

### **RRB NTPC Previous Year Question Paper Mock - (Solutions)**

### S1. Ans.(c)

Sol.

### **S2.** Ans.(b)

**Sol.** +3, +3 Pattern series

#### **S3.** Ans.(a)

Sol. New Ratio

$$1 \times \frac{105}{100} : 2 \times \frac{110}{100} : 3 \times \frac{115}{100}$$
  

$$\Rightarrow 21 : 44 : 69$$

## SSC

### S4. Ans.(d)

**Sol.** Hindustan Socialist Republican Association was a revolutionary organisation, also known as the Hindustan Socialist Republican Army, established in 1928 at Feroz Shah Kotla in New Delhi by Chandrasekhar Azad, Bhagat Singh, Sukhdev Thapar and others.

### **S5.** Ans.(b)

**Sol.** The three dynamic leaders of Lokmanya Tilak, Lala Lajpat Rai and Bipin Chandra Pal, who famously came together as the Lal-Bal-Pal trio.

### **S6.** Ans.(c)

**Sol.** There are  $2^{20}$ =1,048,576 rows, and  $2^{14}$ =16,384 columns in an Excel worksheet, at least since Excel 2007

### S7. Ans.(c)

**Sol.** 
$$\pi r^2 = 616$$

$$r = 14$$

$$d = 28m$$

### **S8.** Ans.(c)

**Sol.** Mean = 
$$\frac{9+5+8+9+9+7+8+9+8}{9}$$
 = 8

Arranging in increasing order

5, 7, 8, 8, 8, 9, 9, 9, 9, 9

Median = Middle term = 8

Mode = max occurrence = 9



### S9. Ans.(a)

**Sol.** Among the following cities Guwahati is under the first list of 20 proposed smart cities under the 'Smart Cities Mission' released by the Union Government in January 2016.

### S10. Ans.(c)

**Sol.** Gallon' is commonly used as a measure of volume.

### S11. Ans.(c)

**Sol.** Pato is the Argentina's official national sport.

### S12. Ans.(d)

**Sol.** Kurukshetra was located near Ambala city, the distance between Ambala City and Kurukshetra is around 51 km.

### S13. Ans.(d)

**Sol.** There are 10<sup>7</sup> millimeters make ten kilometers.

### S14. Ans.(b)

**Sol.** Calcium hypochlorite is an inorganic compound with formula Ca(ClO)2. It is the main active ingredient of bleaching powder.

### S15. Ans.(c)

**Sol.** A : B : C = 2 : 3 : 4 2units  $\rightarrow$  Rs 400 crore

3 units  $\rightarrow \frac{3}{2} \times 400 = \text{Rs } 600 \text{ crore},$ 



### S16. Ans.(c)

**Sol.** Cricketer Virat Kohli was honoured with Arjuna Award in 2013.

### S17. Ans.(b)

**Sol.** A tachometer is an instrument measuring the rotation speed of a shaft or disk, as in a motor or other machine.

### S18. Ans.(d)

**Sol.** HCF (1.26, 1.98, 1.62) = 0.18m = 18 cm

### \$19. Ans.(a)

**Sol.** The Slave dynasty was founded by Quṭb al-Dīn Aibak, a favourite slave of the Muslim general and later sultan Muhammad of Ghor.

### S20. Ans.(a)

**Sol.** Exobiology is the branch of science that deals with the possibility and likely nature of life on other planets or in space.

### S21. Ans.(c)

### S22. Ans.(b)

**Sol.** S.I. = 
$$\frac{13500 \times 12.5 \times 2}{100}$$

$$S.I. = 3375$$

### S23. Ans.(d)

**Sol.** Geology is an earth science concerned with the solid Earth, the rocks of which it is composed, and the processes by which they change over time.

