

SSC MOCK TEST - 237 (SOLUTION)

- (B) A manifesto lists all the jobs to be undertaken by a party after election. Agenda list all the issues to be discussed at a meeting.
- (D) $(5.5)^2 = 30.25$
 $(11.0)^2 = 121.00$
- (A)

M	A	S	T	E	R	::	L	A	B	O	U	R
+2	+2	+2	+2	+2	+2		+2	+2	+2	+2	+2	+2
↓	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
O	C	U	V	G	T		N	C	D	Q	W	T
- (C) Bulb is an item while all others are phenomena.
- (B) In the number pair 483 - 15, both the numbers are multiples of 3.
 $\frac{483}{3} = 161$; $\frac{15}{3} = 5$
- (C)

5	4	8	7			
E	→ ⁻¹	D	→ ⁺⁴	H	→ ⁻¹	G
12		11		15		14
L	→ ⁻¹	K	→ ⁺⁴	O	→ ⁻¹	N
21		22		23		24
U	→ ⁺¹	V	→ ⁺¹	W	→ ⁺¹	X
17		16		20		19
Q	→ ⁻¹	P	→ ⁺⁴	T	→ ⁻¹	S
- (A)

P	R	O	D	U	C	T	I	O	N	S
+1	-1	+1	-1	+1	+2	+1	-1	+1	-1	+1
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Q	Q	P	C	V	E	U	H	P	M	T
O	R	I	E	N	T	A	T	I	O	N
+1	-1	+1	-1	+1	+2	+1	-1	+1	-1	+1
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P	Q	J	D	O	V	B	S	J	N	O
- (A) As, PUNISHED = $16 + 21 + 14 + 9 + 19 + 8 + 5 + 4 = 96 \xrightarrow{\times 3} 288$
and TAILOR = $20 + 1 + 9 + 12 + 15 + 18 = 75 \xrightarrow{\times 3} 225$
Similarly, RELEASED = $18 + 5 + 12 + 5 + 1 + 19 + 5 + 4 = 69 \xrightarrow{\times 3} 207$
- (B)

2	10	60	420	3360	30240
↑	↑	↑	↑	↑	↑
$\times 5$	$\times 6$	$\times 7$	$\times 8$	$\times 9$	
- (C) Y $\xrightarrow{-6}$ S $\xrightarrow{-5}$ N $\xrightarrow{-4}$ J $\xrightarrow{-3}$ G
 $\xrightarrow{-2}$ E
- (C) Only son of woman's grandfather = woman's father
man's brother's father = man's father
So man's father is woman's father.
Hence woman is a **sister** of man.

- (A) As, $12 \times 13 = 156$, $15 \times 13 = 195$
Similarly, $14 \times 11 = 154$
- (B) abbbc/abbbc/abbbc/abbbc
- (B) 19
- (C) Musical toys = $14 + 28 = 42$
- (A)
- (C)

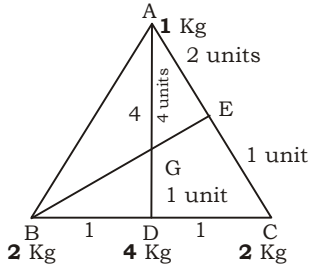
In $\triangle ABF$
 $AB = \sqrt{(150)^2 + (80)^2}$
 $AB = \sqrt{22500 + 6400} = \sqrt{28900} = 170 \text{ m}$
- (B) Trees Flowers Pencil Table
Conclusion: None follows.
- (C)

LEFT	→	F
	→	A
	→	C
	→	E
	→	B
	→	D
RIGHT		
- (B) In this question reflection works as water image

In this time 9 : 50 the both hand of clock are lies between 6 to 12 clockwise. Hence we subtract that time from 17 : 90
 $17 : 90 - 9 : 50 = 8 : 40$
- (A)
- (C)
- (C) Let Johny's age = x years
Hari's age = 2x years
and Rahul's age = (x - 3) years
ATQ.,
 $2x = 5(x - 3) \Rightarrow 3x = 15 \Rightarrow x = 5$
Hence Johny's age = 5 years
- (C)
- (D)

