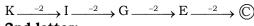


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## SSC MOCK TEST - 212 (SOLUTION)

- 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)  $\underbrace{M}_{-1}\underbrace{U}_{-1}\underbrace{M}_{-1}\underbrace{B}_{-1}\underbrace{A}_{-1}\underbrace{I$
- 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:**



#### 2nd letter:

$$\stackrel{M \longrightarrow +3}{\longrightarrow} P \xrightarrow{+3} S \xrightarrow{+3} V \xrightarrow{+3} \widehat{Y}$$
Number

10. (A)



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

- 11. (D)  $\frac{563}{1}$ ,  $\frac{647}{1}$ ,  $\frac{479}{1}$ ,  $\frac{815}{1}$ ,  $\frac{143}{1}$
- 12. (B)

$$U \xrightarrow{-2} \mathbf{S} \xrightarrow{-4} O \xrightarrow{-2} M \xrightarrow{-4} I$$

$$P \xrightarrow{-8} \mathbf{\widehat{H}} \xrightarrow{-4} D \xrightarrow{-2} B \xrightarrow{-1} A$$

13. (A) 
$$G H I$$
  $M N O$   $T U V$   $B C D$   $+6$   $+6$   $+7$   $+8$   $+8$ 

- 14. (C)
- 15. (D)
- 16. (D) As, 99 × 15 = 1485 and, 32 × 17 = 527 Similarly, 91 × 18 = 1638

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

Open-minded
Young scintists

Superstitious

Neither I nor II follows.

- 21. (D)
- 22. (A)
- 23. (D)
- 24. (B) Gaurav  $\rightarrow$  wife  $\rightarrow$  sister
- 25. (D
- 29. (B) Pollywood is a Panjabi Cinema industry in India and Pakistan.

Kollywood refers to Tamil Cinema. Mollywood refers to Malayalam Cinema.

boy

- 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.



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- 33. (A) 4th Feb - World Cancer Day.
- 34. (B) Choronical order of Mugal Emperors-Babar, Humayun, Akbar, Jahangir, Shah Jahan, Aurangzeb, Bahadur Shah, Jahandar Shah, Farrukhsiyar, Rafi ud-Darajat, 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)
- (D) Sylvain Arend Comet C/1956R, 45. 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 State Maharashtra Lezim
- Puliyattam Tamil Nadu Dappu Andhra Pradesh 51. (A) A.T.Q,
- $33 \text{ years} \xrightarrow{\text{After 4 years}} 37 \text{ years}$

$$37 \text{ years} \xrightarrow{\text{on death of } 64 \text{ years}} 37 - \frac{64}{8}$$

 $29 \text{ years} \xrightarrow{\text{After} \atop 3 \text{ years}} 32 \text{ year}$ 

$$32 \text{ years} \xrightarrow{\text{on death of } 72 \text{ years}} 32 - \frac{72}{8}$$

 $23 \text{ years} \xrightarrow{\text{After} \atop 3 \text{ years}} 26 \text{ years}$ 

(D)  $656656 \longrightarrow (656000 + 656)$ 52.

656 (1000+1) 656 × 1001

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

Is divisible by 1001

53. (B) A.T.Q, Time Efficiency  $\frac{A}{B} = \frac{140}{100} = \frac{7}{5} = \frac{5}{7} \times \frac{5}{7}$ 

 $\frac{B}{C} = \frac{80}{100} = \frac{4}{5} = \frac{5}{7} \times \frac{7}{7}$ 

So, time

A : B : C 25:35:28

3 units  $\longrightarrow$  6 days

 $35 \text{ units } \longrightarrow 70 \text{ days}$ 

Hence, B will complete this work in 70 days.

- 54. (A) Put  $\beta = 0$  $2\sin^2\beta + 4\cos(\alpha + \beta) \times \sin\alpha \cdot \sin\beta + \cos2(\alpha + \beta)$  $\Rightarrow$  0 + 0 + cos2 $\alpha$  $\Rightarrow \cos 2\alpha$
- 55. (C) Let the number of workers be x.

 $\Rightarrow x \times 8500 = 7 \times 10000 + (x - 7) 7800$ 

 $\Rightarrow 85x = 700 + 78(x - 7)$ 

 $\Rightarrow 85x - 78x = 700 - 546$ 

 $\Rightarrow 7x = 154$ 

$$\Rightarrow x = \frac{154}{7} = 22$$

56. (C) A.T.Q,  $3^x - 3^{x-1} = 1458$ 

$$\Rightarrow 3^x - \frac{3^x}{3} = 1458$$

$$\Rightarrow 3^x \left( 1 - \frac{1}{3} \right) = 1458$$

$$\Rightarrow 3^x \times \frac{2}{3} = 1458 \qquad \Rightarrow 3^x = 2187$$

$$\Rightarrow 3^x = 3^7 \Rightarrow x = 7$$

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

58.