### S24. Ans.(c)

### S25. Ans.(d)

**Sol.** Mother = 43, son = 22

Father = 
$$43 + 3 = 46$$

Difference will always remain

same. i.e. 
$$46 - 22 = 24$$
 years

### S26. Ans.(b)

**Sol.** CP of sugar =  $15 \times 50 = 750$ 

CP of Wheat = 
$$20 \times 75 = 1500$$

S.P. of sugar = 
$$750 \times \frac{110}{100} = 825$$

S.P. of Wheat = 
$$1500 \times \frac{120}{100} = 1800$$

Total sale value = 1800 + 825 = 2625

### S27. Ans.(c)

**Sol.** They are not synonym.

### S28. Ans.(a)

Sol. X do whole work in 4 days

Y do whole work in 8 days

Together = 
$$\frac{4 \times 8}{8 + 4} = \frac{8}{3} = 2.67$$
 days

### S29. Ans.(c)

**Sol.** 
$$x + 2y = 27$$

$$x - 2y = -1$$

On adding

$$2x = 26$$

$$x = 13 \text{ and } y = 7$$

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### S30. Ans.(b)

**Sol.** The new country changed its name from East Pakistan to Bangladesh on 11 January 1972 and became a parliamentary democracy under a constitution.

### S31. Ans.(d)

 $a \to 0.008$ 

 $b \to 0.083$ 

 $c \rightarrow 0.005$ 

 $d \rightarrow 0.004$ 

option (d) is smallest.

### S32. Ans.(d)

**Sol.** Range = Largest value - Smallest value

Range = 7 - 1 = 6

### S33. Ans.(c)

**Sol.** AB+ is the universal recipient blood type, meaning that patients with AB+ blood can receive blood from donors of any blood type if they require a transfusion.

### S34. Ans.(a)

**Sol.** Total price =  $1.2 \times 330 + 1.3 \times 270$ 

= 396 + 351 = 747

Remain amount = 1000 - 747 = 253

# SSC

### S35. Ans.(c)

**Sol.** MS-DOS is a non-graphical command line operating system derived from 86-DOS that was created for IBM compatible computers.

### S36. Ans.(d)

**Sol.** Except EMI, all are methods of quick transfer of funds.

### S37. Ans.(d)

**Sol.** difference = 
$$\frac{ab}{100}$$
 %

$$=\frac{20\times20}{100}\%=4\%$$

Required value =  $12500 \times \frac{4}{100} = 500$ 

### S38. Ans.(d)

**Sol.** Under the Constitution of India which came into force on the 26th January 1950 the legislative power is vested in Parliament.

### S39. Ans.(c)

**Sol.** Nearsightedness (myopia) is a common vision condition in which you can see objects near to you clearly, but objects farther away are blurry.

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### S40. Ans.(a)

**Sol.** Speed of car A =  $\frac{120 \times 2}{3}$  = 80 km/h.

Speed of car B =  $\frac{80}{2}$  = 40 km/h.

### S41. Ans.(d)

**Sol.** +5, +4, +3, +2, +1 Pattern series.

### S42. Ans.(b)

Sol. P - Electrician - Friday

Q - Plumber - Monday

R - Cook - Thursday

S - Doctor - Tuesday

T - Carpenter - Wednesday

### S43. Ans.(d)

**Sol.** S – Doctor – Tuesday

### S44. Ans.(a)

**Sol.** Q – Plumber – Monday

S45. Ans.(b)

### S46. Ans.(d)

Sol. Sam – 10hr

Shyam - 8hr

Ram - 5hr

Neither I nor II follows



**Sol.** 1184 - 8 = 1176 which is divisible by 21

### S48. Ans.(b)

**Sol.** Required area =  $125 \times 75 - 3 \times 125 = 9000 \text{ sq.m}$ 

### S49. Ans.(a)

**Sol.** Red soils are generally derived from crystalline rock. They are usually poor growing soils, low in nutrients and humus and difficult to cultivate because of its low water holding capacity.

### S50. Ans.(a)

**Sol.** To accomplish the SDGs and encourage global development, UNDP focuses on poverty reduction, HIV/AIDS, democratic governance, energy and environment, social development, and crisis prevention and recovery.

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### **S51.** Ans.(d)

Sol. As sun is a star, similarly

Moon is a satellite.

