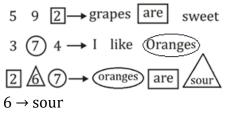


RRB NTPC Previous Year Question Paper Mock - (Solutions)

S1. Ans.(c)

S2. Ans.(c)

Sol.



S3. Ans.(a)

Sol. A glucose meter or glucometer is a medical device for determining the approximate concentration of glucose in the blood. It can also be a strip of glucose paper dipped into a substance and measured to the glucose chart.

S4. Ans.(a) Sol. A (1) : (2) $\frac{90}{2} = 45$ = 90 km/hr

S5. Ans.(b)

Sol. Chlorine is a pungent smelling, corrosive, green/yellow gas. The best known use is in water purification for domestic supplies and in swimming pools.

S6. Ans.(c) Sol. X Y 5 : 7 4203 = 140 km/hr $\frac{140}{7} \times 5 = 100$ km/hr Complete Preparation for RAILWAY Exams **RAILWAY EXTREME**

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S7. Ans.(d)

Sol. The 2015 ICC Cricket World Cup was the 11th Cricket World Cup, jointly hosted by Australia and New Zealand from 14 February to 29 March 2015.

S8. Ans.(c)

Sol. The World Heritage Site Bhimbetka in MP is famous for Rock shelters.

S9. Ans.(b) $\bar{x} = \frac{10+11+9+11+9}{5} = \frac{50}{5} = 10$ $\sum \frac{(x_{i-\bar{x}})^2}{n} = \frac{(10-10)^2 + (11-10)^2 + (9-10)^2 + (11-10)^2 + (9-10)^2}{5}$ $= \frac{0+1+1+1+1}{5} = \frac{4}{5}$ **Sol.** {10, 11, 9, 11, 9} $\therefore \text{ S.D} = \sqrt{\frac{4}{5}} = \frac{2}{\sqrt{5}}$

S10. Ans.(b) **Sol.** Both A and R are true, but R is not the correct explanation of A.

S11. Ans.(c) Sol. 20

S12. Ans.(a) Sol. The energy possessed by a body by virtue of its motion is called kinetic energy. adda >L

S13. Ans.(a)

Sol. Sum of the letters is 28.

S14. Ans.(c) **Sol.** 2.5 kg — 120 $\therefore 0.5 \text{ kg} - \frac{120}{2.5} \times 0.5 = 24$

S15. Ans.(c) Sol. Fabric is made of yarn And sword is made of metal.

S16. Ans.(c)

Sol. The Nobel Peace Prize 2014 was awarded jointly to Kailash Satyarthi and Malala Yousafzai "for their struggle against the suppression of children and young people and for the right of all children to education."

S17. Ans.(b)

Sol. The project is approved and the satellite will be launched during 2019 – 2020 timeframe by PSLV-XL from Sriharikota. Aditya-1 was meant to observe only the solar corona. The outer layers of the Sun, extending to thousands of km above the disc (photosphere) is termed as the corona.

S18. Ans.(c)

Sol. Annie Besant was the first woman President of Indian National Congress . She was president in Calcutta Session in 1917. Sarojini Naidu was the first Indian woman president of Indian National Congress in the year 1925.

S19. Ans.(b)

Sol. The RTI (RIGHT TO INFORMATION) ACT was passed by Parliament on 15 June 2005 and came fully into force on 12 October 2005.

S20. Ans.(d)

Sol. (n-1) + n + (n + 1) = 42 $n = \frac{42}{3} = 14$

S21. Ans.(b) Sol. (x+2y) (2x - y)= $2x^2 - xy + 4xy - 2y^2$ = $2x^2 + 3xy - 2y^2$

S22. Ans.(c)		~~
Sol. Mode = 1 {Maximum	<mark>times in th</mark> e given n	iumber}
Mean = $\frac{5 \times 1 + 3 \times 2 + 4 + 5 + 4 \times 9}{2}$ =	5+6+4+5+36	
14	14	
$=\frac{56}{5}=4$		
14		
S23. Ans.(d)		

Sol. Nitrogen is not present in HCL.

S24. Ans.(a)

Sol. Osteoporosis is a condition that weakens bones, making them fragile and more likely to break.

S25. Ans.(b)

Sol. A. R. Rahman is not a Bharat Ratna recipient.

S26. Ans.(a)

Sol. Chhatrapati Shivaji Maharaj Terminus, also known by its former name Victoria Terminus, is a historic railway station and a UNESCO World Heritage Site in Mumbai, Maharashtra, India which serves as the headquarters of the Central Railways.

