1. (B) Sharana Basaveshwara Temple is a shrine at Kalburgi (Gulbarga), an ancient town in the north-eastern part of Karnataka. The temple is dedicated to an eminent Hindu religious teacher and philosopher, Shri Sharana Basaveshwara.
2. (D) The National Capital Region (NCR) is the designation for the conurbation of metropolitan area in India. It encompasses the entire National Capital Territory of Delhi, including New Delhi and urban areas surrounding it in neighboring states of Haryana, Uttar Pradesh and Rajasthan.
3. (D) The Union Government has recently constituted Dr. Ashok Lahri committee to interact with the trade and industry on the imposition of Central Excise Duty on jewellery.
4. (B) The Nobel Prize is widely regarded as the most prestigious award available in the fields of literature, medicine, physics, chemistry, peace, and economics.
5. (B) Kublai Khan was the fifth Khagan (Great Khan) of the Mongol Empire, reigning from 1260 to 1294 . Although it was only nominally due to the division of the empire.
He also founded the Yuan dynasty in China as a conquest dynasty in 1271, and ruled as the first Yuan emperor until his death in 1294. The capital city 'Daydo' was established by him in Beijing. By 1279, the Yuan forces had overcome the last resistance of the Southern Song dynasty, and Kublai became the first non-native Emperor to conquer all of China.
6. (C) The Bardoli Satyagraha of 1928, in the state of Gujarat, India during the period of the British Raj, was a major episode of civil disobedience and revolt in the Indian Independence Movement. Sardar Vallabh Bhai Patel played an important role and was the leader in Bardoli Satyagraha.
7. (D) Clip art, (in the graphic arts,) is a collection of pre-made images or pictures used to illustrate any medium. Today, clip art is used extensively in both personal and commercial projects.
8. (C) Hansen's disease (also known as leprosy) is a long-lasting infection caused by bacteria. The disease was once feared as a highly contagious and devastating disease. Now, however, the disease is very rare and easily treated. Early diagnosis and treatment usually prevent disability related
to the disease.
9. (A) Morarji Desai, the author of "A Minister and his Responsibilities" was an Indian independence activist and the Prime Minister of India from 1977 to 1979. He was also the first Prime Minister to head India's first non-Congress Government.
10. (D) In keeping with the RM Lodha panel's proposals to the Supreme Court on the restructuring of the Board of Control for Cricket in India, the BCCI appointed media veteran Rahul Johri as its first Chief Executive Officer. In January this year, a panel headed by former Chief Justice of India RM Lodha, suggested that the BCCI must be run professionally under a CEO. The panel recommended a cooling off period between successive terms for top officials and suggested that the ministers and government servants cannot occupy BCCI posts.
11. (C) Ellora is an archaeological site 29 km (18 mile) north-west of the city of Aurangabad in Maharashtra. It was built by the Rashtrakuta dynasty (Brahmanical \& Buddhist group of caves) and Yadav (Jain group of caves). It is well known for its monumental caves, Ellora is an UNESCO World Heritage Site and also forms one of major tourist attraction in Marathwada region of Maharashtra.
12. (B) Bhimsen Gururaj Joshi, (4 February 1922-24 January 2011) was an Indian vocalist from Karnataka in the Hindustani classical tradition. He is known for the "Khayal" form of singing, as well as for his popular renditions of devotional music Bhajans and Abhangs.
In 1998, he was awarded the Sangeet Natak Akademi Fellowship, the highest honour conferred by Sangeet Natak Akademi, India's National Academy for Music, Dance and Drama. Subsequently, he also received the Bharat Ratna, India's highest civilian honour, in 2009.
13. (A) The frog excretes urea thus, is a ureotelic animal. It is carried by blood into the kidney where it is separated and excreted.
14. (D) World Malaria Day (WMD) is an international observance commemorated every year on 25 April and recognizes global efforts to control malaria. Globally, 3.3 billion people in 106 countries are at risk of malaria.