### \$52. Ans.(d)

Sol. Alternate Series of Squares and cubes.

1, 4, 9, 16 ......

1, 8, 27, 64 ......

### S53. Ans.(c)

**Sol.** HCF (48, 92, 140) = 4

### \$54. Ans.(b)

**Sol.** 
$$15 \times 4 + 15 \div 11 \times 33 - 98 = 60 + 45 - 98 = 7$$

### \$55. Ans.(b)

Sol. Mean = 
$$\frac{10+11+12+9+8}{5}$$
 = 10  
  $\sum (x-\overline{x})^2 = 0 + 1 + 4 + 1 + 4 = 10$ 

S.D. = 
$$\sqrt{\frac{\sum (x - \overline{x})^2}{x}} = \sqrt{\frac{10}{5}} = \sqrt{2}$$



### \$56. Ans.(d)

Sol.



Mother1 — Husband Joey

Lady is grandmother of Joey's father.

### **S57.** Ans.(c)

**Sol.** One gigabyte is equal to 1000<sup>3</sup> Bytes. There are 1,000 bytes in a kilobyte, 1,000 kilobytes in a megabyte, 1,000 megabytes in a gigabyte.

### S58. Ans.(c)

**Sol.** "Gandhi Peace Prize" is an annual award given to individuals and institutions for their contributions towards social, economic and political transformation.

### \$59. Ans.(b)

**Sol.** Required angle = 
$$\frac{15}{100} \times 360\% = 54^{\circ}$$

**S60.** Ans.(c)

**Sol.** 
$$\frac{20+35}{10+20+15} = \frac{55}{45} = \frac{11}{9}$$

S61. Ans.(d)

**Sol.** 
$$\frac{35}{100} \times 960 = 336$$

S62. Ans.(c)

**Sol.** The Triratna is a Buddhist symbol, thought to visually represent the three Jewels of Buddhism (the Buddha, the Dharma, and the Sangha).

**S63.** Ans.(b)

**Sol.** Space tourism is the practice of travelling into space for recreational purposes.

S64. Ans.(b)

**Sol.** Among the following, India is the smallest in terms of area. India is at 7<sup>th</sup> largest country in terms of area.

S65. Ans.(a)

Sol. A piece of cloth appears black when it is viewed under red light because it completely absorbs red colour wavelength.

S66. Ans.(a)

### Sol.

**Sol.** 
$$21 + 1 \div 7 \times 15 \div 6 \times 14 - 55$$
  

$$\Rightarrow 21 + \frac{1}{7} \times \frac{15}{6} \times 14 - 55$$

$$= 26 - 55 = -29$$

S68. Ans.(a)

**Sol.** root  $\rightarrow 4$ 

**S69.** Ans.(c)

Sol. Hirakud Dam is built across the Mahanadi River, about 15 kilometres (9.3 mi) from Sambalpur in the state of Odisha in India.



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### S70. Ans.(b)

**Sol.** The election of the President shall be held in accordance with the system of proportional representation by means of the single transferable vote and the voting at such election shall be by secret ballot.

### S71. Ans.(a)

**Sol.** Volleyball is a popular team sport in which two teams of six players are separated by a net.

### **S72.** Ans.(b)

**Sol.** 
$$40 \times t = d$$

Also, 
$$56 \times t = d + 80$$

$$\Rightarrow$$
 56  $\times \frac{d}{40}$  = d + 80

$$1.4 d = d + 80$$

$$0.4d = 80$$

$$d = 200 \text{ km}$$

### S73. Ans.(b)

**Sol.** A rectifier is an electrical device that converts alternating current (AC), which periodically reverses direction, to direct current (DC), which flows in only one direction

### S74. Ans.(d)

**Sol.** Except credit card, all are its types.

### \$75. Ans.(a)

Sol. Only I follows

### \$76. Ans.(d)

Sol. Quadrant IV.

### \$77. Ans.(a)

Sol. -7 Pattern

### \$78. Ans.(a)

**Sol.** Young horse is called colt

### **S79.** Ans.(b)

Sol.