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S27. Ans.(d)
Sol. \sec^2 + 2\tan\theta \cot\theta - \tan^2\theta
= 1 + \tan^2\theta + 2\tan\theta \cot\theta - \tan^2\theta
= 1 + 2
= 3
```

S28. Ans.(b)

Sol. SARDAR VALLABHBHAI PATEL is known as the "Bismarck of India" due to his efforts of consolidating the fragmented parts of a divided India i.e. princely states and British India into a nation and prevented balkanization of India. Sardar was also known as the Iron man of India.

S29. Ans.(c) Sol. A : B : C $E \rightarrow 15$: 10 : 6 We have, Total work = Efficiency × time $= 31 \times 25$ C can complete the same work in $=\frac{31\times25}{6}=\frac{775}{6}$ S30. Ans.(d) Sol. 4x + 5y = 14x - 5y = 165x = 30 $\boxed{x=6} \therefore y = \frac{14-4\times 6}{5}$ $y = \frac{-10}{5} = -2$ adda 241 S31. Ans.(b) **Sol.** HCF of 20 and 16 = 4

S32. Ans.(b)

Sol. The Mars Orbiter Mission, also called Mangalyaan, is a space probe orbiting Mars. It was launched on 5 November 2013 by the Indian Space Research Organisation

S33. Ans.(a)

Sol. The term deciduous means "falling off at maturity" in this type of forest trees shed their leaves at maturity. These forests are found in many areas worldwide and have distinctive ecosystems, understory growth, and soil dynamics. World's maximum newsprint comes from Deciduous forest.

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S34. Ans.(b)
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```
Sol. 10 R 192 P 48 S48 P 96 Q 1
= 10 - 192 ÷ 48 × 48 ÷ 96 + 1
= 10 - 4 × \frac{1}{2} + 1
= 10 - 2 + 1 = 11 - 2 = 9
```

6 Months Subscription



S35. Ans.(b) Sol. $\frac{N}{M} \times \frac{M}{L} = \frac{3}{2} \times \frac{5}{3} = 5 : 2$

S36. Ans.(a) Sol. 100% = 5800 $\therefore 67\% = \frac{5800}{100} \times 67 = 3886$

S37. Ans.(b)

Sol. Hypothermia is a medical emergency that occurs when your body loses heat faster than it can produce heat, causing a dangerously low body temperature. Normal body temperature is around 98.6 F (37 C). Hypothermia occurs as your body temperature falls below 95 F (35 C).

S38. Ans.(c)

Sol. 'Blood' flows in 'Vein' in the same way, 'Oil' flows in 'Pipelines'.

S39. Ans.(b)

Sol. BIOS (Basic Input Output System) is the program a personal computer's microprocessor uses to get the computer system started after you turn it on.

S40. Ans.(d)

Sol. Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Transmission is generally not the cause of the cancer.

S41. Ans.(c)

```
Sol. Required value = (5+5+20 + 5) - (11+10+14)
= 35 - 35
= 0
∴ It is same.
```

S42. Ans.(d)

Sol. Required value = (5+11+5+14) = 35

S43. Ans.(c)

Sol. Required ratio = $\frac{(5+2+3+10+15+20)}{2+13+11+4+15+10+14+6+12+3}$ = $\frac{55}{90} = \frac{11}{18}$

S44. Ans.(d)

Sol. +4, +4, +4 series

```
S45. Ans.(c)
Sol. 17 - 7 \div 27 + 3 \times 79
\Rightarrow 17 + 7 \times 27 \div 3 - 79
\Rightarrow 17 + 7 \times 9 - 79
\Rightarrow 17 + 63 - 79
\Rightarrow 80 - 79
\Rightarrow 1
```

S46. Ans.(b)

```
Sol. tan (- 405°)
= - tan (90×4×45)
= - tan45°
= - 1
```

S47. Ans.(d)

Sol. Some greenhouse gases occur naturally in the atmosphere, while others result from human activities such as burning of fossil fuels such as coal. Greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

S48. Ans.(b)

Sol. Kargil War was an armed conflict between Indian and Pakistani forces that took place between May and July 1999 in the Kargil district of Kashmir and along the Line of Control. In India, the conflict is also referred to as Operation Vijay.

S49. Ans.(b)

Sol. +13 series.

