## SSC MOCK TEST - 205 (SOLUTION)

1. (B) Death leads to sorrow and birth leads to happiness.
2. (D) $(2 \times 2 \times 3)^{2}+223=367$
$(1 \times 7 \times 2)^{2}+172=368$
3. (B)

4. (B)

5. (A) Rest are prime numbers
6. (C) Snake is a reptile
7. (D) 1. Ale
8. Align
9. Alpine
10. Amended
11. Anatomy
12. (D) JKLM/JKLM/JKLM
13. (D) $\underline{a b b b} b \underline{c} d / a \underline{b} b b c d$
14. (C)


In south direction 100 metres from the starting point.
11. (A)
A C169
B D576
C E1225
D F2116
$(13)^{2}$
$(24)^{2}$
$(35)^{2}$
$(46)^{2}$
12. (C) $2 \times 2+1=5 \quad 17 \times 4+3=71$

$$
5 \times 3+2=17 \quad 71 \times 5+4=359
$$

13. (B)

14. (C)

15. (D)
16. (A) $12 \times 8+4=100$
$8 \times 4+12=44$
$4 \times 12+8=56$
17. (A) $[(20+2)-1]=21$
$[(23+1)-2]=22$
$[(43+2)-5]=40$
18. (A) $2^{2}+1=5$
$3^{2}+1=10$
$5^{2}+1=26$
$7^{2}+1=50$
$11^{2}+1=122$
19. (A)

20. (B)

I. False
II. True
III. False
21. (B)
22. (A)
23. (C)
24. (D)
25. (C) $\mathbf{S} \quad \mathbf{P} \quad \mathbf{E} \quad \mathbf{A} \quad \mathbf{K}$ 21, 40, 44, 57, 99
26. (B) Serena Williams was the Runner-up Novak Djokouic won the Men's 2019 Winisleden Chanpionship by defeating Roger Federer.
27. (C) C.M. of Meghalaya - Conrad K. Sangma Governer of Meghalaya - Tathagata Roy
28. (C) Best Short Film Award - Na Bole Wo Haram Special Jury Award - Walking With the for Direction and Wind Story
29. (B) National Green tribunal (NGT) is a statutory body established under the National Green Tribunal Act, 2010.
Justice Adarsh Kumar Goel is the acting Chairperson of the Tribunal.
New Delhi is the principal place of sitting of the Tribunal and Bhopal, Pune, Kolkata and Chennai are the other places of sitting of the tribunal.
30. (B) Bhupesh Baghel is the C.M of Chhattisgarh.
31. (C) International Court of Justice was established in June 1945 and began its work in April 1946.
It is located at the Hague, Netherlands.
32. (C) Commission Criteria Suggested for States Reorganisation
33. Dhar commission
(June 1948)
34. JVP Committee
35. Fazl Ali commission (Dec 1953)

- Geographical contiguity
- Financial self reliance
- Administrative viability
- Potential for development
- security, unity \& and economic prosperity
- Linguistic and cultural homogeneity.
- Unity and security of nation
- Financial, Economic and administrative considerations
- welfare of people

The government of India accepted the recommendations of FAC and State Reorganisation Act of 1956 was passed. It led to the formation of 14 states and 6 UTs on 1st November 1956.
35.
(A) State

Tamil Nadu

## Classical dance

Bharatnatyam

$$
2
$$

And
Andhra Pradesh Kuchipud Assam Kuchipudi

Name
Bihu
36
6. (D)

\author{

1. Anamudi 2003 <br> Sholo <br> National <br> Park(Kerala)
}

## 2. Dachigam 1981

National
Park (J\&K)
3. Hemis 1981

National
Park(J\&K)
4. Jim Corbett 1936

National Park
(Uttarakhand)

## Important facts

Under consideration of UNESCO's
World Heritage
Committee for
selection as a
World Heritage
Site.
Only area where Kashmir Stag is found. Largest National Park in India. Establised as Hailey National Park.
38. (A) A landlocked country is a sovereign state entirely enclosed by land or whose only coastlines lie on closed seas. There are currently 49 land locked countries.
42. (A) Book