26. (B) Two times Nobel Prize Awardees
John Bardeen (Physics), Frederick Sanger (Chemistry), Marie Curie (Physics and Chemistry) and Linus Pauling (Chemistry and Peace).
27. (B) Franz Wegner introduced the Lattice Gange Theory.
Quantum Chromodynamics Theory was introduced by Harald Fritzsch and Heinrich Leutwyler, together with Murrey Gell-Mann.
29. (A) Minority Affairs - Mukhtar Abbas Naqvi
Social Justice and Empowerment - Thawar Chand Gehlot
Petroleum and Gas - Dharmendra Pradhan
33. (B) Hpungan Pass - connects Arunachal Pradesh with Myanmar
Chankan Pass - connects Arunachal Pradesh with Myanmar
Kumjawng Pass - connects Arunachal Pradesh with Myanmar
34. (A) Bishnoi movement was started by the Environmentalist Amrita Devi and other village men in 1730 to save the villages sacred trees and protect the forest from deforestation.
35. (A) Budget deficit = total expenditure - total receipts.
Revenue deficit = revenue expenditure - revenue receipts.
Fiscal Deficit = total expenditure - total receipts except borrowings.
Primary Deficit = Fiscal deficit - interest payments.
39. (D) Progesterone is an endogenous steroid and sex hormone involved in the menstrual cycle, pregnancy, and embryogenesis of humans and other species.
Prolactin is a hormone that is secreted by the pituitary gland in the brain which is responsible for the making of milk by alveoli in breast. This hormone rises when the baby suckles the breast.
Estrogen, is the primary female sex hormone. It is responsible for the development and regulation of the female reproductive system and secondary sex characteristics.
40. (B) Paleontology - study of animal and plant fossils.
Ichthyology - branch of zoology that deals with fishes.
42. (D) Metformin, is the first - line medication for the treatment of type 2 diabetes. It is also used in the treatment of polycystic ovary syndrome.
Diazepam is used to treat anxiety disorders, alcohol withdrawal symptoms, or muscle spasms.
Latanoprost, is a medication used to treat increased pressure inside the eye.
43. (D) Viscometer - viscosity of a fluid
45. (D) Ram Vilas Paswan - Cabinet Minister of Consumer Affairs, Food and Public Distribution
Sadananda Gowda - Minister of Chemicals and Fertilizers
Nitin Jairam Gadkari - Minister for Road Transport & Highways of and Shipping Ministry of Micro, Small and Medium Enterprises
Narendra Singh Tomar - Minister of Agriculture & Farmers Welfare and Minister of Rural Development
46. (B) Protein Day - 27 February
47. (A) Ctrl+Tab - to switch between open tabs in a browser
CTRL + SHIFT + TAB - move right to left one tab
49. (A) Disaster Management Services - 108
Women Helpline (Domestic Abuse) - 181
Women Helpline - 1091
51. (D) ATQ,
 $16a^4 + 3a^2b^2 + 81b^4 = 91$
 $\Rightarrow (4a^2 + 6ab + 9b^2)(4a^2 - 6ab + 9b^2) = 91$
 $\Rightarrow 4a^2 + 6ab + 9b^2 = \frac{91}{13}$
 $\Rightarrow 4a^2 + 6ab + 9b^2 = 7$... (i)
 $\Rightarrow 4a^2 - 6ab + 9b^2 = 13$... (ii)
From equation (i) and (ii)
 $12ab = -6$
 $\Rightarrow 3ab = \frac{-6}{4}$
 $3ab = \frac{-3}{2}$
Hence, value of $3ab = \frac{-3}{2}$

52. (A) Using masspoint theorem



$$AG = 4 \text{ units}$$

$$GD = 1 \text{ unit}$$

$$\frac{AG}{GD} = \frac{4}{1}$$

53. (A) ATQ,

$$\frac{10 \times 71.7 + 11 \times 42 + 6x + 4x + 5x}{24} = 56$$

$$\Rightarrow 15x = 24 \times 56 - 717 - 462$$

$$\Rightarrow x = \frac{165}{15}$$

$$\Rightarrow x = 11$$

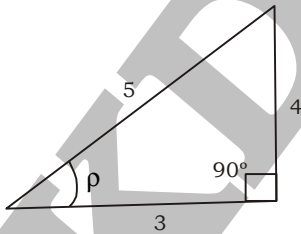
$$\text{Required Avg.} = \frac{6x + 5x}{2}$$

$$= \frac{11 \times 11}{2}$$

$$= 60.5$$

54. (A) $5 \sin \theta = 4$

$$\sin \theta = \frac{4}{5}$$



$$\frac{\sec \theta + 4 \cot \theta}{4 \tan \theta - 5 \cos \theta} = \frac{\frac{5}{3} + 4 \times \frac{3}{4}}{4 \times \frac{4}{3} - 5 \times \frac{3}{5}}$$

