

RRB NTPC Previous Year Paper 19_(Solutions)**Q1. Ans.(d);**

Sol. Hepatitis B is spread through needle sharing, needle stick injury, mucous membrane exposure, and direct contact with infected body fluids. There appears to be no transmission of Hepatitis B via tears, sweat, urine, and stool or droplet nuclei (airborne).

S2. Ans.(c);

Sol.

S3. Ans.(d);

Sol. A RAST test is a type of blood test used to test for allergies. Immunoglobulin E (IgE) is a class of antibody (immune protein) associated with allergic reactions. A hemoglobin A1c test measures the amount of glucose attached to hemoglobin.

S4. Ans.(d);

Sol. Major left-bank tributaries include Gomti River, Ghaghara River, Gandaki river, and Kosi river; major right-bank tributaries include Yamuna river, Son river, Punpun and Damodar

S5. Ans.(d);

Sol. Let no. be x

$$6x = 60 - 6$$

$$x = 9$$

S6. Ans.(d);

Sol. $12\% = \frac{3}{25}$

$$\ell = 28x$$

$$b = 25x$$

$$\begin{aligned} \text{Area} &= 25x \times 28x \\ &= 700x^2 \end{aligned}$$

Atq,

$$700x^2 \rightarrow 448 \text{ sq.m}$$

$$x \rightarrow 0.8 \text{ m}$$

$$\text{So, } \ell = 28 \times 0.8 = 22.4 \text{ m}$$

$$b = 25 \times 0.8 = 20 \text{ m}$$

S7. Ans.(c);

Sol. Mirage is formed due to the phenomenon called total internal reflection. Mirages occur when the ground could be very hot and the air is cool.

S8. Ans.(b);

Sol. Synonyms

S9. Ans.(c);

Sol. Cycle = $150 + 115 + 150 = 415$

Taxi = $155 + 100 + 150 = 405$

Rickshaw = $75 + 100 + 125 = 300$

Bus = $100 + 175 + 100 = 375$

Own car = $125 + 175 + 100 = 400$

Train = $145 + 110 + 155 = 410$

Cycle is used by most no. of people

S10. Ans.(d);

Sol. Wanting to travel by train and bus = 785

Wanting to travel by taxi and own car = 805

Difference = 20 less

S11. Ans.(d);

Sol. Required difference = 5

S12. Ans.(a);

Sol. Inspired by the Dandi March by Mahatma Gandhi which triggered a civil disobedience movement across the country, a group of 100 men led by C Rajagopalachari marched to Vedaranyam and extracted salt from sea water in April 1930 to break the salt law imposed by the British

S13. Ans.(a);

S14. Ans.(b);

Sol. Enter key is not used to run a selected command.

S15. Ans.(a);

Sol. $K : L : M = \frac{2}{3} : \frac{3}{4} : \frac{1}{2}$

Or, $8 : 9 : 6$

Atq,

$23x \rightarrow 3105$

$x \rightarrow 135$

L's share = $9x = 9 \times 135 = 1215$

S16. Ans.(d);

Sol. due \rightarrow ba

to \rightarrow ca

So, you \rightarrow da

S17. Ans.(c);

Sol. $a - b = 5$... (i)

$a^2 + b^2 = 97$

from (i), on squaring

$a^2 + b^2 - 2ab = 25$

$97 - 2ab = 25$

$ab = 36$

S18. Ans.(b);

Sol. $C + A + R = 3 + 1 + 18 = 22$

Similarly,

$$T + R + A + M = 20 + 18 + 1 + 13 = 52$$

S19. Ans.(d);**Sol.** Profit share of N : C

$$20,000 \times 12 : 10,000 \times 6$$

$$4 : 1$$

Atq,

$$4x + 1x = 10,000$$

$$x = 2000$$

$$N\text{'s share} = 4 \times 2000 = 8000$$

S20. Ans.(d);**Sol.** O/R/K $\rightarrow 3/5/7$

$$W \rightarrow 9$$

$$T \rightarrow 1/4$$

S21. Ans.(b);**Sol.** Yerwada Central Jail is a noted high-security jail in Yerwada, Pune, in Maharashtra.**S22. Ans.(c);****Sol.** Except (c); all other are antonyms**S23. Ans.(d);****Sol.** The Vote on Account is the special provision given to the government to obtain the vote of Parliament to withdraw money when the budget for the new financial year is not released or the elections are underway, and the caretaker government is in place.**S24. Ans.(b);****Sol.** Aizawl is the capital of the state of Mizoram in India. With a population of 293,416, it is the largest city in the state**S25. Ans.(c);****Sol.** S26. **Ans.(d);****Sol.** Manipur doesn't share boundary with Arunachal Pradesh.**S27. Ans.(c);**