2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009
23. (D) Discovery Scientist Year Diode Bulb Sir J.S. Fleming 1904 Triode Bulb Lee de Forest 1906 Radioactivity Henry Becquerel 1896 Law of floatation Archimedes 1827
25. (B) The rights and privileges for the betterment of women are: right to equality in law [Article 14], right to social equality [Article 15], right to social equality in employment [Article 16] right to adequate means of livelihood [Article 39 (a)], right to equal pay for equal work [Article 39 (d)], right that the health and strength of workers both men and women are not abused [Article 39 (e)], right to just and humane conditions of work and maternity relief [Article 42], and right to improvement in employment opportunities and conditions of the working women [Article 46].
26. (B) Master Dinanath Mangeshkar Award was instituted in 1999 in memory of Dinanath Mangeshkar, father of Lata Mangeshkar. Since then it is awarded annually to persons for their outstanding contributions to music and movies. The awards carries monetary award of Rs 101001, memento and citation. Dinanath Mangeshkar was born on December 29, 1900 and died on April 24, 1942. The award ceremony is held annually on $23^{\text {rd }}$ or $24^{\text {th }}$ April. Actors Jeetendra and Ranveer Singh along with filmmaker Sanjay Leela Bhansali received the Master Dinanath Mangeshkar Awards in Mumbai on April 23.
28. (C) The Hazratbal is a Muslim shrine in Srinagar, Jammu \& Kashmir. It contains a relic, the Moi-e-Muqqadas. It is believed by many Muslims of Kashmir that hair of the Holy Prophet Muhammad has been preserved. The shrine is situated on the left bank of the Dal Lake, Srinagar and is considered to be Kashmir's holiest Muslim shrine.
29. (B) On April 18, 1853, the first Indian train popularly called Aag Gadi was steamed off from Bombay to Thane. The train was drawn by three engines named "Sahib", "Sindh" and "Sultan" and it covered the 34 km distance in 57 minutes.
30. (B) Venus is sometimes called Earth's twin because Venus and Earth are of almost the same size, have about the same mass (they weigh about the same), and have a very similar composition (are made of the same
material). They are also neighbouring planets.
31. (A) India will be hosting the 2018 Commonwealth Judo Championships in Jaipur, besides organising the Asian Cadet and Asian Junior Judo Championships in September in Kerala this year. The Commonwealth Judo Championships was allotted to India, by the Commonwealth Judo Congress held on April 23 ${ }^{\text {rd }}$ at Port Elizabeth, South Africa.
32. (C) The Gram-negative bacterium Yersinia pestis is the causative agent of the systemic invasive infectious disease classically referred to as plague, and has been responsible for three human pandemics: the Justinian plague (sixth to eighth centuries), the Black Death (fourteenth to nineteenth centuries) and modern plague (nineteenth century to the present day).
35. (D) Nephridia of earthworm - excretory organs Nematoblsts of hydra - offensive organs Tracheae of insects - respiratory organs Flame cells of planaria - excretory organs Gills of prawn - respiratory organs
36. (C) The Comptroller and Auditor-General shall hold office for a term of six years from the date on which he assumes such office, provided that where he attains the age of sixty-five years before the expiry of the said term of six years, he shall vacate such office on the date on which he attains.
39. (C) The cerebral hemispheres (the cerebrum) form the largest part of the human brain and are situated above other brain structures. They are covered with a cortical layer (the cerebral cortex) which has a convoluted topography.
40. (C) Since 1947, the Indian economy has been premised on the concept of planning. This has been carried through the FiveYear Plans, developed, executed, and monitored by the Planning Commission (NITI Aayog after 2014). With the Prime Minister as the ex-officio Chairman, the commission has a nominated Deputy Chairman, who holds the rank of a Cabinet Minister. Revised versions of the formula have been used since then to determine the allocation of central assistance for state plans. The new government led by Narendra Modi, elected in 2014, has announced the dissolution of
the Planning Commission, and its replacement by a think tank called the NITI Aayog (an acronym for National Institution for Transforming India). National Development Council finally approves the draft of five year plan.
43. (D) The coefficient of friction (denoted by $\mu$ ) does not have any unit as it is dimensionless.
44. (A) A berry fruit is produced from the ovary of a single flower in which the outer layer of the ovary wall develops into an edible fleshy portion (botanically the pericarp). The definition includes many fruits that are commonly known as berries, such as grapes, tomatoes, cucumbers, eggplants (aubergines) and bananas.
45. (A) Many children in our country suffer from malnutrition. Protein deficiency disease known as Kwashiorkar. This can be prevented by giving food rich in protein, e.g. milk, butter, meat and egg.
47. (D) Born in Patara, a land that is part of present-day Turkey, St. Nicholas was a Christian bishop who helped the needy. After his death, the legend of his gift-giving grew. St. Nicholas transformed into the legendary character called Santa Claus, who brings Christmas presents to children around the world.
48. (D) Anita Nair is the author of the novel "Alphabet Soup for Lovers". Some of her other novels include "The Better Man, Ladies Coupe, Mistress, Lessons in Forgetting, Cut Like Wound and Idris". She has also published a collection of poems titled Malabar Mind, a collection of essays titled Good night \& God Bless and also five books for children. She has written two plays and the screenplay for the movie adaptation of her novel Lessons in Forgetting, which was part of the Indian Panorama at IFFI 2012 and won a National Film Award in 2013.
49. (B) The clitellum is a thickened glandular and non-segmented section of the body wall near the head in earthworms and leeches, that secretes a viscid sac in which the eggs are deposited. It is present about 2 cm ( 0.79 in) behind the anterior end of the body (around the 14 th, 15 th and 16 th segments).
51. (A) Required average $=\frac{250+550+400}{3}$

