## SSC MOCK TEST - 212 (SOLUTION)

1. (A) Kathak is the folk dance of Uttar Pradesh, while Rouf is the flok dance of Jammu and Kashmir
2. (C) As, $9 \times 2-4=14$ Similarly, $15 \times 2-4=26$
3. (C)

4. (B) In all other pairs, second is the name given to artificial rearing of the first.
5. (B) In all other pairs, second number is 9 more, than the first.
6. (B) All except Instruct denote learning process.
7. (B)
8. (A) acac/abab/acac/abab/acac.

Thus the pattern acac/abab is repeated
9. (C) 1st letter:
$\mathrm{K} \xrightarrow{-2} \mathrm{I} \xrightarrow{-2} \mathrm{G} \xrightarrow{-2} \mathrm{E} \xrightarrow{-2}$ (C)
2nd letter:
$\mathrm{M} \xrightarrow{+3} \mathrm{P} \xrightarrow{+3} \mathrm{~S} \xrightarrow{+3} \mathrm{~V} \xrightarrow{+3}(\mathrm{Y})$ Number
$5 \xrightarrow{+3} 8 \xrightarrow{+3} 11 \xrightarrow{+3} 14 \xrightarrow{+3}$ (17)
10. (A)

(Directions showing in compass) Man has to go the North, if the wishes to move towards the East.
11. (D)

12. (B)

17. (D) As, $18 \times 5=90$
and, $13 \times 11=143$
Similarly, $7 \times 5=35$
18. (D) As, $9+8+7=14$
and, $4+7+3=14$
Similarly, $2+1+9=12$
19. (C)
20. (C)


Neither I nor II follows.
21. (D)
22. (A)
23. (D)
24. (B)

25. (D)
29. (B) Pollywood is a Panjabi Cinema industry in India and Pakistan.
Kollywood refers to Tamil Cinema. Mollywood refers to Malayalam Cinema.
30. (C) The National Safety Council (NSC) is a self-supporting non-profit autonomous society, set up by the Ministry of Labour and Employment, Govt. of India (GoI) on 4th March 1966. Its aim is to strengthen a national movement on Safety, Health \& Environment (SHE) to prevent and mitigate loss of life, human suffering $\&$ economic losses and provide support services. It is in news because the 2016 NSCI Safety Awards will be presented by the Minister of State (Independent Charge), Labour \& Employment Bandaru Dattatreya on April 20, 2017 in New Delhi. The NSCI Safety Awards are coveted national level awards in the field of Workplace Safety, Health and Environment. The headquarters of the NSC is located in Mumbai, Maharashtra.
32. (A) Doppler effect - An increase/decrease in the frequency of sound, light, or other wave as the source and observer move towards each other.
Zeeman effect - The splitting of a spectrum line into several components by the application of a magnetic field.
Photoelectric effect - The emission of electrons or other free carriers when light hits a material. Electrons emitted in this manner can be called Photoelectrons.
33. (A) $4^{\text {th }}$ Feb - World Cancer Day.
34. (B) Choronical order of Mugal EmperorsBabar, Humayun, Akbar, Jahangir, Shah Jahan, Aurangzeb, Bahadur Shah, Jahandar Shah, Farrukhsiyar, Rafi udDarajat, Shah Jahan II, Muhammad Shah, Ahmad Shah Bahadur, Alamgir II, Shah Alam, Akbar Shah II, Bahadur Shah II.
36. (A) Books : Author
'A Wasted Hour' : Jeffrey Archer 'Two (a Novel)' : Gulzar 'Hit Refresh' : Satya Nadella.
40. (A) The Government of India Act 1919 was passed to expand participation of Indians in the Government of India. India Independence Act 1947 was an Act passed by the Parliament of the UK that divided the British India into two new independent dominions of India and Pakistan. The act came to know as 3 June Plan or Mountbatten plan.
43. (C) Public account - Article 266(2) Consolidated account _ Article 266(1) Contingency fund - Article 267(1)
45. (D) Sylvain Arend - Comet C/1956R Joseph Asprook - Carter As book all the moon and planet (2157) Ashbrook. Edmin Hubble - Nebulae
48. (A) Boundary Line