Sol. $LCM(12, 16, 20, 24) = 240$

S28. Ans.(c);**Sol.** The core infrastructure elements of Smart City includes- Adequate water supply, Assured electricity supply, Sanitation, including solid waste management, Efficient urban mobility**S29. Ans.(c);****Sol.** Let cost be $100x$

Atq,
 $80x \rightarrow \text{Rs } 6400$
 $x \rightarrow \text{Rs } 80$
 cost of 20 items = 8000
 cost of each = 400

S30. Ans.(d);

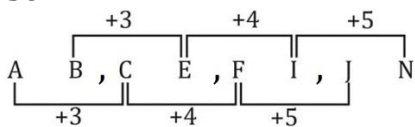
Sol. Synonyms

S31. Ans.(c);

Sol. Vertebrae are the 33 individual bones that interlock with each other to form the spinal column.

S32. Ans.(d);

Sol.



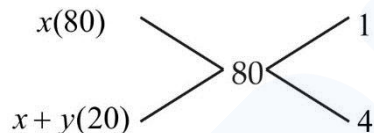
S33. Ans.(d); Ans.(3, 5) are twin prime numbers. Twin prime number is a prime number that is either 2 less or 2 more than another prime number.

S34. Ans.(c);

Sol. x does whole work in 80 days

x + y do whole work in 20 days

let total work be 80



Efficiency of y is $4 - 1 = 3$

Y alone = $\frac{80}{3} = 26\frac{2}{3}$ days

S35. Ans.(d); Ans. $(4x - 7)^2 = 16x^2 + 49 - 56x$
 $= 16x^2 - 56x + 49$

S36. Ans.(c);

Sol. Fire causes burn. Similarly, water causes flood.

S37. Ans.(b);

Sol. Joule's Law is a law stating that the heat produced by an electric current i flowing through a resistance R for a time t is proportional to $i^2 Rt$.

S38. Ans.(c);

Sol. Atq,

$$x \left(1 + \frac{20}{100}\right)^2 = 14,400$$

$x = \text{Rs } 10,000$

S39. Ans.(d);

Sol. On comparing $7/12$ is smallest.

S40. Ans.(c);

Sol. $\sin 60 \times \cot 30$

$$\frac{\sqrt{3}}{2} \times \sqrt{3} = \frac{3}{2}$$

S41. Ans.(c);

Sol. Advances in Space Research (ASR) is a peer-reviewed scientific journal that is published 27 times per year by Elsevier. It was established in 1981 and is the official journal of the Committee on Space Research (COSPAR). The editor-in-chief is Pascal Willis.

S42. Ans.(d);

Sol. Ratio of areas = $2^2 : 1^2$
= 4 : 1

S43. Ans.(d);

Sol. Coal, crude oil, and natural gas are all considered fossil fuels because they were formed from the buried remains of plants and animals that lived millions of years ago. All fossil fuels are non renewable.

S44. Ans.(c);

Sol. In computing, a serial port is a serial communication interface through which information transfers in or out one bit at a time (in contrast to a parallel port).

S45. Ans.(c);

Sol. HCF (391 – 7, 318 – 6)
HCF (384, 312) = 24

S46. Ans.(c);

Sol. Don't change your PIN at regular intervals.

S47. Ans.(a);

Sol.

48. Ans.(c);

Sol. An endoscopy is used in medicine to look inside the body. The endoscopy procedure uses an endoscope to examine the interior of a hollow organ or cavity of the body.

S49. Ans.(c);

Sol. Lateral inversion is the real or apparent reversal of left and right. For example, the letter b when laterally inverted becomes the letter d (more or less). It is well-known that a plane mirror causes the apparent lateral inversion of objects.

S50. Ans.(d);

Sol. After including the husband of the married daughter, there are 12 male members in the family.

