



KD Campus Pvt. Ltd

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

Answer-key & Solution

SSC JE (Electrical)
MOCK -(94)
Date:- 22.4.2017

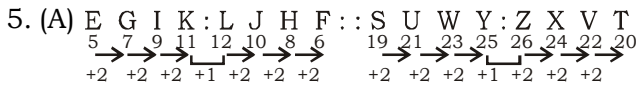
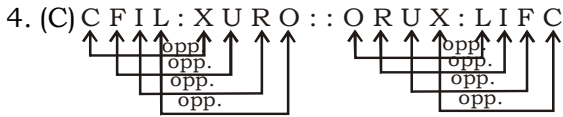
1. B	26. D	51. B	76. C	101. A	126. B	151. B	176. A
2. B	27. A	52. C	77. A	102. B	127. C	152. C	177. C
3. D	28. C	53. A	78. A	103. A	128. C	153. A	178. A
4. C	29. A	54. B	79. C	104. A	129. C	154. C	179. B
5. A	30. A	55. B	80. A	105. C	130. B	155. B	180. B
6. B	31. B	56. D	81. B	106. C	131. A	156. D	181. B
7. D	32. A	57. A	82. D	107. A	132. B	157. C	182. B
8. B	33. A	58. C	83. D	108. C	133. D	158. B	183. C
9. B	34. B	59. C	84. B	109. A	134. B	159. B	184. D
10. A	35. C	60. A	85. B	110. B	135. A	160. C	185. D
11. D	36. C	61. B	86. D	111. B	136. A	161. C	186. C
12. B	37. B	62. A	87. C	112. C	137. C	162. D	187. B
13. B	38. B	63. C	88. B	113. D	138. C	163. B	188. C
14. C	39. A	64. B	89. A	114. B	139. B	164. C	189. D
15. C	40. B	65. D	90. C	115. B	140. C	165. D	190. C
16. C	41. C	66. C	91. C	116. A	141. B	166. A	191. B
17. C	42. C	67. B	92. A	117. A	142. A	167. B	192. C
18. C	43. D	68. B	93. A	118. A	143. D	168. D	193. D
19. D	44. D	69. C	94. A	119. C	144. B	169. B	194. A
20. B	45. A	70. B	95. D	120. A	145. A	170. C	195. D
21. C	46. C	71. B	96. A	121. C	146. D	171. C	196. B
22. A	47. C	72. C	97. A	122. C	147. C	172. D	197. C
23. D	48. B	73. D	98. C	123. C	148. B	173. B	198. C
24. B	49. B	74. C	99. B	124. A	149. D	174. B	199. C
25. D	50. D	75. D	100. C	125. C	150. B	175. C	200. A

Note : If your opinion differ regarding any answer, please message the mock test and Question number to 9560620353

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

SOLUTION SSC JE (Electrical) MOCK TEST no. 94

1. (B) Lizard belongs to Reptiles. In the same way Human belongs to mammals.
3. (D) SHORE is the along the SEA. In the same way FOOTPATH is along the ROAD.



6. (B) 2 : 12 :: 8 : ?
 $2^2 + 2^3 = 12$ $8^2 + 8^3 = 576$

7. (D) 9 : 22 :: 16 : 32
 $3^2 : (5^2 - 3)$ $4^2 : (6^2 - 4)$

8. (B) 9 : 162 :: 8 : 128
 $(9)^2 \times 2 = 162$ $(8)^2 \times 2 = 128$

9. (B) 85 : 42 :: 139 : 69
 $(85 - 1) \div 2 = 42$ $(139 - 1) \div 2 = 69$

10. (A) Drop is a small part of the ocean. In the same way constellation is a small part of space.

11. (D) 383 is a Prime number.

12. (B) Sphere is a three-dimensional figure and others are 2D.

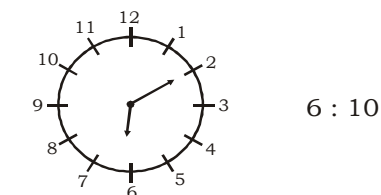
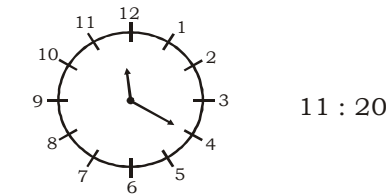
13. (B) Ist $\times 3 + 1 =$ IInd. All follow this rule except B

14. (C) In option 'C' all are from same category.

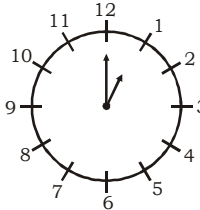
15. (C) Article is written in Book, Magazine and Newspaper.

