PREVIOUS YEAR PAPER

DSSSB Assistant Engineer (Electrical) 2022 — 20 June 2022, Shift 1

DSSSB Other Posts · 20 June 2022 · Shift 1

114 of the paper's 200 questions · +1 for a correct answer, −0.25 for a wrong one · 120 minutes

Left out of the original paper: 86 (any question that needs a figure, a symbol or formatting we cannot show, or whose text did not read back cleanly from the booklet).

Questions from the Delhi Subordinate Services Selection Board's paper of 20 June 2022, Shift 1. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/dsssb-other-posts/previous-year-papers/dsssb-other-posts-2022-assistant-engineer-electrical-20-jun-shift-1/

Mental Ability

1. Among five friends, Vineeta is elder than Jonita. Pratha is younger than Jonita. Vedangi is elder than Samya. Vineeta is younger than Samya. Who is the eldest among all?

(a) Vedangi
(b) Jonita
(c) Samya
(d) Pratha

Answer: (a)

2. Six boxes numbered 1 to 6 are kept in a rack one ove the other; but not necessarily in the same order. Only two boxes are kept above box 1. Box 2 kept just above box 5. One box is kept between box 4 and box 6. Box 3 is kept at the top. F are kept between box 3 and box 5. Box 4 is not adjacent to box 3. Which box is kept at the seco place from the top?

(a) 5
(b) 4
(c) 6
(d) 2

Answer: (a)

3. Three statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.
Statement :
All wires are lights.
All lights are bulbs.
All bulbs are computers.
Conclusions:
I. Some computers are wires.
II. All lights are computers.

(a) Only Conclusion I follows

(b) Only Conclusion II follows

(c) Both conclusions I and II follows

(d) Neither conclusion I nor II follows

Answer: (a)

4. P, Q, R, S, T and U are six students of a class. They appear in a class test which has maximum marks of 100. Q scores 60%, P scores 10 marks less than R. U scores 20 marks more than P. R and Q score equal marks. T scores the lowest marks. S scores 35 marks more than T and 5 marks more than U. Which two persons score more marks than R?

(a) S and P

(b) U and Q

(c) U and S

(d) P and U

Answer: (a)

5. Select the letter cluster that will replace the question mark (?) in the following series.
MQD, JNC, GKB, DHA, ?

(a) AEZ

(b) ADZ

(c) ZEZ

(d) AEY

Answer: (a)

6. In a code language, CINEMA is written as 13-18-24-26-14-22, how will FLOWER be written in that language?

(a) 12-21-15-9-22-23

(b) 12-14-21-18-22-4

(c) 12-15-21-9-22-4

(d) 12-15-22-9-23-4

Answer: (a)

7. Sangeeta is going towards the east, then she turns 90 degrees left and walks a few meters, then she again turns 90 degrees left and walks a few metres. In which direction is she going now?

(a) East
(b) West
(c) North
(d) South

Answer: (a)

8. Pointing to the photograph of a boy, Gayatri said 'he is my mother-in-law's daughter's only brother's son'. How is Gayatri's husband related to the boy?

(a) Maternal uncle
(b) Paternal uncle
(c) Father
(d) Son

Answer: (a)

9. If A # B means 'A is the daughter of B' A < B means 'A is the wife of B' A = B means 'A is the son of B' If J # C < H = T < K = R, then how is H related to R?

(a) Paternal grandson
(b) Maternal grandson
(c) Son-in-law
(d) Brother-in-law

Answer: (a)

10. Select the option that is related to the third term the same way as the second term is related to the first term.
SLW : XQB : : FAX : _____

(a) KGB
(b) KFC
(c) LFD
(d) KEC

Answer: (a)

11. Three of the following four letter-clusters are alike in some manner and one is different. Identify the one which is different.

(a) SWAEI
(b) MQUYC
(c) BFJNR
(d) VZDKM

Answer: (a)

12. Three of the following four word-pairs are alike in some manner and one is different. Identify the one which is different.

(a) Cataract: Eyes

(b) Squint : Nose

(c) Arthritis : Joints

(d) Psoriasis : Skin

Answer: (a)

13. A statement is followed by two courses of action numbered I and II. Assuming everything in the statement to be true, decide which of the suggested courses of action (a decision to be taken for follow up /improvement in regard to the problem) logically follow(s) for pursuing:
Statement:
Some residents of the housing society have complained of water leakage from the ceiling of their apartments. As per the norms of the housing society, any maintenance exceeding ninety thousand rupees is to be bear by the apartment owners.
Courses of Action:
I. The society management committee should inquire about the tentative expenditure on the repairing of the ceilings of the apartments for which such complaints have been reported.
II. The apartment owners should be asked to pay the entire repairing amount by themselves.