S50. Ans.(a)

Sol. A central processing unit (CPU) is the electronic circuitry within a computer that carries out the instructions of a computer program by performing the basic arithmetic, logic, controlling, and input/output (I/O) operations specified by the instructions.

```
S51. Ans.(a)
Sol. HCF of 360 and 450 = 90
```

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S52. Ans.(a)
Sol.
Akhil — Mother = Ramesh<sup>+</sup>
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Rashmi Ramesh is brother-in-law to Akhil.

S53. Ans.(a) Sol. Only conclusion I follows.

S54. Ans.(b)

Sol. The Indian rupee sign ₹ is the currency symbol for the Indian rupee, the official currency of India. Designed by Udaya Kumar, it was presented to the public by the Government of India on 15 July 2010, following its selection through an "open" competition among Indian residents.

S55. Ans.(d)

Sol. Also known as 'Dakshin Ganga' – the South Ganges, the Godavari is the second longest river of India.

Sol 2000

Sol. 2000 — For 2year 1000 — For 1year ↓ 10% 100 → (based on CI)

S57. Ans.(c)

S58. Ans.(d)

Sol. On 24 November 2015, as it was returning to Khmeimim airbase, a Russian Sukhoi Su-24 aircraft with tail number 83 was shot down near the Syrian–Turkish border by a AIM-9X Sidewinder missile from a patrolling Turkish Air Force F-16 fighter jet.

S59. Ans.(d)

Sol. $\frac{6000 \times x \times 3}{100} + \frac{8000 \times 5 \times x}{100} = 5220$ 180x + 400x = 5220 580x = 5220 X = $\frac{5220}{580} = 9\%$

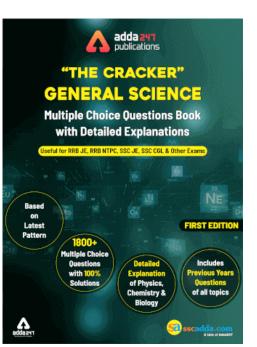
S60. Ans.(d)

Sol. Saina Nehwal won bronze medal in badminton in Women's singles getting the country's first Olympic medal in badminton.

S61. Ans.(c)

```
Sol. \frac{85+85+55+80}{95+65+75+75} = \frac{305}{310} \times 100
= 98%
```

```
S62. Ans.(b)
Sol. \frac{65+85}{75+80} = \frac{150}{155} = \frac{30}{31}
```



7

S63. Ans.(b) Sol. $\frac{75}{95} = \frac{15}{19}$

S64. Ans.(d) **Sol.** P + Q = 2(P - Q) P + Q = 2P - 2Q 3Q = P30 = P

S65. Ans.(d) Sol. Oat is a Rabi crop Paddy is a kharif crop

S66. Ans.(b)
Sol. ∴ side = 13
∴ Area = 13 × 13 = 169 sq. units

S67. Ans.(c)

Sol. Pressurization becomes increasingly necessary at altitudes above 10,000 feet (3,000 m) above sea level to protect crew and passengers from the risk of a number of physiological problems caused by the low outside air pressure above that altitude. Thus the pressure inside the cabin of the aircraft flying at an altitude is maintained more than that of outside.

S68. Ans.(b)

Sol. Let CP = 100 \therefore MP = 160 We have, 160 = Rs. 320 \therefore CP = Rs. 200 Profit % = $\frac{300 - 200}{200} \times 100 = 50\%$

S69. Ans.(a)

Sol. Akash is a medium-range mobile surface-to-air missile defense system developed by the Defence Research and Development Organisation (DRDO) and produced by Bharat Dynamics Limited (BDL) for Missile Systems and Bharat Electronics (BEL) for other radars, control centers in India.

S70. Ans.(c)

S71. Ans.(a) Sol. $\frac{6}{5} = 1.2, \frac{4}{3} = 1.3, \frac{3}{2} = 1.5, \frac{5}{4} = 1.25$ 6/5 is least

```
S72. Ans.(c)
Sol. 69587
```

S73. Ans.(b)

```
Sol. 154 B 11 C 6 A 6 D 2 7

\Rightarrow 154 \div 11 × 6 + 6 - 27

\Rightarrow 14 × 6 + 6 - 27

\Rightarrow 84 + 6 - 27

\Rightarrow 90 - 27

\Rightarrow 63
```

S74. Ans.(c)

Sol. Search engine Yahoo said that 'Cow' has emerged as the 'Personality of the Year 2015' on the back of online buzz around beef ban and associated discussions on intolerance. The trend is a part of Yahoo's 2015 Year in Review (YIR) for India.