## Author

My Unforgettable -
Mamata Benerjee
Memories
My Music My Life - Pt. Ravi Shankar Flood of Fire - Amitav Ghosh
43. (A) Date

15 October

14 November

## Event

International Day of Rural Women
World Diabetes Day
10 December Human Rights Day
46. (D) Country

Cuba
Lituania

## America

## National Game

Baseball
Basketball
Baseball
50. (D) Apollo 11 was the first crewed manned mission to moon
51. (B) $x+\frac{1}{x}=4$
$\Rightarrow x^{2}+1=4 x$
$\Rightarrow x^{2}-4 x=-1$
$\Rightarrow x^{2}-4 x+5=-1+5$
$\Rightarrow\left(x^{2}-4 x+5\right)=4$
$\Rightarrow \frac{4}{x^{2}-4 x+5}=1$
52. (D) $\sin \theta+3 \cos \theta=1$

Squaring both side,
$\Rightarrow \sin ^{2} \theta+9 \cos ^{2} \theta+6 \sin \theta \cos \theta=1$
$\Rightarrow 1-\cos ^{2} \theta+9\left(1-\sin ^{2} \theta\right)+6 \sin \theta \cos \theta=1$
$\Rightarrow-\cos ^{2} \theta-9 \sin ^{2} \theta+6 \sin \theta \cos \theta=-9$
$\Rightarrow(3 \sin \theta-\cos \theta)^{2}=9$
$\Rightarrow 3 \sin \theta-\cos \theta=3$
53. (B) ATQ.,
$\frac{\text { Area of } \Delta_{1}}{\text { Area of } \Delta_{2}}=\frac{\frac{1}{2} a_{1} \cdot h_{1}}{\frac{1}{2} a_{2} \cdot h_{2}}$
$\Rightarrow \frac{3}{2}=\frac{\frac{1}{2} a_{1} 4}{\frac{1}{2} a_{2} 5} \Rightarrow \frac{a_{1}}{a_{2}}=\frac{15}{8}$
$\Rightarrow a_{1}: a_{2}=15: 8$
54. (C) We know that

$$
\begin{aligned}
& \text { Slope of line }\left(\mathrm{m}_{1}\right)=\frac{y_{2}-y_{1}}{x_{2}-x_{1}} \\
\Rightarrow & \left(\frac{-5-(-2)}{-3-3}=\frac{1}{2}\right)
\end{aligned}
$$

When slope of line is perpendicular, $m_{1} \times m_{2}=-1$
$\Rightarrow \frac{1}{2} \times \mathrm{m}_{2}=-1$
$\Rightarrow \mathrm{m}_{2}=-2$
55. (C) Let prices of rice, sugar and oil

Increase $\rightarrow$


Total increase percentage in expenses,
$=\frac{37}{120} \times 100=30 \frac{5}{6} \%$
56. (C) ATQ.,
C. $\mathrm{P} \rightarrow 12$ units
S. $\mathrm{P} \rightarrow 15$ units

Profit $\%=\frac{3 \text { units }}{12 \text { units }} \times 100=25 \%$
57. (A) $6=3 \times 2$

In 133!, the 2 's will be in abundance hence we need to count the number of 3 's in 133!. Number of 3's in 133!
$=$ maximum integral value of ,
$\left[\left(\frac{133}{3}\right)+\left(\frac{133}{9}\right)+\left(\frac{133}{27}\right)+\left(\frac{133}{81}\right)+\ldots \ldots.\right]$
$\Rightarrow 44+14+4+1=63$
58. (A) $\mathrm{V}=19404 \mathrm{~cm}^{3}$
$\frac{2}{3} \pi r^{3}=19404$
$\mathrm{r}^{3}=\frac{19404 \times 7 \times 3}{2 \times 22}=441 \times 21$
$r=21$
Hence, Total surface area (TSA) $=3 \pi r^{2}$
$\Rightarrow 3 \times \frac{22}{7} \times 21^{2}=4158 \mathrm{~cm}^{2}$
59. (C) A. T. Q,