(a) Only II follows

(b) Only I follows

(c) Both I and II follow

(d) Neither I nor II follows

Answer: (a)

17. Which number in the following series is wrong?
8, 4, 4, 6, 12, 30, 90, 310

(a) 12

(b) 30

(c) 90

(d) 310

Answer: (a)

18. Three of the following four number triads are alike in some manner and one is different. Identify the one which is different.

(a) 9 : 83 : 117

(b) 11 : 101 : 143

(c) 12 : 110 : 156

(d) 8 : 76 : 102

Answer: (a)

19. What approximate value should come in place of the question mark (?) in the following expression?
10.003 + 15.008 ÷ 2.998 × 4.001 + 35.9929 ÷ 17.982 = ?

(a) 28
(b) 32
(c) 40
(d) 16

Answer: (a)

20. Which two signs should be interchanged to make the given equation correct?
6 + 17 × 15 ÷ 3 – 34 = 73

(a) × and ÷
(b) + and –
(c) × and –
(d) + and ×

Answer: (a)

General Awareness

21. Which of the following ISRO chairman was replaced by scientist S. Somanath in the month of January 2022?

(a) A. S. Kiran Kumar
(b) Kailasavadivoo Sivan
(c) K. Radhakrishnan
(d) G. Madhavan

Answer: (a)

22. Google renamed itself _____ in 2015, making Google a subsidiary.

(a) Alphabet
(b) Script
(c) Meta
(d) Omega

Answer: (a)

23. As of January 2022, which of the following is not a known Cryptocurrencies?

(a) Ethereum
(b) Litecoin
(c) Graffiti
(d) Polkadot

Answer: (a)

24. Haj Committee Act was passed in the year _____.

(a) 2001
(b) 2002
(c) 2003
(d) 2004

Answer: (a)

25. What is the name of the scheme to Preserve Rich Heritage of Minority Communities of India under the Overall Concept of Indian Culture?

(a) Hamari Dharohar
(b) Sanskriti Bachao
(c) Alpsankhyak Heritage
(d) Minority Treasure

Answer: (a)

26. In which of the following years the Sikh Gurudwaras Act was passed?

(a) 1923
(b) 1924
(c) 1925
(d) 1926

Answer: (a)

27. Which of the following was not one of the three r g houses of Tamil India?

(a) Pandyas
(b) Cheras
(c) Cholas
(d) Kadambas

Answer: (a)

28. Which of the following pilgrimage sites in Pakistan connects the Kartarpur Sahib Corridor in India?

(a) Gurudwara Darbar Sahib
(b) Gurudwara Panja Sahib
(c) Gurudwara Dera Sahib
(d) Gurudwara Rori Sahib

Answer: (a)

29. In which place did Sarnath Lord preach his first sermon sacred as Maha Dharm Chakra Parivartan?

(a) Sarnath
(b) Namdroling
(c) Chaukhandi
(d) Yiga Choeling

Answer: (a)

30. Which of the following states is known for the Sattriya dance?

(a) Goa
(b) Assam
(c) Rajasthan
(d) Karnataka

Answer: (a)

31. In which of the following years did Lata Mangeshkar receive the Bharat Ratna award?

(a) 2001
(b) 2002
(c) 2003
(d) 2004

Answer: (a)

32. Mahavir Jayanti is one of the most important festivals in Jainism, and it celebrates the birth anniversary of the _____ Tirthankara Mahavir.

(a) 24th
(b) 26th
(c) 28th
(d) 30th

Answer: (a)

33. Punjab and Sind Bank was incorporated in _____.

(a) 1908
(b) 1909
(c) 1910
(d) 1911

Answer: (a)

34. In which of the following years the Disaster Management Act was passed?

(a) 2001
(b) 2003
(c) 2004
(d) 2005

Answer: (a)

35. Mangrove forest of Bhitarkanika is in _____

(a) Chhattisgarh
(b) Rajasthan
(c) Odisha
(d) West Bengal

Answer: (a)

36. As per the census 2011, what was the literacy rate of females of India?

(a) 33.66%
(b) 65.46%
(c) 26.36%
(d) 28.96%

Answer: (a)

37. What is the name of the project launched by Prime Minister, Shri Narendra Modi in which bridges will be built for safe and seamless travel on National Highways?

(a) Laxman Rekha
(b) Setu Bharatam
(c) Ram Setu Project
(d) Connecting India

Answer: (a)

38. Higgs boson is often called the _____.

(a) Life particle
(b) Particle of divinity
(c) God particle
(d) Holy particle

Answer: (a)

39. Conversion of a substance from the solid to the (eous state without its becoming liquid is called _____.

(a) Transferal
(b) Sublimation
(c) Colligation
(d) Gasification

Answer: (a)

40. Who was the first Deputy Speaker of Lok Sabha?

(a) Utpal Kumar Singh
(b) G. V. Mavalankar
(c) M. Ananthasayanam Ayyangar
(d) Santosh Kumar Gangwar

Answer: (a)

Arithmetic Ability

43. When 3871, 5627 and 8700 are divided by the greatest number p, the remainder in each case is q. What is the value of (5p– 3q)?