## Country

Mannerheim Line-
Russia and Finland
Maginot Line - France and Germany
Seigfrid Line - France and Germany
50. (C) Folkdance

Lezim
Puliyattam
Dappu

## State

Maharashtra
Tamil Nadu
Andhra Pradesh
51. (A) A.T.Q,

33 years $\xrightarrow[\text { After } 4 \text { years }]{ } 37$ years
37 years $\xrightarrow{\text { on death of } 64 \text { years }} 37-\frac{64}{8}$
29 years $\xrightarrow[3 \text { years }]{\text { After }} 32$ year
32 years $\xrightarrow[\text { on death of } 72 \text { years }]{ } 32-\frac{72}{8}$
23 years $\xrightarrow[3 \text { years }]{\text { After }} 26$ years
52. $(\mathrm{D}) 656656 \longrightarrow(656000+656)$

$$
656(1000+1)
$$

$$
656 \times 1001
$$

$$
656 \times 7 \times 11 \times 13
$$

Is divisible by 1001
53. (B) A.T.Q,

Time Efficiency
$\frac{\mathrm{A}}{\mathrm{B}}=\frac{140}{100}=\frac{7}{5}=\frac{5}{7} \times \frac{5}{7}$
$\frac{B}{C}=\frac{80}{100}=\frac{4}{5}=\frac{5}{7} \times \frac{7}{7}$
So, time

$$
\mathrm{A}: \mathrm{B}: \mathrm{C}
$$

$$
25: 35: 28
$$

3 units $\longrightarrow 6$ days
35 units $\longrightarrow 70$ days
Hence, B will complete this work in 70 days.
54. (A) Put $\beta=0$
$2 \sin ^{2} \beta+4 \cos (\alpha+\beta) \times \sin \alpha \cdot \sin \beta+\cos 2(\alpha+\beta)$
$\Rightarrow 0+0+\cos 2 \alpha$
$\Rightarrow \cos 2 \alpha$
55. (C) Let the number of workers be $x$.
A.T.Q.,
$\Rightarrow x \times 8500=7 \times 10000+(x-7) 7800$
$\Rightarrow 85 x=700+78(x-7)$
$\Rightarrow 85 x-78 x=700-546$
$\Rightarrow 7 x=154$
$\Rightarrow x=\frac{154}{7}=22$
56. (C) A.T.Q,

$$
\begin{aligned}
& 3^{x}-3^{x-1}=1458 \\
& \Rightarrow 3^{x}-\frac{3^{x}}{3}=1458 \\
& \Rightarrow 3^{x}\left(1-\frac{1}{3}\right)=1458 \\
& \Rightarrow 3^{x} \times \frac{2}{3}=1458 \quad \Rightarrow 3^{x}=2187 \\
& \Rightarrow 3^{x}=3^{7} \quad \Rightarrow x=7
\end{aligned}
$$

57. (A) $(823)^{933!} \times(777)^{223!} \times(838)^{123!}$
$3^{4} \times 7^{4} \times 8^{4}=1 \times 1 \times 6=6$
58. (D)


AC is the diameter of circle
So, $\angle \mathrm{ABC}=90^{\circ}$
$\angle \mathrm{EBA}=90^{\circ}-65^{\circ}=25^{\circ}$
$\angle \mathrm{ABE}=\angle \mathrm{ACE}=25^{\circ}$ (angle in the same
segment)
AC || ED
$\therefore$ So, $\angle \mathrm{ACE}=\angle \mathrm{CED}=25^{\circ}$
59. (D)