$$
=\frac{1200}{3}=400
$$

52. (D) Number of valid votes polled by males $=$ $7600-1875=5725$
53. (D) Required average $=\frac{2250+7600+4250}{3}$
$=\frac{14100}{3}=4700$
54. (C) Required $\%=\frac{\propto 2500}{\& 6720} \cdot 100_{\dot{\dot{\phi}}}^{\ddot{O}} \%$
$=37.20 \%$
» $37 \%$
55. (B) Required $\%=\frac{28000-4600}{8} \cdot 100 \underset{\dot{\oplus}}{\ddot{\circ}} \%$ $=42.50 \%$
56. (D) According to the question, Sum of five numbers $=5 \times 306.4$ $=1532$
$\therefore$ Third number
$=1532-2 \times 431-2 \times 214.5$
$=1532-862-429=241$
57. (B) $\mathrm{SI}=\frac{15000 \times 9 \times 2}{100}=₹ 2700$
$\mathrm{CI}=12000\left[\left(1+\frac{8}{100}\right)^{2}-1\right]$
$=12000\left[\left(\frac{27}{25}\right)^{2}-1\right]$
$=12000\left[\frac{729-625}{625}\right]$
$=12000 \times \frac{104}{625}=₹ 1996.8$
$\therefore$ Total interest earned
$=₹(2700+1996.8)=₹ 4696.8$
58. (A) Let the listed price be ₹ $x$.

Discount $=30 \%$ of $x$
$=\frac{30 x}{100}=₹ \frac{3 x}{10}$
According to the question,
$\frac{3 x}{10}=82.5$
$\Rightarrow x=\frac{82.5 \times 10}{3}=₹ 275$
$\therefore$ Required cost price of calculator $=70 \%$ of 275
$=₹ \frac{70 \times 275}{100}=₹ 192.50$
59. (B) Required time $=\mathrm{LCM}$ of 18,24 and 32 seconds $=288$ seconds.