(a) 1024

(b) 1084

(c) 1108

(d) 1118

Answer: (a)

46. Income of A is 48 % more than the income of B whose income is 40% less than that of C. A's income is what percent more than the average income of B and C?

(a) 10.5%

(b) 11%

(c) 12%

(d) 12.5%

Answer: (a)

47. A shopkeeper bought articles A and B for a total of ₹2210. He sold A at a gain of 15% and sold B at a loss of 20%. The selling price of A is ₹104 more than that of B. What was the difference (in ₹) between the cost prices of A and B?

(a) 245

(b) 250

(c) 275

(d) 290

Answer: (a)

48. The ratio of the present ages of Anoop and his wife is 10 : 9. After 12 years from now, the ratio of their ages will be 13 : 12. What will be the sum of their ages (in years) after 6 years from now?

(a) 76

(b) 82

(c) 88

(d) 94

Answer: (a)

50. A and B can complete a work in 75 days and 60 days, respectively. They started the work together, but A left after some days. B alone completed the remaining work in 33 days. For how many days did A and B work together?

(a) 10

(b) 12

(c) 15

(d) 17

Answer: (a)

52. The amount of a sum invested for 3 years at 8% p.a simple interest is ₹1660 less than the simple interest on the same sum for 12 years at 12% p.a.
What is the sum (in ₹)?

(a) 8200
(b) 8300
(c) 8400
(d) 8500

Answer: (a)

53. The average daily income of Rishi and his 9 friends is ₹520. If the daily income of Rishi is ₹150 more than the average daily income of his 9 friends, then what is the daily income (in ₹) of Rishi?

(a) 635
(b) 640
(c) 650
(d) 655

Answer: (a)

55. The sides of a triangular park are 132 m, 224 m and 260 m. Its area is equal to the area of a rectangular garden whose sides are in ratio 21 : 11.
The perimeter (in m) of the rectangular garden is

(a) 396
(b) 462
(c) 512
(d) 528

Answer: (a)

General English

61. Select the most appropriate option to fill in the blank.
A war has been going on _____ Russia and Ukraine.

(a) along with
(b) among
(c) besides
(d) between

Answer: (a)

62. Select the most appropriate option to fill in the blank.
During the pandemic, there was a reduction _____ the number of road accidents.

(a) in
(b) to
(c) at
(d) between

Answer: (a)

63. Identify the adverb in the following sentence.
He condition will certainly worsen if you do not take her to the hospital.

(a) condition
(b) certainly
(c) worsen
(d) take

Answer: (a)

64. Select the most appropriate option to fill in the blank.
Kavya got up early and _____ so much noise that she woke everybody up.

(a) make
(b) makes
(c) made
(d) has made

Answer: (a)

65. Select the most appropriate option to fill in the blank.
I always _____ the newspaper in the evening as my mornings are busy in other things.

(a) read
(b) am reading
(c) was reading
(d) had read

Answer: (a)

66. Select the most appropriate synonym of the given word.
ASSEMBLE

(a) scatter
(b) divide
(c) distribute
(d) collect

Answer: (a)

67. Select the most appropriate synonym of the given word.
WANDER

(a) roam
(b) run
(c) escape
(d) stay

Answer: (a)

68. Select the most appropriate antonym of the given word.
ZEALOUS

(a) passionate

(b) enthusiastic

(c) indifferent

(d) pathetic

Answer: (a)

69. Select the most appropriate option to fill in the blanks in the given two sentences.
Dr. Singh has a deep _____ of the human character.
Mangal Pandey could _____ the Indian soldiers against the use of new bullets.

(a) insight; incite

(b) incite; incite

(c) incite; insight

(d) insight; insight

Answer: (a)

70. Select the most appropriate idiom to fill in the blank.
The Managing Director _____ for being late to office again and again.

(a) kept pace with him

(b) picked a quarrel with him

(c) took his advantage

(d) took him to task

Answer: (a)

71. Select the sentence part which has an error in spelling. If there is no error, select 'No error'.
I was pleasantly surprised to hear his explaination.

(a) I was pleasantly

(b) surprised to hear

(c) his explaination

(d) No error

Answer: (a)

72. Select the sentence part which has an error in spelling. If there is no error, select 'No error'.
A quarter of US jobs will be severely disrupted as artificial intelligence accelerates the automation of existing work.

