
	7	а	27	d	47	b	67	а	87	С
	8	d	28	С	48	С	68	b	88	а
	9	С	29	b	49	а	69	С	89	b
	10	С	30	а	50	а	70	С	90	b
	11	b	31	d	51	b	71	С	91	a
	12	а	32	b	52	b	72	b	92	b
	13	d	33	а	53	а	73	С	93	b
	14	С	34	С	54	С	74	b	94	b
	15	b	35	b	55	а	75	а	95	а
	16	b	36	С	56	d	76	с	96	b
	17	а	37	а	57	d	77	b	97	b
	18	С	38	d	58	С	78	d	98	b
	19	С	39	а	59	С	79	С	99	d
	20	С	40	b	60	d	80	а	100	а
17 a 37 a 57 d 77 b 97 b 18 c 38 d 58 c 78 d 98 b 19 c 39 a 59 c 79 c 99 d 20 c 40 b 60 d 80 a 100 a										