S51. Ans.(d);

Sol. $15G + 4c = 7000$... (i)

Also,

$$10C = 25G$$

$$\frac{C}{G} = \frac{25}{10} = \frac{5}{2}$$

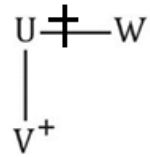
From (i)

$$15 \times G + 4 \times \frac{5}{2} G = 7000$$

$$G = \text{Rs } 280$$

S52. Ans.(b);

Sol.



S53. Ans.(c);

Sol. Correct mean wt = $55 - \frac{9}{25}$
 $= 55 - 0.36 = 54.64 \text{ kg}$

S54. Ans.(d);

Sol. $\frac{w}{0.80} = \frac{9}{6} \Rightarrow w = 1.2$

S55. Ans.(a);

Sol. Madam Bhikaji Cama fighter unfurled the flag known as Saptarishi at Stuttgart in Germany in 1907.

S56. Ans.(c);

Sol. Develop a model which can be replicated only in India is not included as the key object of the Jan Aushadhi Campaign.

S57. Ans.(d);

Sol. Mithali Raj was the Indian captain for 2016 ICC Women's World Cup Twenty20 cricket match.

S58. Ans.(c);

Sol. $B = 10$

$$A = 5$$

$$H + O = 10$$

$$M + H = 12$$

$$T + M + E = 13$$

$$A + H = 5$$

$$B + H = 5$$

$$\text{People who speak Hindi} = 10 + 12 + 5 + 5 = 32$$

S59. Ans.(b);

Sol. People who speak more than one language = $10 + 12 + 13 + 5 + 5 = 45$

S60. Ans.(c);

Sol. Bengali : Marathi

15 : 25

3 : 5

S61. Ans.(d);

Sol. $G + P = 60$

$4G + 2P = 170$

On solving

$G = 25$

$P = 35$

S62. Ans.(d);

Sol. Average speed = $\frac{\text{total distance}}{\text{Total time}}$

$$= \frac{40+30}{\frac{40}{80} + \frac{30}{60}} = 70 \text{ km/ph}$$

S63. Ans.(d);

Sol. Archimedes' principle states that the upward buoyant force that is exerted on a body immersed in a fluid, whether fully or partially submerged, is equal to the weight of the fluid that the body displaces and acts in the upward direction at the center of mass of the displaced fluid.

S64. Ans.(d);

Sol.

Person	Speciality	Day
E	Cardiologist	Friday
F	Physician	Monday
G	Dentist	Thursday
H	Nephrologist	Tuesday
K	Surgeon	Wednesday

S65. Ans.(b);

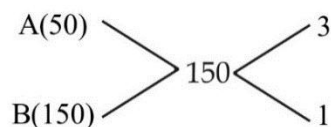
Sol.

S66. Ans.(d);

Sol.

S67. Ans.(b);

Sol.



$$A + \bar{B} = \frac{150}{3-1} = 75 \text{ min}$$

Or, 1 hr 15 min

S68. Ans.(c);

Sol. The full member teams were in ICC Cricket World Cup T20 – 2016 other than the host country are 9 , including the host company there are 10 teams in the tournament will play against each other

S69. Ans.(d);

Sol.

B R O W N : B N O R W
 1 2 3 4 5 : 1 5 3 2 4

S O U N D : S D U O N
 1 2 3 4 5 : 1 5 3 2 4

S70. Ans.(c);

Sol. Silicosis is a form of occupational lung disease caused by inhalation of crystalline silica dust, and is marked by inflammation and scarring in the form of nodular lesions in the upper lobes of the lungs. It is a type of pneumoconiosis.

S71. Ans.(a);

Sol. The speed of light in vacuum is estimated as 3.00×10^8 meters / second.

S72. Ans.(d);

Sol. Alternate differences of +2 and +4.

S73. Ans.(b);

Sol. 0.001

S74. Ans.(d);

Sol. The Salar Jung Museum is an art museum located at Dar-ul-Shifa, on the southern bank of the Musi River in the city of Hyderabad, Telangana,

S75. Ans.(c);

Sol. In 2016, she received the People's Choice Award for "Favourite Actress In A New TV Series" for her role in Quantico, becoming the first South Asian actress to win a People's Choice Award.