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60. (A)


Radius of the field $=140 \mathrm{~m}$ Width of garden $=7 \mathrm{~m}$
$\therefore$ Area of garden
$=\pi\left(147^{2}-140^{2}\right)$
$=\frac{22}{7}(147+140)(147-140)$
$=22 \times 287=6314 \mathrm{~m}^{2}$
Required cost $=₹(21 \times 6314)$
= ₹ 132594
61. (C) Total equivalent capital of A $=5 x \times 12+8 x \times 12=₹ 156 x$
Total equivalent capital of B
$=6 x \times 24=₹ 144 x$
Total equivalent capital of C
$=8 x \times 12+4 x \times 12=₹ 144 x$
$\therefore$ Required ratio $=\mathrm{A}: \mathrm{B}: \mathrm{C}$
= 156x: $144 x$ : $144 x$
= 13: 12: 12
62. (B) Let Vipul's salary $=₹ x$
$5 \%$ of $x=₹ \frac{5 x}{100}=₹ \frac{x}{20}$
As given,
$1687.50=\frac{75}{100} \times \frac{x}{20}=\frac{3 x}{80}$
$\Rightarrow 3 x=1687.50 \times 80$
$\Rightarrow x=\frac{1687.50 \times 80}{3}=₹ 45000$
63. (D) Total weight of the mixture
$=40+25=65 \mathrm{~kg}$
Total cost price of wheat
$=₹(40 \times 12.50+25 \times 15.10)$
$=₹(500+377.50)=₹ 877.50$
Total selling price of wheat
$=₹ \frac{877.50 \times 110}{100}$
$=₹ 965.25$
$\therefore$ SP per kg $=₹ \frac{965.25}{65}$
= ₹ 14.85
64. (B) $(B+C)$ 's 1 day's work $=\frac{1}{8}$
$(A+B)$ 's 1 day's work $=\frac{1}{12}$
$(A+C)$ 's 1 day's work $=\frac{1}{16}$
On adding all these three equations, 2 ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ )'s 1 day's work
$\Rightarrow \frac{1}{8}+\frac{1}{12}+\frac{1}{16}=\frac{6+4+3}{48}=\frac{13}{48}$
$\Rightarrow(A+B+C)$ 's 1 day's work $=\frac{13}{96}$
$\therefore \mathrm{A}, \mathrm{B}$ and C together can complete the work in $\frac{96}{13}=7 \frac{5}{13}$ days
65. (D) When a train crosses a platform, the distance covered
$=$ Length of platform and the train.
Speed $=\frac{\text { Length of }(\text { platform }+ \text { train })}{\text { Time taken }}$
Thus we have inadequate data.
66. (A) Amount remaining after

1 year $=4000\left(1+\frac{7.5}{100}\right)-1500=₹ 2800$
2 years $=2800\left(1+\frac{7.5}{100}\right)-1500=₹ 1510$
3 years $=1510\left(1+\frac{7.5}{100}\right)-1500=₹ 123.25$
67. (C) Let the number of students appeared in school X = 100
$\therefore \quad$ Number of students qualified in school $\mathrm{X}=70$
$\therefore \quad$ According to question,
Number of students appeared in School $\mathrm{Y}=120$
Number of students qualified in School Y
$=70+50 \%$ of $70=70+35=105$
$\therefore \quad$ Required percentage
$=\frac{105 \times 100}{120}=87.5 \%$
68. (D) Required number of items
$=\frac{(3000+1000)}{(60-40)}=\frac{4000}{20}=200$

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69. (A) Let the speed of train C be $x \mathrm{kmph}$.