16. (C) All are capital of a Nation except New York.

17. (D)



18. (C) After 12 O'clock both hands of a clock meet together between 1 and 2 O'clock.



Minute hand required 5 min.

Gain $5 \times \frac{60}{55} = 5 \frac{5}{11}$ min

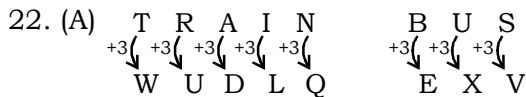
Actual time:- 1 hour $5 \frac{5}{11}$

19. (D) Cannot be determined because we cannot determine the total number of students who failed.

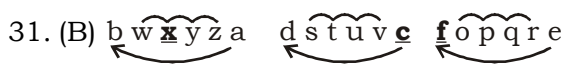
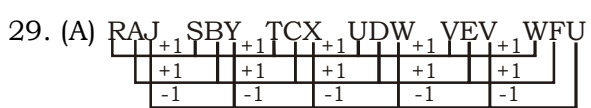
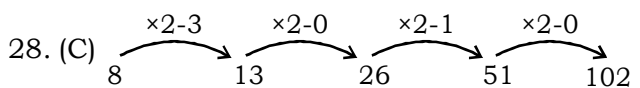
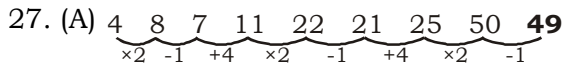
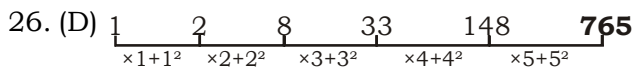
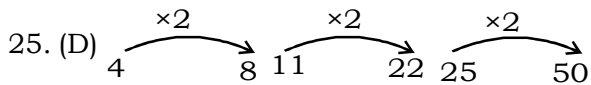
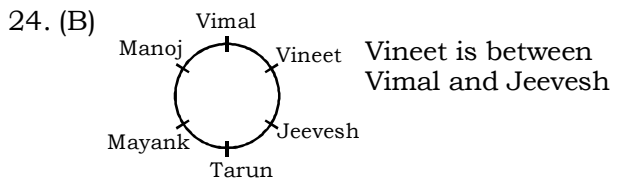
20. (B) Hasan \leftarrow Punit \leftarrow Sadna \leftarrow John \leftarrow Amit

21. (C) Abhishek \leftarrow Hritik \leftarrow Yash \leftarrow Mahesh \leftarrow Karan
Then, Increasing order

Karan \rightarrow Mahesh \rightarrow Yash \rightarrow Hritik \rightarrow Abhishek



23. (D) Fish lives in water and water is Green.



33. (A) Inside number is cube of outside number.

34. (B)

×	8	9	10) ×
	5	4	3	
+	28	11	16	
	12	25	14) +

40=(28+12) 30=(16+14)

35. (C)

+	31	17	58	87
+	68	19	61	56
+	91	22	70	50
	10	142	11	7

=200 =200 =200 =200

36. (C)

×	3A	5B	4C) × C required.
	45B	20C	28A	
	15B	4A	7C	

4×5=20

37. (B)

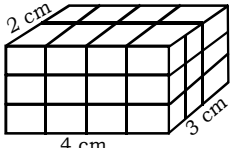
Z4	-2	X3	-2	V9
(4 × 3) - 3 = 9				
A6	+2	C2	+2	E10
(6 × 2) - 2 = 10				
T4	-2	R5	-2	P15
(4 × 5) - 5 = 15				

38. (B) In same century the calendar of a year which is in the form LY+2, will repeat after a time period of 11 years. Therefore the calendar of the year 1918 will match completely with the calendar of the year 1918+11 ⇒ 1929 .

39. (A) 2100 is not divided by 400. So, it is not a leap year.

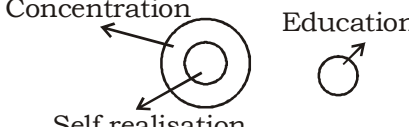
40. (B) In option 'B' 6 and 1 appear together, but in standard dice it is not possible.