S76. Ans.(c);

Sol. Range = $9 - 3 = 6$

S77. Ans.(a);

Sol. Myanmar's parliament has elected Htin Kyaw as the country's next president, the first civilian leader after more than 50 years of military rule

S78. Ans.(d);

Sol. Sodium lamps are very energy efficient and yellow happens to be the most sensitive color (frequency) of the human eye. Therefore Sodium lamps are a good option for city street lighting

S79. Ans.(c);

Sol. The acid present in curd is lactic acid. The increased acidity causes the milk proteins (casein) to tangle into solid masses, or curds.

S80. Ans.(b);

$$\text{Sol. Total SP} = 5 \times 70 \times \frac{110}{100} + 10 \times 80 \times \frac{120}{100}$$

$$= 385 + 960 = 1345$$

S81. Ans.(c);

Sol. The official language of Goa is Konkani.

S82. Ans.(c);

Sol. 2% → Rs 120

1% → Rs 60

100% → Rs 6000

S83. Ans.(d);

Sol. Initial circumference = $2\pi r$

New circumference = $2\pi(r+x)$

Increase = $2\pi x$

S84. Ans.(a);

Sol. The International Space Station(ISS) is a space station, or a habitable artificial satellite, in low Earth orbit. Its first component was launched into orbit in 1998, with the first long-term residents arriving in November 2000.

85. Ans.(a);

Sol. In Periscope plane mirrors are used to fold light so that image of an object can be brought down to a lower level.

S86. Ans.(d);

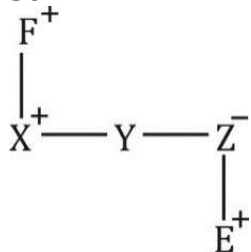
Sol. Neither I nor II follows

S87. Ans.(b);

Sol. Alluvial soils are formed mainly due to silt deposited by Indo-Gangetic-Brahmaputra rivers. In coastal regions, some alluvial deposits are formed due to wave action

S88. Ans.(a);

Sol.



E is grandson of F

S89. Ans.(c);

Sol.

L	I	G	E	R	:	G	I	R	L	E
1	2	3	4	5		3	2	5	1	4

Similarly,

T	E	P	A	L	:	P	E	L	T	A
1	2	3	4	5		3	2	5	1	4

S90. Ans.(c);

$$\text{Sol. } \sin\theta = \frac{P}{H} = \frac{15}{17}$$

$$B = \sqrt{17^2 - 15^2} = 8$$

$$\cot\theta = \frac{B}{P} = \frac{8}{15}$$

S91. Ans.(d);

Sol. a : b : c

1 : 3 : 6

Atq,

$$\frac{10x}{3} = 70$$

$$x = 21$$

Smallest = x = 21

S92. Ans.(b);

Sol. The maximum gap between two sittings should not be more than 6 months. That means, The parliament should meet at least twice a year.

S93. Ans.(c);

$$\text{Sol. } 6 + 78 \div 3 - 4 \times 6$$

$$\Rightarrow 6 + 26 - 24 \Rightarrow 8$$

S94. Ans.(b);

Sol. The distance between the Sun and Earth is estimated to be 14.96×10^7 km

S95. Ans.(b);

Sol. India has a floating exchange rate system where the exchange rate of the rupee with another currency is determined by market factors such as supply and demand

96. Ans.(c);

Sol. Atq,

$$R - M = M - P$$

$$R + P = 2M$$

Also,

$$R + P = 66$$

So,

$$M = \frac{66}{2} = 33$$

S97. Ans.(d);

(a) LEMON

(b) APPLE

(c) ORANGE

(d) POTATO

Except (d) all other contain seeds.

S98. Ans.(c);

Sol. Shiv Shankar Prasad Chawrasia, commonly known as S.S.P. Chawrasia, is an Indian professional golfer. Since 2008 he has won six Asian Tour events, four of which were co-sanctioned by the European Tour.

S99. Ans.(d);

$$\text{Sol. Time} = \frac{18}{6} + \frac{12}{4}$$
$$= 3 + 3 = 6 \text{ hr}$$

So, 6 : 30 am + 6 hr = 12 : 30 pm

S100. Ans.(b);

Sol. Rajaji National Park is an Indian national park and tiger reserve that encompasses the Shivaliks, near the foothills of the Himalayas. The park is spread over 820 km²., and three districts of Uttarakhand

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