(D)

AC is the diameter of circle

So,  $\angle ABC = 90^{\circ}$ 

 $\angle EBA = 90^{\circ} - 65^{\circ} = 25^{\circ}$ 

 $\angle$ ABE =  $\angle$ ACE = 25° (angle in the same segment)

AC | | ED

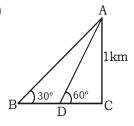
 $\therefore$  So,  $\angle$  ACE =  $\angle$  CED = 25°



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59. (D)



AC = 1 kmIn AADC

$$\tan 60^{\circ} = \frac{1}{DC} \Rightarrow DC = \frac{1}{\sqrt{3}} \qquad ...(i)$$

Now, In ∆ABC

$$tan30^{\circ} = \frac{1}{BD+DC} \Rightarrow BD + DC = \sqrt{3}$$

and, BD = 
$$\sqrt{3} - \frac{1}{\sqrt{3}} = \frac{2}{\sqrt{3}}$$

Then the speed of aeroplane

$$= \frac{2 \times 3600}{\sqrt{3} \times 10} = 240\sqrt{3} \text{ km/hr}$$

60. (A) A.T.Q,

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

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

1st year interest

2nd year interest

1 unit → ₹ 360

128 units → ₹ 46080

(B) A.T.Q, 62.

> milk water Vessels A Vessels B 40 litres 22 litres 8 litres mixture taken out

Water = 22 litres

Milk = 8 litres

W: M = 22: 8 = 11:4

When 6 litres milk is taken out from vessels B

15 units = 6 litres

$$4 \text{ units} = 4 \times \frac{6}{15} = \frac{8}{5} \text{ litres}$$

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

Now, 5% of 16 = 0.8

Total profit is 1 unit more

Hence,

5% of 16 + 0.2

0.2 ----> ₹ 80

16 units  $\longrightarrow \frac{80 \times 16}{0.2} = ₹ 6400$ 

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64. (D) ATQ = 
$$\frac{8}{25}$$
 SUM

Time = 
$$\frac{R}{2}$$
, Rate = R

Now, 
$$8 = \frac{25 \times R \times R}{100 \times 2} = \left[ SI = \frac{P \times R \times T}{100} \right]$$

$$\Rightarrow$$
 8 =  $\frac{R^2}{4 \times 2}$   $\Rightarrow$  64 =  $R^2$ 

$$\Rightarrow$$
 R = 8%

65. (D) Distance travelled by driver in 2 hours

$$= 300 \times \frac{40}{100} = 120 \text{ km}$$

Distance to be covered in 2 hours

$$= 300 - 120 = 180 \text{ km}$$

Required speed = 
$$\frac{180}{2}$$
 = 90 km/h

Required difference = 
$$90 - \frac{120}{2}$$

$$= 30 \text{ km/hr}$$

66. (C) Diagonal of cube will be equal to diameter of sphere,

$$\sqrt{3}a = 2 \times r$$

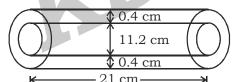
$$\sqrt{3}a = 2 \times 6\sqrt{3}$$

$$a = 12$$

Surface area =  $6a^2$  =  $6 \times 12 \times 12$ 

 $= 864 \text{cm}^2$ 

67. (C)



Volume of metal = External volume of cylindrical tube – Internal volume of cylindrical tube

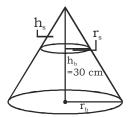
$$= \pi (r_{ex})^2 h - \pi (r_{in})^2 h = \pi h \{ (r_{ex})^2 - (r_{in})^2 \}$$

$$= \pi h \left\{ \left( \frac{12}{2} \right)^2 - \left( \frac{11.2}{2} \right)^2 \right\}$$

$$= \frac{22}{7} \times 21 \times (36 - 31.36)$$

$$= 22 \times 3 \times 4.64 = 306.24 \text{ cm}^3$$

68. (D)



here

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

Volume of smaller cone =  $\frac{\text{vol. of bigger cone}}{27}$ 

i.e. 
$$\frac{1}{3}\pi(r_s)^2(h_s) = \frac{\frac{1}{3}\pi(r_b)^2(h_b)}{27}$$

or, 
$$(r_s)^2(h_s) = \frac{(r_b)^2(h_b)}{27}$$

$$\Rightarrow \frac{(r_b)^2(h_b)}{(r_s)^2(h_s)} = 27$$

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, 
$$\frac{h_b}{h_a} = \frac{3}{1} \implies h_s = \frac{h_b}{3} = \frac{30}{3} = 10 \text{ cm}$$