 $a \rightarrow NOSE$ 

 $b \rightarrow WALK$ 

 $c \rightarrow NAIL$ 

 $d \rightarrow HEAD$ 

Except (b) all other a other a parts of body.

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S80. Ans.(d)

Sol. None

S81. Ans.(d)

**Sol.** Brown = 20 + 50 + 30 = 100

Black = 5 + 10 + 20 + 50 + 30 + 5 = 120

Required ratio =  $\frac{100}{120} = \frac{5}{6}$ 

S82. Ans.(a)

**Sol.** Do not like black = 20 + 100 + 30 = 150

Only back and white = 20 + 30 = 50

Required ratio =  $\frac{150}{50} = \frac{3}{1}$ 

S83. Ans.(b)

**Sol.** The Grand Slam consists of the Australian Open in mid-January, the French Open in May and June, Wimbledon in June and July, and the US Open in August and September.

S84. Ans.(a)

**Sol.** Putting x = 4

= 64 (64 - 16 - 4) = 2816

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S85. Ans.(d)

**Sol.** From April 1, 2010, as per the RBI circular on new guidelines on savings accounts. "The interest has to be calculated on daily basis for the closing day".

**S86. Ans.(b)** 

**Sol.**  $97 \times 97 = 9409$ 

\$87. Ans.(b)

**Sol.** Some of the sea level rise is due to melting glaciers and ice sheets which add water to the oceans that was once trapped on land. Certain glaciers and ice sheets are particularly vulnerable. Global warming has caused them to be less stable, to move faster towards the ocean, and add more ice into the water.

**S88.** Ans.(c)

**Sol.** "My Country, My Life" book is authored by Lal Krishna Advani.

S89. Ans.(a)

**Sol.** Cos (1110°)

 $\cos (3 \times 360 + 30^{\circ})$ 

 $=\cos(30^{\circ})=\sqrt{3}/2$ 

S90. Ans.(c)

**Sol.** Sin 
$$\theta = \frac{P}{H} = \frac{2}{3}$$

Here B = 
$$\sqrt{5}$$

$$Sec \theta = \frac{H}{B} = \frac{3}{\sqrt{5}} = \frac{3\sqrt{5}}{5}$$

Cot 
$$\theta = \frac{B}{P} = \frac{\sqrt{5}}{2}$$

### S91. Ans.(a)

**Sol.** ZIKA virus which damages the brain of the fetus is a mosquito borne disease.

S92. Ans.(b)

**Sol.** 
$$(x^5 \div x^4)^3 \div x$$
  
=  $x^3 \div x = x^2$ 

S93. Ans.(a)

**Sol.** 
$$80\% \rightarrow 2400$$

$$1\% \rightarrow 30$$

Now, 
$$75\% = 75 \times 30 = 2250$$

S94. Ans.(c)

**Sol.** 
$$0 \rightarrow R$$
,  $1-A$ ,  $6 \rightarrow T$ ,  $9 \rightarrow I$ 

$$2 \rightarrow N, 3 \rightarrow G$$

SSC



### S95. Ans.(a)

**Sol.** The tragic loss of the space shuttle Columbia killed seven astronauts. One of those, Kalpana Chawla, was the first Indian-born woman in space. Born in Karnal, India, on July 1, 1961, Chawla was the youngest of four children.

### **S96.** Ans.(b)

**Sol.** All of them are non-metals.

**S97. Ans.(b)** 

Sol.

$$\frac{A(30)}{B(90)} > 90 < \frac{3}{1}$$

Time to fill tank =  $\frac{90}{3-1}$  = 45

### S98. Ans.(b)

**Sol.** The prostate is a walnut-sized gland located between the bladder and the penis. The prostate is just in front of the rectum.

### S99. Ans.(c)

**Sol.** 12.5% =  $\frac{1}{8}$ ATQ, 9 units  $\rightarrow$  Rs. 4500 1units  $\rightarrow$  Rs. 500 So, Profit = Rs. 500

### S100. Ans.(d)

**Sol.** He is a element and rest are compounds.