$$= \frac{\frac{5}{3} + 3}{\frac{16}{3} - 3} = \frac{14}{7} = 2$$

55. (C) ATQ,

$$6 \times \frac{\sqrt{3}}{4} a^2 = 2400 \sqrt{3}$$

$$\Rightarrow a = 40 \text{ metres}$$

$$\text{Perimeter of hexagon} = 6 \times 40 = 240 \text{ metres}$$

$$\text{The total cost} = 240 \times 16.80 = 4032$$

56. (D) ATQ,

$$(4m + 6w) \times 5 = (3m + 4w) \times 7$$

$$\Rightarrow 20m + 30w = 21m + 28w$$

$$\Rightarrow m = 2w$$

$$\Rightarrow \frac{m}{w} = \frac{2}{1}$$

$$\text{Total work} = (4m + 6w) \times 5$$

$$= (4 \times 2 + 6 \times 1) \times 5$$

$$= 70 \text{ units}$$

Now,

$$(2m + 25w) \times 5 = 70 \times \frac{5}{2}$$

$$\Rightarrow 2m + 25 = 35$$

$$m = 5 \text{ men}$$

Hence, 5 men are required to Assist the women.

57. (B) ATQ,

SP : Profit

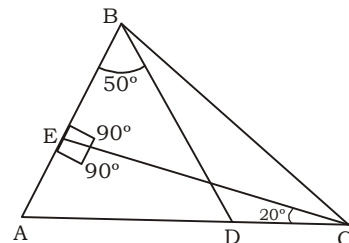
$$15,200 \times .77 : 2,660$$

$$22 : 5$$

$$\text{Profit \%} = \frac{5}{17} \times 100$$

$$= 29.41\%$$

58. (D)



In $\triangle AEC$

$$\angle A = 180^\circ - (90^\circ + 20^\circ)$$

$$= 70^\circ$$

Now, In $\triangle ABD$

$$\angle BDA = 180^\circ - (70^\circ + 50^\circ)$$

$$= 60^\circ$$

59. (C)
$$\frac{\tan A - \sec A - \sec^2 A - \tan^2 A}{\tan A + \sec A - 1}$$

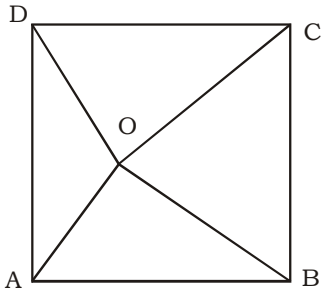
$$= \frac{(\tan A - \sec A) + (\sec A + \tan A)(\sec A - \tan A)}{\tan A + \sec A - 1}$$

$$= \frac{(\sec A - \tan A)(\sec A + \tan A - 1)}{(\tan A + \sec A - 1)}$$

$$= \sec A - \tan A$$

$$= \frac{1 - \sin A}{\cos A}$$

60. (D) ATQ,



$OA^2 + OC^2 = OB^2 + OD^2$
 $\Rightarrow 6^2 + 8^2 = 4^2 + OD^2$
 $\Rightarrow 100 - 16 = OD^2$
 $\Rightarrow OD^2 = 84$
 $OD = 2\sqrt{21}$

61. (B) Let D get = 100 units
 A : B : C : D
 140.625 : 112.5 : 125 : 100
 100 units \Rightarrow 320

140.625 units $\Rightarrow \frac{320 \times 140.625}{100}$
 $= 450$

Hence, Marks obtained by A is 450.

62. (D) A : B : C
 $1,12,000 \times 12 : (80,000 \times 8 + 72,000 \times 2) :$
 $(72,000 \times 6 + 64,000 \times 2)$
 $112 \times 3 : 196 : 140$
 $28 \times 3 : 49 : 35$
 49 units = Rs. 9,800

168 units \Rightarrow Rs. $\frac{9,800 \times 168}{49}$
 $=$ Rs. 33,600

63. (A) A : B = 6 : 7
 B : C = 3 : 2
 A : B : C
 18 : 21 : 14
 Difference in shares (A - C)
 4 units = Rs. 450

$\Rightarrow 53 \text{ units} = \text{Rs. } \frac{450 \times 53}{4}$
 $=$ Rs. 7,155
 Hence, The sum is Rs. 7,155

64. (A) ATQ,
 Let internal radius is r.
 $\pi(9^2 - r^2) \times 140 = 7480$
 $\Rightarrow 9^2 - r^2 = \frac{7480 \times 7}{140 \times 22}$
 $\Rightarrow r = 8 \text{ cm}$
 Hence, Thickness = $9 - 8$
 $= 1 \text{ cm}$