41. (C)



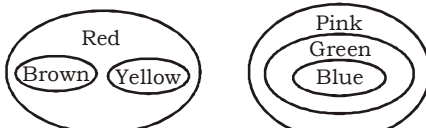
All cuboid have at least one face painted black
4 × 3 × 2 = 24

42. (C)



43. (D) The common part of square, ractangle and circle is 9

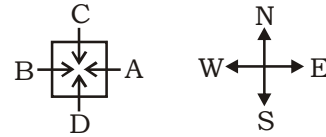
44. (D)



45. (A) 18 Q 12 P 4 R 5 S 6
18 × 12 ÷ 4 + 5 - 6

$$18 \times 3 + 5 - 6 = 54 + 5 - 6 = 53$$

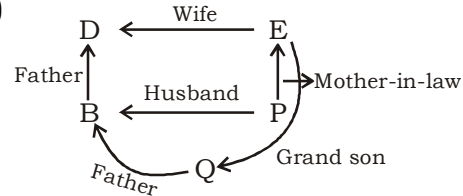
46. (C)



A and B are Partner, then C and D are Partner.

D is facing North then C is facing in South.

47. (C)



Hence B is the son of D.

52. (C) Gibbon, Gorilla and Orangutan are apes, but Langur is not an ape, it is prosimians.

54. (B) Pitcher plant is an insectivorous plant. It feeds on living creatures including insects and small mammals. These plants attract the prey with a smell of rotting meat. The victim is dissolved by some enzymes.

55. (B) The Confederation of Indian Industry (CII) is an association of Indian businesses which works to create an environment conducive to the growth of industry in India. The headquarters of CII is located at New Delhi. It is in news because CII has launched a unique platform "Startup Mentorship Circle" in Mumbai to help in connecting start-ups with the global marketplace. The platform is truly a strong eco-system for nurturing innovation and startup to drive sustainable economic growth and generate large scale employment opportunities.

56. (D) The first-ever World Tsunami Awareness Day (WTAD) has been observed on November 5, 2016 to spread awareness among people across the world in matters related to the dangers of tsunami and shall stress on the importance of early warning systems in order to mitigate damage from the often devastating natural hazard. It also aims at reviving traditional knowledge about tsunamis. The 2016 theme of WTAD is "Effective Education and Evacuation Drills".

58. (C) The book "An Era of Darkness: The British Empire in India" has been authored by Dr. Shashi Tharoor, the Lok Sabha MP. The book recalls in some detail misdeeds of the British in looting India and making it suffer an agonizing and violent death. In it, author has rightly points out that British rule in India

was effectively and regularly supplemented by famine, forced migration and brutality - the three examples of why British rule over India was despotic and anything but enlightened. The book has recently released by the Vice President of India M. Hamid Ansari.

59. (C) After the 3rd century AD Roman Empire came to an end. Indian merchants meanwhile had begun to rely more heavily on the south-east Asian Trade.
60. (A) The Assam government has recently signed a Memorandum of Understanding (MoU) with the Union Ministry of Civil Aviation (MoCA) under Regional Connectivity Scheme (RCS) - UDAN to boost State air connectivity. The Airports Authority of India (AAI) shall be the Implementing Agency for the scheme on behalf of Ministry of Civil Aviation. As per the MoU, the State Government shall reduce VAT to 1% or less on ATF at RCS Airports and for RCS flights from other airports located within the state. The Government of Assam shall also provide minimum land for development and expansion of RCS Airports and also provide multi-modal hinterland connectivity (road, rail, metro, waterways, etc.) as required.
61. (B) Balaji Vishwanath. As Sambhaji (1680-89) were succeeded by Rajaram, Shivaji II, Tarabai and Shahu ji. Balaji Vishwanath played a crucial role in the final victory of Shahu by winning over almost all the Maratha sardars to the side of Shahu. Under Bajji Rao I Maratha power reached a zenith. But that option is not given.
62. (A) The 12th edition of International Oil and Gas Conference and Exhibition "Petrotech-2016" will be held at Pragati Maidan in New Delhi on December 5th. The 2016 theme is "Hydrocarbons to fuel the future - Choices and Challenges". The purpose of the global event is to bring Energy Ministers, industry leaders, professionals, academicians and domain experts from the energy sector on a common platform. It is a biennial platform for national and international experts in the oil & gas industry to exchange views and share knowledge, expertise and experiences.
63. (C) Nawab Salimullah founded Muslim League in 1906 at Dacca. Communal Award was announced by Ramsay McDonald in 1932.
64. (B) The red data book contains only 8 lists of threatened plant and animal species.
66. (C) Pandit Amaradeva (88), the legendary Sri Lankan singer and composer, has recently passed away in Sri Jayawardenepura Kotte,

Sri Lanka. He was the recipient of many international honours, including Ramon Magsaysay Award, Padma Shri, for his contribution to music.