$\mathrm{AC}=1 \mathrm{~km}$
In $\triangle \mathrm{ADC}$
$\tan 60^{\circ}=\frac{1}{\mathrm{DC}} \Rightarrow \mathrm{DC}=\frac{1}{\sqrt{3}}$
Now, In $\triangle A B C$
$\tan 30^{\circ}=\frac{1}{\mathrm{BD}+\mathrm{DC}} \Rightarrow \mathrm{BD}+\mathrm{DC}=\sqrt{3}$
and, $\quad \mathrm{BD}=\sqrt{3}-\frac{1}{\sqrt{3}}=\frac{2}{\sqrt{3}}$
Then the speed of aeroplane
$=\frac{2 \times 3600}{\sqrt{3} \times 10}=240 \sqrt{3} \mathrm{~km} / \mathrm{hr}$
60. (A) A.T.Q,

$$
\frac{\mathrm{B}}{\mathrm{~A}}=\frac{3}{4}, \frac{\mathrm{~B}}{\mathrm{C}}=\frac{6}{5}
$$


increment
Total income before $=1900$ units
Total income after increment $=2140$ units

Increment $=\frac{2140-1900}{1900} \times 100$

$$
=12.63 \%=13 \%
$$

61. (A) ATQ,
$12 \frac{1}{2} \%=\frac{1}{8} \%, 6 \frac{1}{4} \%,=\frac{1}{16}$
Let, total amount borrowed 128 units 128
1 st year interest 16
2nd year interest 81
1 unit $\rightarrow$ ₹ 360
128 units $\rightarrow ₹ 46080$
62. (B) A.T.Q,


Water $=22$ litres
Milk = 8 litres
$\mathrm{W}: \mathrm{M}=22: 8=11: 4$
Step - II
When 6 litres milk is taken out from vessels B
15 units = 6 litres
4 units $=4 \times \frac{6}{15}=\frac{8}{5}$ litres
11 units $=11 \times \frac{6}{15}=\frac{22}{5}$ litres
Now, total milk in vessels,
$A=32+\frac{8}{5}=\frac{168}{5}$
Remaining water in vessels $B=22-\frac{22}{5}$

$$
=22 \times \frac{4}{5}
$$

Required ratio $=\frac{\frac{168}{5}}{22 \times \frac{4}{5}}=21: 11$
63. (D) A.T.Q,
$25 \%=\frac{1}{4}$
Let CP $=16$ units
Profit $=25 \%$
S.P = 20 units

Profit $=4$ units
If profit is calculated on S.P $25 \%$ of 20 profit $=5$ units
Profit on CP and Profit on SP is 1 unit more.
Now, $5 \%$ of $16=0.8$
Total profit is 1 unit more
Hence,
$5 \%$ of $16+0.2$
$0.2 \longrightarrow$ ₹ 80
16 units $\longrightarrow \frac{80 \times 16}{0.2}=₹ 6400$
64. (D) $\operatorname{ATQ}=\frac{8}{25}$ S.I
64. (D) $\mathrm{ATQ}=\frac{8}{25} \longleftarrow \mathrm{SUM}$

Time $=\frac{R}{2}$, Rate $=R$
Now, $8=\frac{25 \times \mathrm{R} \times \mathrm{R}}{100 \times 2}=\left[\mathrm{SI}=\frac{\mathrm{P} \times \mathrm{R} \times \mathrm{T}}{100}\right]$
$\Rightarrow 8=\frac{\mathrm{R}^{2}}{4 \times 2} \Rightarrow 64=\mathrm{R}^{2}$
$\Rightarrow \mathrm{R}=8 \%$
65. (D) Distance travelled by driver in 2 hours
$=300 \times \frac{40}{100}=120 \mathrm{~km}$
Distance to be covered in 2 hours
$=300-120=180 \mathrm{~km}$
Required speed $=\frac{180}{2}=90 \mathrm{~km} / \mathrm{h}$
Required difference $=90-\frac{120}{2}$

$$
=30 \mathrm{~km} / \mathrm{hr}
$$

66. (C) Diagonal of cube will be equal to diameter of sphere,
$\sqrt{3} a=2 \times r$
$\sqrt{3} a=2 \times 6 \sqrt{3}$
$a=12$
Surface area $=6 a^{2}=6 \times 12 \times 12$
$=864 \mathrm{~cm}^{2}$
67. (C)