65. (B) $\frac{MP}{SP} = \frac{100}{72} = \frac{25}{18}$
 $\frac{SP}{CP} = \frac{6}{5}$
 CP : SP : MP
 15 : 18 : 25
 3 units = Rs. 30.80
 15 units = $\frac{30.80 \times 15}{3}$
 $=$ Rs. 154

66. (C) Let, Amit travelled by bicycle is x km and (50 - x) by foot

$\frac{50 - x}{5} + \frac{x}{10} = 9$
 $\Rightarrow 10(50 - x) + 5x = 50 \times 9$
 $\Rightarrow 500 - 10x + 5x = 50 \times 9$
 $\Rightarrow 50 = 5x$
 $x = 10 \text{ km}$

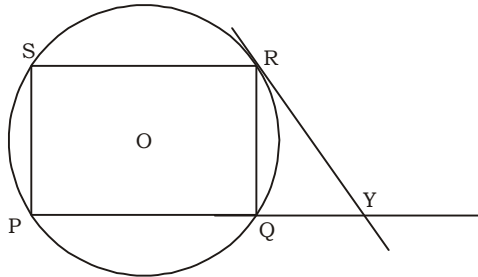
67. (B) ATQ,
 $5678 \times 43267y$ is divisible by 72.
 If any number is divisible by 72 then it must be divisible by 8 and 9
 By putting $y = 2$ and $x = 4$

Now, $\sqrt{8x + 9y} = \sqrt{8 \times 4 + 9 \times 2}$
 $= \sqrt{50} = 5\sqrt{2}$

68. (A) ATQ,
 $6^3 : 7^3$
 $216 : 343$
 127 units
 127 units \rightarrow Rs. 6,350
 216 units \rightarrow Rs. $\frac{6350 \times 216}{127}$
 $=$ Rs. 10,200

69. (D) $N = 3^{14} + 3^{13} - 12$
 $= 3^{13}(3 + 1) - 3 \times 4$
 $= 12(3^{12} - 1)$
 $= 12(3^6 - 1)(3^6 + 1)$
 $= 12 \times 728 \times 730$
 $= 12 \times 728 \times 73 \times 10$
 $\therefore 73$ is the largest prime factor of N .

70. (A)



$\angle PRQ = 45^\circ$
 $\angle ORY = 90^\circ$
 $\angle QRY = 45^\circ$
 $RQ = QY$
 Diagonal = 8 = Diameter

$$\text{side} = \frac{8}{\sqrt{2}} = 4\sqrt{2}$$

In $\triangle SPY$,
 $SY^2 = SP^2 + PY^2$
 $= (8\sqrt{2})^2 + (4\sqrt{2})^2$
 $= 128 + 32 = 160$
 $SY = 4\sqrt{10}$

71. (D) $x = 4 + \sqrt{11} + \sqrt{7}$
 $x - 4 = \sqrt{11} + \sqrt{7}$
 Squaring both sides
 $(x - 4)^2 = (\sqrt{11} + \sqrt{7})^2$
 $\Rightarrow x^2 + 16 - 8x = 11 + 7 + 2\sqrt{77}$
 $\Rightarrow x^2 - 8x - 2 = 2\sqrt{77}$
 Again squaring both sides
 $x^4 - 16x^3 + 60x^2 + 32x + 4 = 308$
 $\therefore x^4 - 16x^3 + 60x^2 + 32x = 304$

72. (A) Required ratio

$$= \frac{425 + 400}{244 + 306}$$

$$= \frac{825}{550} = \frac{3}{2}$$

73. (D) Total export of item A from 2012 to 2014
 $= 225 + 370 + 425$
 $= 1020$

Total export of all items in 2015
 $= 400 + 209 + 306 + 275$
 $= 1,190$

Required percentage

$$= \frac{1190 - 1020}{1190} \times 100 = 14.28\%$$

74. (A) Total export of item D in 2010, 2012, and 2014

$$= 214 + 247 + 309$$

$$= 770$$

$$\text{In, 2011} = 250 + 134 + 244 + 282 = 910$$

$$\text{In, 2012} = 225 + 138 + 230 + 247 = 840$$

Required percentage

$$= \frac{770}{(910 + 840)} \times 100$$

$$= 44\%$$

75. (A) ATQ,

Avg. Export of item B in given six years

$$= \frac{128 + 134 + 138 + 169 + 182 + 209}{6}$$

$$= 160$$

1.4 times of Avg. export of B in give six years

$$= 1.4 \times 160$$

$$= 224$$

We can see that,

In 2013, the export of item D is 1.4 times the Avg export of B in given six years.