Speed of train B relative to C
$=(120-x) \mathrm{kmph}$
$=\left[(120-x) \times \frac{5}{18}\right] \mathrm{m} / \mathrm{sec}$
$=\left(\frac{600-5 x}{18}\right)$
Distance covered $=100+200=300 \mathrm{~m}$
$\therefore \frac{300}{\left(\frac{600-5 x}{18}\right)}=120$
$\Rightarrow \quad 300=\frac{120(600-5 x)}{18}$
$\Rightarrow \quad 10 \times 9=2(600-5 x)$
$\Rightarrow 90=1200-10 x$
$\Rightarrow 10 x=1200-90$
$\Rightarrow x=\frac{1110}{10}=111$
Hence, the speed of train C is 111 kmph.
70. (B) (1) If one green ball in a box, then number of ways $=6$
(2) If two green balls in a box, then number of ways $=5$
(3) If three green balls in a box, then the number of ways $=4$
(4) If four green balls in a box, then number of ways $=3$
(5) If five green balls in a box, then number of ways $=2$
(6) If six green balls in a box, then number of ways $=1$
$\therefore$ Total number of ways
$=6+5+4+3+2+1=21$
71. (D) Let their monthly income are $x$ and $y$ respectively.
$\therefore x+y=₹ 8000$
Again, they spend $90 \%$ and $80 \%$ respectively.
So they save $10 \%$ and $20 \%$.
By question,
(10\% of $x):(20 \%$ of $y)=3: 4$
$\Rightarrow \frac{\frac{10 x}{100}}{\frac{20 y}{100}}=\frac{3}{4} \Rightarrow \frac{10 x}{20 y}=\frac{3}{4}$
$\Rightarrow x=\frac{3}{2} y$
Putting the value of eq. (2) in eq. (1)
$\Rightarrow \frac{3}{2} y+y=8000$
$\Rightarrow \frac{5 y}{2}=8000$
$\therefore y=\frac{8000 \times 2}{5}=₹ 3200$
$\therefore x=\frac{3}{2} y=\frac{3}{2} \times 3200=₹ 4800$
72. (A) Let the both parts are $x$ and $y$.
$\therefore x+y=65$
By question,
$25 \%$ of $x=40 \%$ of $y$
$\Rightarrow \frac{25 x}{100}=\frac{40 y}{100}$
$\Rightarrow \frac{x}{4}=\frac{2 y}{5}$
Putting the value of eq. (2) in eq. (1),
$\frac{8 y}{5} y+y=72$
$\Rightarrow \frac{13 y}{5}=65$
$\therefore y=25$
$\therefore x=65-y=65-25=40$
both parts $=40,25$.
73. (C) $\because$ Interest
$=\frac{\text { principle } \times \text { time } \times \text { rate }}{100}$
( $\because 747$ is amount $)$
$\therefore 747-\mathrm{P}=\frac{\mathrm{P} \times 6 \times 11}{100}$
$\Rightarrow 747=\frac{66 \mathrm{P}}{100}+1=\frac{166 \mathrm{P}}{100}$
$\therefore \mathrm{P}=\frac{747 \times 100}{166}=₹ 450$

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74. (C) $\because(a-b)=1 \Rightarrow(a-b)^{3}=(1)^{3}$
$\Rightarrow a^{3}-b^{3}-3 a b(a-b)=1$
$\Rightarrow a^{3}-b^{3}-3 a b \times 1=1$
$\Rightarrow a^{3}-b^{3}-3 a b=1$
75. (A) S.P. $=₹ 900$, loss $=25 \%$

So, C.P $=\frac{900 \times 100}{(100-25)}=₹ 1200$
For $25 \%$ Profit, the S.P. will be $125 \%$ of ₹ 1200
$=1200 \times \frac{125}{100}=₹ 1500$
76. (C) Let mean proportional is $x$

So, $25: x: x: 121$
$\Rightarrow \frac{25}{x}=\frac{x}{121}$
$\Rightarrow x^{2}=25 \times 121$
$\Rightarrow(x)^{2}=(5 \times 11)^{2}$
$\therefore x=55$
77. (D) Speed $=75 \mathrm{~km} / \mathrm{h}$,
time $=20$ minute $=\frac{15}{60}$ hours
$\therefore$ distance $=$ speed $\times$ time
$=75 \mathrm{~km} / \mathrm{h} \times \frac{20}{60} \mathrm{~h}=25 \mathrm{~km}$
$=25 \times 1000 \mathrm{~m}=25000 \mathrm{~m}$
78. (A) Let the income of $\mathrm{C}=x$.
$\therefore$ income of $\mathrm{B}=80 \%$ of $x$
$=\frac{80 x}{100}=\frac{4 x}{5}$
$\therefore$ income of $\mathrm{A}=110 \%$ of $\frac{4 x}{5}$
$\frac{110}{100} \times \frac{4 x}{5}=\frac{22 x}{25}$
$\therefore$ Ratio is,
$\frac{22 x}{25}: \frac{4 x}{5}: x=\mathrm{A}: \mathrm{B}: \mathrm{C}$
$\Rightarrow \frac{22 x}{25}: \frac{20 x}{25}: \frac{25 x}{25}=\mathrm{A}: \mathrm{B}: \mathrm{C}$
$\therefore \mathrm{A}: \mathrm{B}: \mathrm{C}=22: 20: 25$
79. (B) 8 men +12 children work in 9 days.