68. (B) The Northern Fertile Plain which is also called the Gangetic Plain lies to the south of Himalayan Region. The soil of this plain is built of the sediments and brought down by the rivers from Himalayas. Such plain is called an alluvial plain and it is very fertile. This plain is one of the largest and most fertile plains of the World. Aggradation is the term used in geology for the increase in land elevation due to the deposition of sediment which includes lowland alluvial rivers, river deltas and alluvial fans.
70. (B) The man who is suffering from myopia has a vision condition where he can see close objects very clearly, but objects farther away appear blurred. Nearsightedness occurs if the eyeball is too long.
71. (B) Inventory refers to raw materials, work-in-process goods and completely finished goods that are considered to be the portion of a business's assets that are ready or will be ready for sale. Inventory are also represented as one of the most important assets that most businesses possess because the turnover of inventories represents one of the primary sources of revenue generation and subsequent earnings for the company's shareholders/owners.
72. (C) Devaluation in modern monetary policy is a reduction in the value of a currency with respect to those goods, services or other monetary units with which that currency can be exchanged. It means official lowering of the value of a country's currency within a fixed exchange rate system.
73. (D) An uninterruptable power supply (UPS) is a backup power supply, such as a battery that provides emergency power in the event when power is lost from the main supply
74. (C) An amphoteric oxide is a molecule or ion that can react as an acid as well as a base. Many metals such as zinc, tin, lead, aluminium, beryllium and most metalloids form amphoteric oxides or hydroxides.
75. (D)
- Member of Parliaments are directly elected by citizens of India on the basis of Universal Adult franchise, except two who are appointed by the President of India.
 - The President of India is elected, from an Electoral College comprising a group of nominees, by the elected members of the Parliament of India (Lok Sabha and Rajya

- Sabha) as well as of the state legislatures (Vidhan Sabhas).
- The Vice President is elected indirectly by an electoral college consisting members of both houses of the Parliament.
 - Members of the Lok Sabha elect their Speaker in the first meeting of the House after a general election.
77. (A) Narinder Batra has become the first Indian to be elected the President of the International Hockey Federation (FIH). He succeeds Spaniard Leandro Negre, who has been the FIH chief since 2008. Batra, who is the president of Hockey India, has become the 12th FIH President and the first Asian to grab the post.
80. (A) Idukki is a hydro-electric project of Kerala. So, the '1' option is not correct. The Idukki Dam is a double curvature arch dam constructed across the Periyar River in a narrow gorge between two granite hills Kuravan and Kurathi in Kerala, India. At 167.68 metres, it is one of the highest arch dams in Asia. It was constructed and is owned by the Kerala State Electricity Board. It supports a 780 MW hydroelectric power station in Moolamattom, which started generating power on 4 October 1975.
81. (B) About 50% of the world population is concentrated between latitude of 20°N and 40°N, because most populous countries like Asia, U.S.A, Europe lie within this latitude.
82. (D) Benguela is a cold current flows from south to north along the west coast of Africa. Guinea current is a warm current flowing east of Guinea along the west coast of Africa.
83. (D) According Article 355, it shall be the duty of the Union to protect every State against external aggression and internal disturbance and to ensure that the government of every State is carried on in accordance with the provisions of this Constitution.
84. (B) The 36th edition of India International Trade Fair (IITF) will be held at Pragati Maidan, New Delhi on 14th November, 2016 and will continue till November 18th, 2016. The fair will be inaugurated by the President of India Pranab Mukherjee with the theme of "Digital India". This year's partner country and states are South Korea and Madhya Pradesh and Jharkhand respectively. The focus country and state are Belarus and Haryana respectively.
85. (B) Narasimham Committee for Financial Sector Reforms (1991) has suggested reduction in SLR, CRR and priority sector financing reducing it from 40% to 10%. Most of the suggestions of the committee were not implemented.
87. (C) Mongols under Chengiz Khan (died in 1227) invaded India during the reign of Iltutmish (1211-36) but did not enter deep in India as Iltutmish refused to give shelter to the Persian king, Khwarizm Shah, whom Chengiz Khan was chasing.
88. (B) Seller's market is a market which has more buyers than sellers. High prices result from this excess of demand over supply. The opposite of the seller's market is the buyer's market, where supply greatly exceeds demand.
89. (A) Noted geophysicist Janardhan G Negi (81) has recently passed away in Hyderabad. He was the former Director-grade scientist at the National Geophysical Research Institute (NGRI). He was known for making outstanding contribution in understanding earthquakes, mass extinctions, especially dinosaurs and the movement of the Indian sub-continental plates.
90. (C) Chief Justice of India, Union Cabinet Minister, Chief Election Commissioner and Cabinet Secretary is the correct order of precedence.
91. (C) Gurumoorthy Mahalingam has become the new Whole-Time Member (WTM) of the Securities and Exchange Board of India (SEBI) for a period of 5 years or till the age of 65 years, whichever is earliest. He will get a consolidated salary of Rs 3.75 lakh. Previously, Mahalingam was the executive director and former regional director of Reserve Bank of India (RBI).
93. (A) The preamble of the Constitution of India is a brief introductory statement that set out the guiding purpose and principles of the document. As originally enacted the preamble described the state as a 'sovereign democratic republic'. In 1976 the Forty second Amendment changed this to read 'sovereign socialist secular democratic republic'.
96. (A) The book "SRK - 25 Years of a Life" has been authored by writer and filmmaker Samar Khan. The book traces the journey of the Bollywood superstar Shah Rukh Khan through all his directors' eyes. The thought behind the book was to show why his directors thought of such iconic characters for Shah Rukh.
99. (B) Both the statements are true but do not explain each other.
100. (C) Aryan is in fact a linguistic term