MEANINGS IN ALPHABETICAL ORDER

Adventurous	willing to take risks	रोमांच पैदा करने वाला
Ribald	referring to sexual matters in an amusing way or irreverent way	अशिष्ट
Refined	with impurities or unwanted elements having been removed by processing	परिशोधित
Indifferent	having no particular interest, unconcerned	उदासीन
Festal	relating to or characteristic of a celebration or festival	खुश
Seamy	sordid and disreputable	अनैतिक
Praise	express warm approval	प्रशंसा
Initiate	cause (a process or action) to begin	आरंभ
Resist	withstand the action or effect of	विरोध
Insular	uninterested in new people and different ideas	जो नये विचार या नये लोग में दिलचस्पी ना ले
Cowardice	lack of bravery	कायरता
Impromptu	done without being planned or rehearsed	बिना तैयारी के
Dermatologist	a medical practitioner qualified to diagnose and treat skin disorders	त्वचा विशेषज्ञ
Orthopedist	a physician who corrects congenital or functional abnormalities of the bones with surgery	कंकाल प्रणाली का विशेषज्ञ
Obstetrics	the branch of medicine and surgery concerned with child birth	जच्चा-बच्चा विशेषज्ञ
Obstetrician	a physician or surgeon qualified to practise in obstetrics	जच्चा-बच्चा विशेषज्ञ
Maxim	a short, pithy statement expressing a general truth or rule of conduct	कहावत
Hyperbole	exaggerated statements or claims not meant to be taken literally	अतिशयोक्ति
Caricature	a picture, description, or imitation of a person in which certain striking characteristics are exaggerated in order to create a comic or grotesque effect	व्यंग-चित्र, कानून
Boutonniere	a floral decoration, typically a single flower or bud, worn on the lapel of a tuxedo or suit jacket	सूट में लगाया हुआ फूल या कली
Macerate	soften or become softened by soaking in a liquid	पानी में भीगने की वजह से नरम

SSC MOCK TEST - 237 (ANSWER KEY)

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| <p>1. (B) 26. (A) 51. (D) 76. (C)</p> <p>2. (D) 27. (B) 52. (A) 77. (C)</p> <p>3. (A) 28. (C) 53. (A) 78. (B)</p> <p>4. (C) 29. (A) 54. (A) 79. (A)</p> <p>5. (B) 30. (D) 55. (C) 80. (D)</p> <p>6. (C) 31. (D) 56. (D) 81. (B)</p> <p>7. (A) 32. (B) 57. (B) 82. (B)</p> <p>8. (A) 33. (B) 58. (D) 83. (B)</p> <p>9. (B) 34. (A) 59. (C) 84. (C)</p> <p>10. (C) 35. (A) 60. (D) 85. (B)</p> <p>11. (C) 36. (B) 61. (B) 86. (A)</p> <p>12. (A) 37. (B) 62. (D) 87. (A)</p> <p>13. (B) 38. (D) 63. (A) 88. (C)</p> <p>14. (B) 39. (D) 64. (A) 89. (B)</p> <p>15. (C) 40. (B) 65. (B) 90. (A)</p> <p>16. (A) 41. (B) 66. (C) 91. (B)</p> <p>17. (C) 42. (D) 67. (B) 92. (B)</p> <p>18. (B) 43. (C) 68. (A) 93. (C)</p> <p>19. (C) 44. (A) 69. (D) 94. (B)</p> <p>20. (B) 45. (D) 70. (A) 95. (D)</p> <p>21. (A) 46. (B) 71. (D) 96. (C)</p> <p>22. (C) 47. (A) 72. (A) 97. (D)</p> <p>23. (C) 48. (C) 73. (D) 98. (B)</p> <p>24. (C) 49. (A) 74. (A) 99. (D)</p> <p>25. (D) 50. (D) 75. (A) 100. (C)</p> | <p>76. (C) Replace 'we' with 'it' as subject is India.</p> <p>77. (C) Replace 'a' with 'the'. Superlative degree of adjective takes article 'the'.</p> <p>78. (B) Scuttle - destroy, Wreck
Stifle - to withhold from circulation</p> <p>79. (A) Soothing - having a gently calming effect
Fizz - to show excitement or exhilaration, the bubbles in a liquid and the sound they make.
Rattling - make a series of knocking sounds
Razzing - tease (someone) playfully</p> <p>86. (A) Previous statement is in past indefinite tense and the action taken place before the past indefinite is formed in past perfect tense.</p> <p>87. (A) Verbs 'make' and 'let' are followed by V_{b, f}.</p> |
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