From question,
1 men $=2$ children
$\therefore 6$ men $=12$ children.
$\therefore 8$ men +12 children
$=8$ men +6 men $=14$ men .
$\therefore 14$ men complete a work in 9 days.
$\therefore 1$ man complete a work in $14 \times 9$ days
$\therefore 7$ men complete a work in $\frac{14 \times 9}{7}$ days = 18 days
80. (D) $x=9-4 \sqrt{5}$
$\therefore \frac{1}{x}=\frac{1}{9-4 \sqrt{5}}$
$\therefore \frac{1}{x}=\frac{9+4 \sqrt{5}}{(9+4 \sqrt{5})(9-4 \sqrt{5})}$
$=\frac{7+4 \sqrt{3}}{(9)^{2}-(4 \sqrt{5})^{2}}$
$=\frac{9+4 \sqrt{5}}{81-80}=9+4 \sqrt{5}$
$\therefore x+\frac{1}{x}=9-4 \sqrt{5}+9+4 \sqrt{5}=18$
81. (D) Remainder $=2 \times 24-11=48-11=37$
82. (C) The pattern is :
$1 \times 2^{2}=1 \times 4=4$
$2 \times 3^{2}=2 \times 9=18$
$3 \times 4^{2}=3 \times 16=48$
$4 \times 5^{2}=4 \times 25=100$
$5 \times 6^{2}=5 \times 36=180$
$6 \times 7^{2}=6 \times 49=294$
83. (B)

| 2 | 12, | 18, | 21, | 28 |
| :---: | ---: | ---: | ---: | ---: |
| 2 | 6, | 9, | 21, | 14 |
| 3 | 3, | 9, | 21, | 7 |
| 7 | 1, | 3, | 7, | 7 |
|  | 1, | 3, | 1, | 1 |

$\therefore$ L.C.M. $=2 \times 2 \times 3 \times 7 \times 3=252$
The smallest 5 -digit number $=10000$

$$
\begin{gathered}
2 5 2 \longdiv { 1 0 0 0 0 ( 3 9 } \\
\frac{756}{2440} \\
\frac{2268}{172}
\end{gathered}
$$

$\therefore$ Smallest number divisible by 252
$=10000+(252-172)=10080$
$\therefore$ Required number $=10081$
84. (C) In the word ASSASSINATION.

A comes thrice, S - four times
I twice and N -twice.
We have to arrange AAA II NNTO (SSSS)
$\therefore$ Number of arrangements
$=\frac{10!}{|3| 2 \mid 2}$
$=\frac{10!}{24}=151200$