Volume of metal $=$ External volume of cylindrical tube - Internal volume of cylindrical tube
$=\pi\left(r_{\text {ex }}\right)^{2} h-\pi\left(r_{\text {in }}\right)^{2} h=\pi h\left\{\left(r_{e x}\right)^{2}-\left(r_{\text {in }}\right)^{2}\right\}$
$=\pi h\left\{\left(\frac{12}{2}\right)^{2}-\left(\frac{11.2}{2}\right)^{2}\right\}$
$=\frac{22}{7} \times 21 \times(36-31.36)$
$=22 \times 3 \times 4.64=306.24 \mathrm{~cm}^{3}$
68. (D)

here,
$\left[\because \frac{r_{b}}{r_{s}}=\frac{h_{b}}{r_{s}}\right]$

Volume of smaller cone $=\frac{\text { vol. of bigger cone }}{27}$
i.e. $\frac{1}{3} \pi\left(\mathrm{r}_{\mathrm{s}}\right)^{2}\left(\mathrm{~h}_{\mathrm{s}}\right)=\frac{\frac{1}{3} \pi\left(\mathrm{r}_{\mathrm{b}}\right)^{2}\left(\mathrm{~h}_{\mathrm{b}}\right)}{27}$
or, $\left(\mathrm{r}_{\mathrm{s}}\right)^{2}\left(\mathrm{~h}_{\mathrm{s}}\right)=\frac{\left(\mathrm{r}_{\mathrm{b}}\right)^{2}\left(\mathrm{~h}_{\mathrm{b}}\right)}{27}$
$\Rightarrow \frac{\left(\mathrm{r}_{\mathrm{b}}\right)^{2}\left(\mathrm{~h}_{\mathrm{b}}\right)}{\left(\mathrm{r}_{\mathrm{s}}\right)^{2}\left(\mathrm{~h}_{\mathrm{s}}\right)}=27$
or, $\frac{r_{b} \times r_{b} \times h_{b}}{r_{s} \times r_{s} \times h_{s}}=\frac{3 \times 3 \times 3}{1 \times 1 \times 1}$
or, $\frac{\mathrm{h}_{\mathrm{b}}}{\mathrm{h}_{\mathrm{s}}}=\frac{3}{1} \Rightarrow \mathrm{~h}_{\mathrm{s}}=\frac{\mathrm{h}_{\mathrm{b}}}{3}=\frac{30}{3}=10 \mathrm{~cm}$
$\Rightarrow$ The required height above the base, $=(30-10) \mathrm{cm}=20 \mathrm{~cm}$
69. (C) $(\sqrt[3]{3.5}+\sqrt[3]{2.5})\left\{(\sqrt[3]{3.5})^{2}-\sqrt[3]{8.75}+(\sqrt[3]{2.5})^{2}\right\}$
$=(\sqrt[3]{3.5})^{3}+(\sqrt[3]{2.5})^{3}$
[by using $(a+b)\left(a^{2}-a b+b^{2}\right)=a^{3}+b^{3}$ ]
$=3.5+2.5=6$
70. (A) ATQ,
$\left(\frac{1}{2}\right)^{k}=\sqrt{3} \Rightarrow 2^{-k}=3^{1 / 2}$
$\left(\frac{1}{3}\right)^{m}=\sqrt{2} \Rightarrow 3^{-m}=2^{1 / 2}$
Multiplying eq. (i) and (ii)
$2^{-k} .3^{-m}=3^{1 / 2} .2^{1 / 2}$
Comparing powers
$m=k=-\frac{1}{2}$, then $\frac{m k}{2}=\frac{1}{8}$
71. (C) $\tan \alpha+2 \tan 2 \alpha+4 \tan 4 \alpha+\frac{8\left(1-\tan ^{2} 4 \alpha\right)}{2 \tan 4 \alpha}$
$\left(\because \cot 2 \theta=\frac{1-\tan ^{2} \theta}{2 \tan \theta}\right)$
$=\tan \alpha+2 \tan 2 \alpha+\frac{8 \tan ^{2} 4 \alpha+8-8 \tan ^{2} \alpha}{2 \tan 4 \alpha}$
$=\tan \alpha+2 \tan 2 \alpha+\frac{4}{\tan 4 \alpha}$
$=\tan \alpha+2 \tan 2 \alpha+\frac{4\left(1-\tan ^{2} 2 a\right)}{2 \tan 2 a}$
$=\frac{1}{\tan \alpha}=\cot \alpha$
72. (A) Percentage of students in B. Tech. $=11 \%$ Percentage of students in M. Teach. $=7 \%$
$\therefore$ Required percentage
$=\frac{11-7}{7} \times 100 \%$
$=\frac{4}{7} \times 100=57 \%$
73. (A) Number of students in B.A. $=24 \%$ of
$11200=2688$
Since, $25 \%$ of them are girls, therefore, number of boys in
B.A. $=75 \%$ of $2688=2016$