 $\Rightarrow$  The required height above the base, = (30 - 10) cm = 20 cm

69. (C) 
$$(\sqrt[3]{3.5} + \sqrt[3]{2.5}) \{ (\sqrt[3]{3.5})^2 - \sqrt[3]{8.75} + (\sqrt[3]{2.5})^2 \}$$

$$= (\sqrt[3]{3.5})^3 + (\sqrt[3]{2.5})^3$$

[by using  $(a + b)(a^2 - ab + b^2) = a^3 + b^3$ ]

$$= 3.5 + 2.5 = 6$$

70. (A) ATQ,

$$\left(\frac{1}{2}\right)^k = \sqrt{3} \Rightarrow 2^{-k} = 3^{1/2}$$
 ...(i)

$$\left(\frac{1}{3}\right)^m = \sqrt{2} \implies 3^{-m} = 2^{1/2}$$
 ...(ii)

Multiplying eq. (i) and (ii)

$$2^{-k} \cdot 3^{-m} = 3^{1/2} \cdot 2^{1/2}$$

Comparing powers

$$m = k = -\frac{1}{2}$$
, then  $\frac{mk}{2} = \frac{1}{8}$ 



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71. (C) 
$$\tan \alpha + 2 \tan 2\alpha + 4 \tan 4\alpha + \frac{8(1-\tan^2 4\alpha)}{2\tan 4\alpha}$$

$$\left(\because \cot 2\theta = \frac{1 - \tan^2 \theta}{2 \tan \theta}\right)$$

$$= \tan \alpha + 2\tan 2\alpha + \frac{8\tan^2 4\alpha + 8 - 8\tan^2 \alpha}{2\tan 4\alpha}$$

$$= \tan \alpha + 2\tan 2\alpha + \frac{4}{\tan 4\alpha}$$

$$= \tan \alpha + 2\tan 2\alpha + \frac{4(1-\tan^2 2a)}{2\tan 2a}$$

$$= \frac{1}{\tan \alpha} = \cot \alpha$$

72. (A) Percentage of students in B. Tech. = 11% Percentage of students in M. Teach. = 7%

$$= \frac{11-7}{7} \times 100\%$$

$$=\frac{4}{7}\times100=57\%$$

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^ of 11200 Total number of students in B. Sc., M.
  - Tech. and B.A. together -(23 + 7 + 24)% of 11200
  - = (23 + 7 + 24)% of 11200
  - = 54% of 11200
  - :. 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
  - Total number of students in these courses

    Number of courses
  - (11+7+24)% of 11200
    - 3
  - = 14\$ of 11200 = 1568

### MEANINGS IN ALPHABETICAL ORDER

	Word	Meaning in English	Meaning in Hindi	
	Accentuate	to make more noticeable	प्रमुख बनाना	
	Accent	a distinctive way of pronouncing a language	उच्चारण	
	Devalue	to cause to seem or to be less valuable or important	अवमूल्यन	
	Dismal	very bad or poor	निराशाजनक	
	Impracticable	Incapable of being practised	अव्यवहारिक	
	Inexcusable	that which cannot be excused	अक्षम्य	
	Insurrection	rising in arms against an established government	बगावत	
	Lurid	unpleasantly bright in colour	चमकदार	
	Meticulous	very careful about doing something in an extremely	मेहनती	
		accurate and exact way		
Methodical		done by using a careful and organized procedure	व्यवस्थित	
Mitigate		to make less severe or pain	कम	
Mild		gentle in nature or behavior	सौम्य	
Murky		very dark or foggy	उदास	
Painstaking		showing or done with great care and effort	श्रमसाध्य	
	Plagiarism	The practice of borrowing words and ideas from other	साहित्यिक चोरी	
а		authors and using them as one's own; literary theft.		
	Prodigy	A child with unusual or remarkable talent.	प्रतिभा संपन्न बालक	
Promiscuous		Having a lot of different sexual partners.	अति कामुक	
	Sharpen	to make sharp or sharper	तेज	
	Unnerve	to cause to lose confidence, courage, or self-control	हतोत्साह	

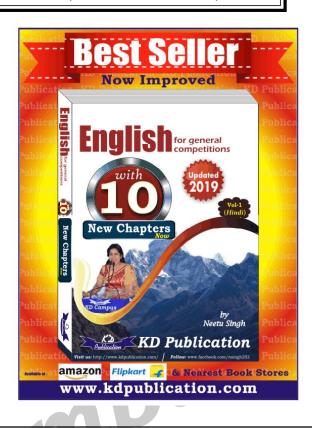


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### SSC MOCK TEST - 212 (ANSWER KEY)

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



- 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