S75. Ans.(b)

Sol. Zika virus is transmitted to people primarily through the bite of an infected Aedes species mosquito. These are the same mosquitoes that spread dengue and chikungunya viruses

S76. Ans.(a) Sol. $130\% \rightarrow 1300$ $\therefore 100\% \rightarrow = \frac{1300}{130} \times 100 = 1000$

S77. Ans.(c)

Sol. "That's one small step for man, one giant leap for mankind" - words were said by Armstrong when Armstrong he stepped onto the Moon (20 July 1969).

S78. Ans.(d)

Sol. CRACKLE

S79. Ans.(c)

Sol. The GST Bill introduced in parliament in 2015 is a constitutional amendment bill.

S80. Ans.(d)

Sol. Ozone (O_3) is the most powerful oxidant used in water purifications. It can oxidize metals (manganese, sulphur, iron) into insoluble particles and removal from water. The removal of unwanted taste and odour is also treated by ozone oxidant.

S81. Ans.(c)

Sol. World Environment Day (WED) is celebrated on the 5th of June every year, and is the United Nation's principal vehicle for encouraging awareness and action for the protection of our environment.

S82. Ans.(b) Sol. Monty Rony Ram Sachin Bin 1 2 3 4 5

S83. Ans.(c) Sol. Sachin

S84. Ans.(a) Sol. Rony

S85. Ans.(c)

Sol. Bin

S86. Ans.(a)

Sol. Sania Mirza and Martina Hingis are named as women's doubles World champions by the International Tennis Federation (ITF) in recognition of their great success in season 2015.

S87. Ans.(d) **Sol.** Let the numbers, a & 25 - a ATQ, $\Rightarrow a^2 + (25-a)^2 = 313$ $\Rightarrow a^2 + 625 + a^2 - 50a = 313$ $\Rightarrow 2a^2 - 50a + 312 = 0$ $\Rightarrow a^2 - 25a + 156 = 0$ $\Rightarrow a^2 - 13a - 12a + 156 = 0$ $\Rightarrow a (a-13)-12 (a-13) = 0$ $\Rightarrow (a-12)(a-13) = 0$ a = 13, 12Required number are, a = 12 or 13 & 25-a = 13 or 12Numbers are 12 and 13.

S88. Ans.(b)
Sol. 9, 10, 11, 11, 13, 13, 17, 19
∴ Range = 19 -9 = 10

S89. Ans.(b)
Sol. (Prime number + 1) in series

S90. Ans.(b)

Sol. Every year, on 31 May, the World Health Organization (WHO) and global partners celebrate World No Tobacco Day (WNTD).

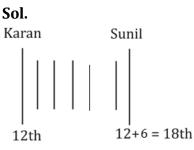


S91. Ans.(c) **Sol.** $(s + 2)^3 = s^3 + 6s^2 + 12s + 8$

S92. Ans.(d)

Sol. Biotechnology means any technological application that uses biological systems or living organisms to make or modify products or processes for specific use.

S93. Ans.(b)



S94. Ans.(d)

Sol. Conclusion I: Probability of a black ball when two balls and selected $=\frac{{}^{3}C_{1} \times {}^{12}C_{1}}{{}^{15}C_{2}} = \frac{12}{35} \neq \frac{1}{5}$ **Conclusion II:** Probability of red ball when two balls as selected = $\frac{{}^{4}C_{2}}{{}^{15}C_{2}} = \frac{6}{105} = \frac{1}{35}$ Hence, no conclusion followed. adda 247

S95. Ans.(d)

Sol. Vikram + Vivek = 50Ţ Efficiency 1 1 \therefore total work = 50 × 2 = 100 \therefore work done by 20 days = 2 × 20 = 40 \therefore Required value = $\frac{40}{100} = \frac{2}{5}$

S96. Ans.(d) **Sol.** a = 75 + 40 = 115

S97. Ans.(c)

Sol. Debugging is the process of checking errors in a software program. Debugging tools (called debuggers) are used to identify coding errors at various development stages

S98. Ans.(b)

Sol. The 103rd edition of the Indian Science Congress (ISC) was inaugurated by Prime Minister Narendra Modi on January 3, 2016 at the University of Mysore, in Mysuru, Karnataka.

S99. Ans.(b) Sol. We have, $10\% = \frac{1}{10}$ $10 \quad 11$ $\frac{10 \quad 11}{100 \quad 121}$ ⇒ 100 unit = 200000 $\therefore 121$ unit = $\frac{200000}{100} \times 121 = 242000$

S100. Ans.(d)Sol. President of U.S.A , Barack Obama was the chief guest on the occasion of Repubic Day celebrations(2015) in India.