Which is equal to the number of students in M.Sc. because $18 \%$ of 11200 is 2016 .
74. (B) Total number of students in M.Sc., B. Tech. and MBA together $=(18+11+$ $17) \%$ of $11200=46^{\wedge}$ of 11200
Total number of students in B. Sc., M. Tech. and B.A. together
$=(23+7+24) \%$ of 11200
$=54 \%$ of 11200
$\therefore$ Required difference
$=54 \%$ of $11200-46 \%$ of 11200
$=8 \%$ of 11200
$=896$
75. (C) Average number of students in B. Tech., M. Tech. and B.A. together
$=\underline{\text { Total number of students in these courses }}$
Number of courses
$=\frac{(11+7+24) \% \text { of } 11200}{3}$
$=14 \$$ of $11200=1568$

## MEANINGS IN ALPHABETICAL ORDER

## Word

Accentuate
Accent
Devalue
Dismal
Impracticable
Inexcusable
Insurrection
Lurid
Meticulous

Methodical
Mitigate
Mild
Murky
Painstaking
Plagiarism

Prodigy
Promiscuous
Sharpen
Unnerve

## Meaning in English

to make more noticeable
a distinctive way of pronouncing a language
to cause to seem or to be less valuable or important
very bad or poor
Incapable of being practised
that which cannot be excused rising in arms against an established government unpleasantly bright in colour very careful about doing something in an extremely accurate and exact way done by using a careful and organized procedure to make less severe or pain
gentle in nature or behavior
very dark or foggy
showing or done with great care and effort
The practice of borrowing words and ideas from other authors and using them as one's own; literary theft.
A child with unusual or remarkable talent.
Having a lot of different sexual partners.
to make sharp or sharper
to cause to lose confidence, courage, or self-control

Meaning in Hindi
प्र मु ख बना ना
उ च चा रप
अवमू ल य
निरा प T जाक
अन यमहा रिक
अक्षा I य
बगा वत
चमक्दा र
मे हनती

ठ यर्वसिथ त
कम
स゙ エय
उ दा स
श्रमस ध्य
स हिति क्कचा` री

प्र तिभ $\mathrm{T} T$ सं $\Psi=\mathrm{T}$ बा लक
अति का मु क
ते ज
हता' र स ह

## SSC MOCK TEST - 212 (ANSWER KEY)


76. (D) The sentence is grammatically and contextually correct.
77. (B) 'Attacked on him' is the incorrect form of phrasal verb that needs to be replaced with 'Attacked him' to make the sentence correct. This is because; 'Attack' is not followed by any preposition.
Thus, the correct sentence would be, 'That Brutus, who was his trusted friend had attacked him caused heartbreak to Julius Caesar'.
78. (B) 'Prefer' is followed by the gerund form of the verb. Thus, 'spend' needs to be replaced with 'spending' to make the sentence grammatically correct. Thus,
the correct sentence would be, 'Though he is a gifted comedian, he prefers spending his spare time watching horror movies.
86. (A) The phrase "cook the books" means "alter facts or figures dishonestly or illegally." It matches option A. Hence option A is correct.
87. (C) The phrase "change your tune" means "express a very different opinion or behave in a very different way." It matches option C. Hence option C is correct.
88. (B) Replace 'have been doing' with 'had been doing'.
89. (A) Replace 'student' with 'students'.

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of Sunday Mock Test.

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