Let $\frac{a+b}{9}=\frac{b+c}{10}=\frac{c+a}{11}=\mathrm{k}$
$a+b=9 \mathrm{k}, b+c=10 \mathrm{k}, c+a=11 \mathrm{k}$
$\Rightarrow a+b+c=15 \mathrm{k}$
Then,
$a=5 \mathrm{k}, b=4 \mathrm{k}, c=6 \mathrm{k}$
$\cos \mathrm{A}=\frac{b^{2}+c^{2}-a^{2}}{2 b c}=\frac{27 \mathrm{k}^{2}}{48 \mathrm{k}^{2}}=\frac{9}{16}$
$\operatorname{cosB}=\frac{a^{2}+c^{2}-b^{2}}{2 a c}=\frac{45 \mathrm{k}^{2}}{60 \mathrm{k}^{2}}=\frac{9}{12}$
$\cos \mathrm{C}=\frac{a^{2}+b^{2}-c^{2}}{2 a b}=\frac{5 \mathrm{k}^{2}}{40 \mathrm{k}^{2}}=\frac{1}{8}$
$\cos \mathrm{A}: \cos \mathrm{B}: \cos \mathrm{C}=\frac{9}{16}: \frac{9}{12}: \frac{1}{8}$
$=27: 36: 6$
60. (D) Let C.P is


90 units $\rightarrow ₹ 72$
105 units $\rightarrow$ ₹ 84
61. (D) $(1 * 2) * 3$
A. T. Q,
$=(1+8 \times 2)+8 \times 3$
$=17+24=41$
62. (B) Given,
$16 \mathrm{w} \times 12=12 \mathrm{~m} \times 8$
$\Rightarrow \quad \frac{\mathrm{w}}{\mathrm{m}}=\frac{1}{2}$
$\therefore$ Total work $=16 \times 1 \times 12=192$ units
Work done by 16 men in 3 days, $=16 \times 2 \times 3=96$ units
$\therefore$ Remaining work $=192-96=96$ units Number of days required to complete remaining work $=\frac{96}{6 m+4 w}$
$=\frac{96}{6 \times 2+4 \times 1}$

$$
=6 \text { days. }
$$

63. 

(C) $4-\frac{5}{1+\frac{1}{3+\frac{1}{2+\frac{1}{4}}}}=4-\frac{5}{1+\frac{1}{3+\frac{4}{9}}}$
$=4-\frac{5 \times 31}{40} \Rightarrow \frac{160-155}{40}=\frac{5}{40}=\frac{1}{8}$
$\Rightarrow \frac{1}{8}$ th part of journey cover in $=10$ minutes
$\therefore \quad \frac{3}{5}$ th part of journey covers in $=10 \times 8 \times \frac{3}{5}$

$$
=48 \text { minutes }
$$

64. (A) Let a person invests $₹ x$ at $4 \%$ and average rate of interest be $\mathrm{r} \%$
$\therefore \quad \frac{x \times 4}{100}=\frac{(45000-x)}{100} \times 6$
$\Rightarrow x=₹ 27000$
$2^{\text {nd }}$ part $=₹ 18000$
Interest of $1^{\text {st }}$ part in one year
$=\frac{27000 \times 4}{100}=₹ 1080$
Similarly, interest of 2 nd part $=₹ 1080$
Total interest $=₹ 2160$
$\therefore \quad \frac{45000 \times r}{100}=2160$
$r=4.8 \%$
65. (C) $x^{2}-x-1=0$
A.T.Q, roots $\alpha, \beta$
$\alpha+\beta=+1, \Rightarrow \alpha \beta=-1$
$\therefore \frac{\alpha^{2}+\beta^{2}}{\left(\alpha^{2}-\beta^{2}\right)(\alpha-\beta)}=\frac{(\alpha+\beta)^{2}-2 \alpha \beta}{(\alpha+\beta)(\alpha-\beta)^{2}}$
$=\frac{(\alpha+\beta)^{2}-2 \alpha \beta}{\alpha^{3}+\beta^{3}-\alpha \beta^{2}-\beta \alpha^{2}}=\frac{(\alpha+\beta)^{2}-2 \alpha \beta}{(\alpha+\beta)^{3}-\alpha \beta(\alpha+\beta)}$
$=\frac{(\alpha+\beta)^{2}-2 \alpha \beta}{(\alpha+\beta)^{3}-4 \alpha \beta(\alpha+\beta)}=\frac{1^{3}-2(-1)}{1^{3}-4(-1) \times 1}=\frac{3}{5}$
66. (C) Volume of prism $=($ Area of base $) \times$ height
$=6 \times \frac{\sqrt{3}}{4}(2)^{2} \times 2$
$=6 \frac{\sqrt{3}}{4} 4 \times 2=12 \sqrt{3} \mathrm{~m}^{3}$
67. (D) 1 day work of Rajni $=\frac{1}{x}$