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85. (A) Let the fraction is $\frac{x}{y}$. By question,
$\frac{(x-20 \% \text { of } x)}{(y+30 \% \text { of } y)}=\frac{9}{20}$
$\Rightarrow \frac{\left(x-\frac{20 x}{100}\right)}{\left(y+\frac{30 y}{100}\right)}=\frac{9}{20}$
$\Rightarrow \frac{\frac{8 x}{10}}{\frac{13 y}{10}}=\frac{9}{20}$
$\Rightarrow \frac{8 x}{10} \times \frac{10}{13 y}=\frac{9}{20}$
$\Rightarrow \frac{x}{y}=\frac{9 \times 13 \times 10}{20 \times 8 \times 10}=\frac{117}{160}$
86. (D) Let the breadth of hall $=x \mathrm{~m}$
$\therefore$ length $=(x+5) \mathrm{m}$,
$\therefore$ area of hall $=750 \mathrm{~m}^{2}$
$\Rightarrow l \times b=750 \mathrm{~m}^{2}$
$\Rightarrow(x+5) x=750$
$\Rightarrow x^{2}+5 x-750=0$
$\Rightarrow x^{2}+30 x-25 x-750=0$
$\Rightarrow(x+30)(x-25)=0$
$\therefore x=25,-30$
$\because x=-30$ is not possible
$\therefore x=25 \mathrm{~m}$.
$\therefore$ length $=(x+5) \mathrm{m}$
$=(25+5) \mathrm{m}=30 \mathrm{~m}$
87. (C) From formula,
$\frac{\mathrm{M}_{1} \mathrm{~T}_{1}}{\mathrm{~W}_{1}}=\frac{\mathrm{M}_{2} \mathrm{~T}_{2}}{\mathrm{~W}_{2}}$
$\left(\right.$ Let Required rupees $\left.=W_{2}\right)$
$\Rightarrow \frac{6 \times 8}{9600}=\frac{9 \times 6}{W_{2}}$
$\Rightarrow \mathrm{W}_{2}=\frac{9 \times 6 \times 9600}{6 \times 8}=₹ 10800$
88. 

(C) $?=\frac{\sqrt{0.01+\sqrt{0.0064}}}{0.01 \times 0.3}$
$=\frac{\sqrt{0.01+0.08}}{0.003}=\frac{\sqrt{0.09}}{0.003}$
$=\frac{0.3}{0.003}=100$
89. (C) Total amount of the bill $=₹ x$
$\therefore\left(1-\frac{2}{5}\right) x=900$
$\Rightarrow \frac{3 x}{5}=900$
$\Rightarrow x=\frac{900 \times 5}{3}=₹ 1500$
90.
(A) $\frac{1}{1+\frac{1}{1+\frac{1}{x}}}=2$
$\Rightarrow \frac{1}{1+\frac{1}{\frac{x+1}{x}}}=2$
$\Rightarrow \frac{1}{1+\frac{x}{x+1}}=2$
$\Rightarrow \frac{1}{\frac{x+1+x}{x+1}}=2 \Rightarrow \frac{x+1}{2 x+1}=2$
$\Rightarrow 4 x+2=x+1$
$\Rightarrow 4 x-x=1-2 \Rightarrow 3 x=-1$
$\Rightarrow x=-\frac{1}{3}$
91. (D)

$\therefore$ Required distance $=20+25=45 \mathrm{~m}$
92. (D) $1 \rightarrow 5 \rightarrow 4 \rightarrow 2 \rightarrow 3$
93. (A)

94. (A)
95. $(\mathrm{A})+\Rightarrow \div, \quad \times \Rightarrow+$
$-\Rightarrow \times \div-$
$36-6+3 \times 5 \div 3=74$
$\Rightarrow 36 \times 6 \div 3+5-3=74$
$\Rightarrow 36 \times 2+5-3=74$
$\Rightarrow 72+5-3=74$
$\therefore 74=74$
96. (D) $5 \times 2 \times 6=60$
$8 \times 4 \times 2=64$
$7 \times 6 \times 3=\mathbf{1 2 6}$
97. (D) $25=5 \times 5$
$30=5 \times 6$
$35=? \times 5$
$\therefore ?=\frac{35}{5}=7$
98. (D) $(24 \times 2)+5=48+5=53$
$(51 \times 4)+7=204+7=211$
$(67 \times 6)+5=402+5=407$
99. (B) $1 \times 10 \Rightarrow(1 \times 10)-1=9$
$2 \times 10 \Rightarrow(2 \times 10)-2=18$
$3 \times 10 \Rightarrow(3 \times 10)-3=27$
$8 \times 10 \Rightarrow(8 \times 10)-8=72$
100. (C)
101. (C)

102. (C)

103. (A)

104. (A)

105. (A) As

| M | O | N | E | Y |
| :---: | :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| 1 | 2 | 3 | 4 | 5 |

P L U S
$\downarrow \downarrow \downarrow \downarrow$
$\begin{array}{llll}6 & 7 & 8 & 9\end{array}$
So,

| P | L | U | M |
| :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| 6 | 7 | 8 | 1 |

