

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 used for amplification of the?**
a) Current b) Resistance c) Power d) Voltage
- 3. A 'PNP' Transistor is made of?**
a) Germanium b) Silicon
c) Either (a) or (b) d) None
- 4. The addition of pentavalent impurity 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 capacitance is?**
a) Volt b) Coulomb c) Farad d) None
- 7. Good conductor of electricity is?**
a) Copper b) Iron c) Aluminum d) Silver
- 8. Grinding wheels are made by?**
a) Iron & Stone b) Rod & Sand
c) Sand d) Abrasive & Bond

9. **We can do reaming after?**
a) Milling b) Shaping c) Drilling d) Spot facing
10. **Sine bar is used for checking and setting of?**
a) Round b) Triangle c) Angle d) Square
11. **What Drill Size should be used for M10 tapping?**
a) 8.1 mm b) 8.8 mm c) 8.6 mm d) 8.2
12. **Tie rod is part of which machine?**
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 solder wire is?**
a) Tint Zinc b) Zinc + Lead c) Tint Lead d) None
16. **Rs.900 are distributed among A, B & C in the ratio 4: 5: 6 what will be the difference of the shares of A and C?**
a) Rs. 25 b) Rs. 120 c) Rs. 130 d) Rs. 150
17. **In a zoo there are Rabbits and Pigeons. If their heads are counted these are 90, while their legs are 224, then the number of "Pigeons"?**
a) 68 b) 70 c) 72 d) 80
18. **A cistern is filled in 9 hrs and it takes 10 hrs when there is a leak in its bottom. If the cistern 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) $5\frac{1}{4}$ 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?
a) Increases b) Decreases c) No change d) None
23. If a body of mass "m" moving on circular path of radius "R" with velocity " ω " then the centripetal is?
a) $\frac{1}{2} mV^2$ b) $m\omega^2 R$ c) mV^2 d) $R\omega^2$
24. The element common to all acids?
a) Oxygen b) Chlorine c) Sulphur d) Hydrogen
25. Right to Information Act comes in to force in the year?
a) 2005 b) 2006 c) 2009 d) 2004
26. Who among the following "*First law officer*" of the Government of India?
a) Solicitor General b) Attorney General
c) Chief Justice d) CAG
27. Who was the second president of India?
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 in which of the following fields?
a) Physics b) Biology c) Chemistry d) Peace
30. Wankhede Stadium is situated in?
a) Mumbai b) Nagpur c) Pune d) Bengaluru
31. "The Leaning tower of Pisa" is situated in?
a) France b) England c) Egypt d) Italy
32. Complete the series $11\frac{1}{9}, 12\frac{1}{2}, 14\frac{2}{7}, 16\frac{2}{3}, (\quad)$?
a) $8\frac{1}{3}$ b) 20 c) $19\frac{1}{2}$ d) $22\frac{1}{3}$
33. Complete the series 45, 54, 47, ____, 49, 56, 51, 57, 53?
a) 55 b) 48 c) 50 d) None
34. In ancient India which of the following was the capital of Kalinga?
a) Ujjain b) Taicila c) Toshali d) Pataliputra
35. The Indian valley Civilization was primarily?
a) Tribal b) Urban c) Rural d) Local
36. The percentage of oxygen in the atmosphere is?
a) 29 % b) 78 % c) 21 % d) 0.03 %
37. "Kanchanaganga" mountain peak is in?
a) India b) Nepal c) Bhutan d) Tibet
38. Which of the following is the busiest human organ?

- a) Nose b) Heart c) Kidney d) Liver
39. **"Kavaratti" is the Capital of?**
a) Lakshadweep b) Daman & Diu
c) Dadra & Nagar Haveli d) Mizoram
40. **Following is Best Conductor of Heat?**
a) Mercury b) Silver c) Leather d) Benzene
41. **The oldest mountains in India are**
a) Himalayas b) Aravallis c) Naga Hills d) Siwaliks
42. **Who was the founder of Chola Dynasty?**
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 and I will have it?"**
a) Mahatma Gandhi b) Jawaharlal Nehru
c) Subhash Chandra Bose d) Bal Gangadhar Tilak
45. **The lion capital at Sarnath is associated with?**
a) Ashoka b) Gopala c) Bimbisara d) Ajatasatru
46. **Sum of the first fifteen natural numbers is?**
a) 130 b) 110 c) 120 d) 140
47. **How many odd numbers are there from 1 to 81?**
a) 42 b) 41 c) 40 d) 43
48. **$(\sqrt{1})^2 + (\sqrt{2})^2 + (\sqrt{3})^2 + (\sqrt{4})^2 = ?$**
a) 6 b) 8 c) 10 d) 9