3 days work of Rajni $=\frac{3}{x}$

4 days work of Geetika $=\frac{4}{x+4}$
A. T. Q,
$\frac{\frac{3}{x}}{\frac{4}{x+4}}=\frac{15}{16} \Rightarrow \frac{x+4}{x}=\frac{5}{4}$
$4 x+16=5 x, \Rightarrow x=16$
68. (C)


8 cm
Volume of the prism $=$ Area of base $\times$ height
$=\frac{\sqrt{3}}{4}(8)^{2} \times 10 \Rightarrow \frac{\sqrt{3}}{4} 64 \times 10$
$=160 \sqrt{3}$ cubic cm
69. (C)

A. T. Q,
$\Rightarrow \mathrm{AP}=6 \mathrm{~cm}$ (Radius ${ }_{1}$ )
$\Rightarrow \mathrm{QC}=3 \mathrm{~cm}\left(\right.$ Radius $\left._{2}\right)$
As, we know any line draw from centre to the tangent be perpendicular
So, $\angle \mathrm{PAB}=\angle \mathrm{QCB}=90^{\circ}$
$\Rightarrow \angle \mathrm{APB}=\angle \mathrm{CQB}=\theta$ (same alternativeangle)
So, $\triangle \mathrm{APB} \sim \triangle \mathrm{CQB}$
$\Rightarrow \frac{\mathrm{AP}}{\mathrm{CQ}}=\frac{\mathrm{AB}}{\mathrm{CB}}$
$\Rightarrow \frac{6}{3}=\frac{8}{\mathrm{CB}}$
$\Rightarrow \mathrm{CB}=4 \mathrm{~cm}$
In right angled triangle,
$\Rightarrow(\mathrm{PB})^{2}=(\mathrm{PA})^{2}+(\mathrm{AB})^{2}$
$\Rightarrow(\mathrm{PB})^{2}=6^{2}+8^{2}$
$\Rightarrow(\mathrm{PB})=10 \mathrm{~cm}$
Again right angled triangle $\triangle \mathrm{CQB}$,
$\Rightarrow \mathrm{BQ}^{2}=\mathrm{BC}^{2}+\mathrm{CQ}^{2}$
$\Rightarrow \mathrm{BQ}^{2}=4^{2}+3^{2}$
$\Rightarrow \mathrm{BQ}=5 \mathrm{~cm}$
Therefore, $\mathrm{PQ}=\mathrm{PB}+\mathrm{BQ}$
$\Rightarrow 10+5=15 \mathrm{~cm}$
70. (B)


ATQ.,
Let $\mathrm{OA}=x=\mathrm{OP}$
$\mathrm{AB}=2 x$
$\mathrm{OM}=x-3$
In $\Delta$ OMP,
$x^{2}=(9)^{2}+(x-3)^{2}$
$x^{2}=81+x^{2}+9-6 x$
$90=6 x$
$x=15$
$\therefore \quad \mathrm{AB}=2 \times 15=30 \mathrm{~cm}$
$71 \quad$ (B)


So, $\triangle \mathrm{ADB} \sim \triangle \mathrm{ORB}$
$\frac{12}{1}=\frac{5}{x} \Rightarrow x=\frac{5}{12}$
Area of $\triangle \mathrm{ORB}=\frac{1}{2} \times 1 \times \frac{5}{12}=\frac{5}{24}$
Area of shaded region $=60-30+\frac{5}{24}=\frac{725}{24}$
72. (A) Number of students who enrolled in N.C.C activity $=15 \%$ of 12000
$=1200 \times \frac{15}{100}=180$
73. (C) ATQ.,
$=(13+11) \%$ of 1200
$=\frac{24}{100} \times 1200=288$
74. (D) Required percentage $=\frac{22}{21} \times 100$