106. (D) Day before Yesterday Today Tomorrow Day after yesterday

CHAIR $\xrightarrow{\text { Reverse }}$ RIAHC
Similarly,
TABLE $\xrightarrow{\text { Reverse }}$ ELBAT
108. (B) $6+15=21$
$3+15=18$
109. (B) $72 \Rightarrow(7+2) \times 2=18$
$56 \Rightarrow(5+6) \times 2=22$
110. (A) Ink is used for writing, similarly Colour is used for painting.
111. (A) Only '064' is the number whose square root is possible.
112. (D) $96=32 \times 3 ; \quad 24=8 \times 3$
$39=13 \times 3 ; \quad 18=6 \times 3$ $81=27 \times 3 ; \quad 54=18 \times 3$ Here $(82,64)$ are not multiples of 3 .
113. (D) Except 'Boat', all run on road
114. (D)

115. (A) SCOUT
116. (B)
117. (C) bcaag/bcaa/bcaa/bcaa $\Rightarrow \mathrm{acab}$
118. (C)
119. (B)
120. (D) $\left[(4)^{2}+(2)^{2}+(5)^{2}+(3)^{2}\right] \div 2=54 \div 2=27$
$\left[(5)^{2}+(3)^{2}+(2)^{2}+(6)^{2}\right] \div 2=74 \div 2=37$
$\left[(5)^{2}+(9)^{2}+(2)^{2}+(2)^{2}\right] \div 2=114 \div 2=\mathbf{5 7}$


## RRB-02 (ANSWER KEY)

| 1. (B) | 21. (A) | 41. (B) | 61. (C) | 81. (D) | 101. (C) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. (D) | 22. (D) | 42. (C) | 62. (B) | 82. (C) | 102. (C) |
| 3. (D) | 23. (D) | 43. (D) | 63. (D) | 83. (B) | 103. (A) |
| 4. (B) | 24. (B) | 44. (A) | 64. (B) | 84. (C) | 104. (A) |
| 5. (B) | 25. (B) | 45. (A) | 65. (D) | 85. (A) | 105. (A) |
| 6. (C) | 26. (B) | 46. (C) | 66. (A) | 86. (D) | 106. (D) |
| 7. (A) | 27. (A) | 47. (D) | 67. (C) | 87. (C) | 107. (C) |
| 8. (C) | 28. (C) | 48. (D) | 68. (D) | 88. (C) | 108. (B) |
| 9. (D) | 29. (B) | 49. (B) | 69. (A) | 89. (C) | 109. (B) |
| 10. (A) | 30. (B) | 50. (C) | 70. (B) | 90. (A) | 110. (A) |
| 11. (C) | 31. (A) | 51. (A) | 71. (D) | 91. (D) | 111. (A) |
| 12. (B) | 32. (C) | 52. (D) | 72. (A) | 92. (D) | 112. (D) |
| 13. (A) | 33. (C) | 53. (D) | 73. (C) | 93. (A) | 113. (D) |
| 14. (A) | 34. (D) | 54. (C) | 74. (C) | 94. (A) | 114. (D) |
| 15. (D) | 35. (D) | 55. (B) | 75. (A) | 95. (A) | 115. (A) |
| 16. (D) | 36. (C) | 56. (D) | 76. (C) | 96. (D) | 116. (B) |
| 17. (C) | 37. (B) | 57. (B) | 77. (D) | 97. (D) | 117. (C) |
| 18. (B) | 38. (C) | 58. (A) | 78. (A) | 98. (D) | 118. (C) |
| 19. (A) | 39. (C) | 59. (B) | 79. (B) | 99. (B) | 119. (B) |
| 20. (A) | 40. (C) | 60. (A) | 80. (D) | 100. (C) | 120. (D) |


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| Note:- If you face any problem regarding result or marks scored, please <br> contact 9313111777 |
| Note:- If your opinion differs regarding any answer, please message the mock <br> test and question number to 8860330003 |