indicating a speech group of Indo-European origin, and is not an ethnic term.

138. (C) $V_1 = iR + V_2$

$$V_2 = (i + \alpha i)R$$

$$= (1 + \alpha) iR \quad \dots(i)$$

$$V_1 = iR + iR(1 + \alpha)$$

$$V_1 = iR(2 + \alpha) \quad \dots(ii)$$

$$\frac{V_2}{V_1} = \frac{1 + \alpha}{2 + \alpha}$$

179. (b) $N_s = \frac{120f}{p}$

$$= \frac{120 \times 50}{8}$$

$$= 750 \text{ rpm}$$

$$s = \frac{N_s - N}{N_s} = \frac{750 - 690}{750}$$

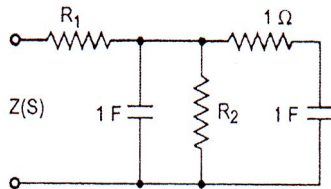
Forward slip = 0.08

Back word slip = (2-s)

$$= (2 - 0.8)$$

$$= 1.92$$

194. (A)



Given data is

(i) $Z(0) = 3\Omega$

(ii) $Z(\infty) = 2\Omega$

as given data n. (I) dete diagram is

(i) Figure

$$Z_{(0)} = R_1 + R_2 = 3 \quad \dots(1)$$

(ii) Figure

$$Z(\infty) = R_1 = 2$$

So, $R_1 = 2\Omega$ (from equation (I) adn (II))

$$R_2 = 1\Omega$$

195. (D) $N_s = \frac{120f}{p}$

$$= \frac{120 \times 50}{6}$$

for 7th harmonic, motor speed is-

$$= \frac{Ns}{7}$$

$$= \frac{1000}{7}$$

$$= 142.85$$

$$143 \text{ rpm}$$

196. (B) Spring efficiency

$$= \frac{\text{Voltage across the string}}{n \times \text{voltage across the unit nearest to the conductor}}$$

η = No of units in the string

$$\text{Voltages across the strings} = 0.8424 \times 3 \times 17.5$$

$$= 44.25 \text{ kv}$$

197. (C) $p_l \propto (25 + f)f_1 = 50 \text{ Hz}$

$$\frac{p_{l_1}}{p_{l_2}} = \frac{(25 + f_1)}{(25 + f_2)}$$

$$f_2 = 60 \text{ Hz}$$

$$= \frac{25 + 50}{25 + 60}$$

$$p_{l_1} = 1 \text{ KW / km}$$

$$\frac{p_{l_1}}{p_{l_2}} = \frac{75}{85}$$

$$p_{l_2} = 1.13 \text{ KW / km}$$

198. (C) $I_L = \frac{P}{V}$

$$= \frac{1800}{200}$$

$$I_L = 9 \text{ A}$$

$$I_{Ls} = \frac{200}{200}$$

$$= 1 \text{ A}$$

$$I_a = I_L + I_{sh}$$

$$= 10 \text{ A}$$

$$E_g = v_t + I_a R_a$$

$$= 200 + 10 \times 0.4$$

$$e_g = 204 \text{ V}$$

199. (C) in auto - Transformer

Power transformed inductively is

$$= (1 - K) \times \text{input power}$$

$$= (1 - 0.8) \times 10 \text{ kw}$$

$$= 0.2 \times 10 \text{ kw}$$

$$= 2 \text{ kw}$$