$$
=104.76 \%
$$

75. $(\mathrm{A})$ Required ratio $=\frac{18+21}{13}=\frac{39}{13}=\frac{3}{1}$


## MEANINGS IN ALPHABETICAL ORDER

## Word

Ambiguous

Anarchist

Applause

Arbitrator

Archipelago
Clumsy
Conclusive
Courteous
Decisive
Ignominious
Innocuous
Jeer

Ominous

Pompous

Rant

Reconciliation

Regression

Relish
Retaliation

Retribution
Retrospection
Revert
Revive

Tenant

Tirade
Undeniable

## Meaning in English

able to be understood in more than one way: having more than one possible meaning a person who rebels against any authority, established order, or ruling power a show of approval or appreciation at a play, speech, sporting event, etc., in which people strike their hands together over and over a person who is chosen to settle a disagreement between people or groups a group of islands moving or doing things in a very awkward way and tending to drop or break things showing that something is certainly true marked by respect for and consideration of others able to make choices quickly and confidently causing disgrace or shame causing no injury
to shout insulting words at someone : to laugh at or criticize someone in a loud and angry way
suggesting that something bad is going to happen in the future having or showing an attitude of someone who thinks he or she is better than other people to talk loudly and in a way that shows anger, to complain in a way that is unreasonable the act of causing two people or groups to become friendly again after an argument or disagreement a trend or shift toward a lower, less severe or less perfect state
enjoyment of or delight in something to do something bad to someone who has hurt you or treated you badly punishment for doing something wrong the act or process or an instance of surveying the past to come or go back
to return to consciousness or life, become active or flourishing again
a person, business, group, etc., that pays to use another person's property a long and angry speech clearly true ,impossible to deny

## Meaning in Hindi

अने का था ${ }^{\text { }}$

अरा जफता वा दी

प्र प स करना

मध्या थ $\top$

द्विपसू ह
बे ढ़ गा

निण $\mathrm{T}^{\wedge}$ ए
शि ठट $T$ चा र
स' चा - समझा , स्पट
$\varepsilon_{\mathrm{c}}$ पि त
हा नि रहित
हँ से उ ड. 1 ना

अशु ${ }^{2} \mathrm{~T}$

दिख T वा करने वा ला

निं दा करना

मे ल- मिला प

प्तन

आ नं द
प्र तिश †' ध

बदला
${ }^{2} \mathrm{~T}_{\mathrm{a}}$ तका लका अवला' कन
वा प्सअ ना
पि र से जि वितहा' ना य
मे ${ }^{\circ}$ आ ना
किरा ये दा र

निं दा, भ T T ण प $^{\text {प }}$
अवववा दित

## SSC MOCK TEST - 205 (ANSWER KEY)


76. (A) Add 'a' before 'Great many' 'A great many' means 'a large number of and' is used with plural countable noun. Hence it will take plural verb.
77. (B) Remove 'but'. The sentence does not have contradictory meaning hence use of but is irrelevant.
78. (A) Change 'to' into 'for'.
79. (B) 'fastidious' is the correct option. Fastidious means hard to please. (तु नु क मिज ज)
80. (B) 'reeked' is the correct option. 'Reek' means a strong or disagreeable fume or odour. (दु ग्ग) ध
81. (C) 'relinquished' is the correct option. 'Relinquish' means to give (something, such as power, control or possession) to another person or group. (ॅ य ग दे ) ना
88. (C) 'the only mistake' is the correct option. 'Only' is an adverb and an Adverb is always placed adjacent to the word that it modifies. If the position of adverb is changed the meaning of the sentence changes. (See chapter 'Adverb' of English Vol.1)
89. (B) 'to further explore' is the correct option.

- Farther means at a greater distance (दू मे आर रधिक
- Further means in addition (अ) र

92. (C) 'Counterfeit' is the correctly spelt word. "Counterfeit' means to make an exact copy of (something) in order to trick people (नकली)
93. (C) 'acquisition' is the correctly spelt word. 'Acquisition' means the act or process of gaining skill, knowledge etc. (अधि हप

## 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.