49. If $(\sqrt{3})^x = 1$ then the value of 'x' is?
- a) 0 b) $\sqrt{3}$ c) 1 d) $\frac{1}{\sqrt{3}}$
50. Which of the following is the smallest quantity?
- a) $-\frac{1}{2}$ b) $\frac{1}{2}$ c) $\frac{1}{\sqrt{2}}$ d) $\frac{1}{(-2)^2}$
51. "Mary Kom" is associated with?
- a) Wrestling b) Boxing
c) Archery d) Weight lifting
52. Hill: Mountain:: Sea : ?
- a) Lake b) Ocean c) River d) Water fall
53. Pick the odd one out amongst the following?
- a) Pink b) green c) Indigo d) Violet
54. In a code language if BCD is written as ABC then UVW will be written as?
- a) XYZ b) BCD c) RST d) MNO
55. 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
56. Which country has the largest number of post offices in the world?
- a) USA b) China c) India d) Russia
57. The Eight Schedule of the Indian Constitution deals?
- a) States in India b) Fundamental Rights
c) Fundamental Duties d) Languages in India

68. 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. $\sin 60^\circ \cdot \cos 30^\circ + \cos 60^\circ \cdot \sin 30^\circ = ?$
 a) $\frac{3}{2}$ b) $\frac{5}{2}$ c) 1 d) $\frac{\sqrt{2}}{3}$
74. $\frac{(569 + 163)^2 - (569 - 163)^2}{569 \times 163} = ?$
 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 first?
 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) Square threads
c) Acme threads d) None
- 78. B.S.W thread has thread angle of?**
a) 60° b) 45° c) 37° d) 55°
- 79. Lip clearance angle in a drill is kept?**
a) 30° b) 45° c) 15° d) 25°
- 80. How many tool heads can be mounted on planer machine?**
a) 4 b) 1 c) 3 d) 2
- 81. Ratio of worm & worm wheel in dividing head is?**
a) 12 : 1 b) 24 : 1 c) 40 : 1 d) 80 : 1
- 82. A device that converts from decimal to binary system is called?**
a) CPU b) Decoder c) Converter d) Encoder
- 83. Which of the following operation cannot be done on milling machines?**
a) Cutting splines b) Cutting gears
c) Cutting helical groove d) Gear shaping
- 84. The limits of Hole are 25.00 and 25.021 and that of a shaft are 25.022 and 25.032 the type fit is?**
a) Interference b) Clearance c) Transition d) None
- 85. Shafts transmitting power at right angle to each other are connected by?**
a) Helical gears b) Spur gears c) Bevel gears d) Spiral gears

86. A force "F" acts on a body with an angle "θ" to the horizontal then its vertical component of force is?
- a) $F \sin\theta$ b) $F \cos\theta$ c) $\frac{F}{\sin\theta}$ d) $\frac{F}{\cos\theta}$
87. Turning water tap is an example of?
- a) Force b) Torque c) Couple d) Moment
88. The relation between coefficient of friction and angle of friction is?
- a) $\mu = \tan\phi$ b) $\mu = \tan^{-1}\theta$ c) $\mu = \sin\phi$ d) $\mu = \cos\phi$
89. If the efficiency of a machine is 100% then it is called?
- a) Simple machine b) Ideal machine
c) Lifting machine d) None
90. The centre of gravity of hemi sphere from the base if r = radius of the sphere?
- a) $\frac{4r}{3\pi}$ b) $\frac{3r}{8}$ c) $\frac{2r}{7}$
91. Which of the following is a class – I lever?
- a) Pliers b) Nut cracker c) Tongs d) None
92. Scalar is a type of physical quantity having magnitude but lacking?
- a) Weight b) Magnitude c) Speed d) Acceleration
93. The rate of change of angular velocity is named by?
- 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 then the time period (t_p) is?
a) f^2 b) $1/f$ c) f d) None
97. One kilogram-meter = ____ Joules?
a) 9 b) 9.81 c) 8.9 d) 8.91
98. The time period of a second's pendulum is?
a) 1 sec b) 2 sec c) 3 sec d) 4 sec
99. One horse power = ____ kgfm/sec?
a) 70 b) 73 c) 74 d) 75
100. If a body falls freely from a height "h" then the velocity to reach the ground?
a) $\sqrt{2gh}$ b) \sqrt{gh} c) $\sqrt{3gh}$ d) $2gh$

1	b	21	b	41	b	61	b	81	c
2	c	22	a	42	a	62	a	82	b
3	c	23	b	43	d	63	c	83	b
4	d	24	d	44	d	64	a	84	a
5	c	25	a	45	a	65	a	85	c
6	c	26	b	46	c	66	a	86	a
7	a	27	d	47	b	67	a	87	c
8	d	28	c	48	c	68	b	88	a
9	c	29	b	49	a	69	c	89	b
10	c	30	a	50	a	70	c	90	b
11	b	31	d	51	b	71	c	91	a
12	a	32	b	52	b	72	b	92	b
13	d	33	a	53	a	73	c	93	b
14	c	34	c	54	c	74	b	94	b
15	b	35	b	55	a	75	a	95	a
16	b	36	c	56	d	76	c	96	b
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