(a) A quarter of US jobs will be severely disrupted

(b) as artificial intelligence accelerates

(c) the automation of existing work.

(d) No error

Answer: (a)

73. Select the sentence which is meaningful and grammatically correct.

(a) Our house Sunita cleans morning in the everyday.

(b) Sunita cleans our house everyday in the morning.

(c) Everyday in the morning cleans our house Sunita.

(d) In the morning our house cleans Sunita everyday.

Answer: (a)

74. Select the most appropriate option to fill in the blank.
The government has decided to give adequate _____ to the farmers for loss of crop.

(a) profit

(b) compensation

(c) penalty

(d) damage

Answer: (a)

75. Select the most appropriate option to fill in the blank.
When the function was over, the dais was left with crushed flowers _____ all over.

(a) Distributed

(b) Covered

(c) Scattered

(d) Planted

Answer: (a)

77. Which of the following is not a part of the roadsi green infrastructure?

(a) Hedges

(b) Trees

(c) Shrubs

(d) Herbs

Answer: (a)

78. Which locations were chosen for the study?

(a) areas with highest level of pollution

(b) roadsides with only trees

(c) roadsides with green infrastructure

(d) areas with hedges and shrubs

Answer: (a)

79. Which of the following was most effective in reducing pollution exposure at the breathing level?

(a) roadsides with only trees

(b) roadsides with hedges

(c) roadsides with trees and hedges

(d) roadsides with shrubs

Answer: (a)

Discipline1

113. Time constant of an RL circuit with R=2 Ω and L=10 H are given by ____.

(a) 10 sec
(b) 5 sec
(c) 2 sec
(d) 3 sec

Answer: (a)

114. Form factor for a sinusoidal wave is given by _____.

(a) 1.414
(b) 1.110
(c) 1.732
(d) 1.5

Answer: (a)

115. In an R-L series circuit connected to a sinusoidal source, the current is ____.

(a) In phase with the voltage
(b) Lagging the voltage by an angle between 0° and 90°
(c) Leading the voltage by an angle between 0° and 90°
(d) Leading the voltage by 90°

Answer: (a)

116. A single phase induction motor with single wind , has _____.

(a) Very high starting torque
(b) Very low starting torque
(c) Zero starting torque
(d) Unity stating torque

Answer: (a)

117. At a high value of slip, the torque of a three phase induction motor is _____.

(a) Directly proportional to slip
(b) Inversely proportional to slip
(c) Zero
(d) Unity

Answer: (a)

118. Full load regulation of four transformers with same power rating are 40%, 20%, 10% and 80% respectively. Which one should be recommended for obtaining better performance?

(a) 40%
(b) 20%
(c) 10%
(d) 80%

Answer: (a)

120. A single phase half bridge inverter consists of _____ number of thyristors and _____ number of diodes

(a) 4, 4
(b) 2, 2
(c) 2, 4
(d) 4, 2

Answer: (a)

Discipline2

122. Which of the following converter is used in vehicle to grid technology?

(a) Single phase half controlled rectifier
(b) Bidirectional converter
(c) Three phase fully controlled rectifier
(d) Buck converter

Answer: (a)

126. Which among the following is not a method for transistor biasing?

(a) Base resistor method
(b) Emitter bias method
(c) Emitter-collector bias method
(d) Voltage-divider bias method

Answer: (a)

127. Maximum efficiency of a series fed Cl[illegible]ar [illegible]fier is _____.

(a) 100%
(b) 50%
(c) 25%
(d) 80%

Answer: (a)

129. The input impedance of an ideal operational amplifier is _____.

(a) Zero
(b) Infinite
(c) Unity
(d) Depends on the input voltage

Answer: (a)

130. The maximum rate at which the amplifier output can change in an operational amplifier is referred to as _____.

(a) Frequency rate
(b) Slew rate
(c) Signal rate
(d) baud rate

Answer: (a)

133. In d.c. generators, armature reaction is produced by ____.

(a) Field current

(b) Armature current

(c) Interpole winding current

(d) Damper winding current

Answer: (a)

134. The regulation of a transformer at a power factor of 0.8 lag if the percentage resistance drop is 1.0% and percentage reactance drop is 5.0% is given by _____.

(a) 4.5%

(b) 3.8%

(c) 2.4%

(d) 7.6%

Answer: (a)

135. The core of a transformer is laminated to _____.

(a) Reduce copper losses

(b) Reduce hysteresis loss

(c) Reduce eddy current loss

(d) Reduce flux loss

Answer: (a)

137. The eddy current loss in an electrical machine is ___.

(a) Proportional to the frequency

(b) Proportional to the square root of th[illegible]cy

(c) Proportional to the square of the frequenc[illegible]

(d) Independent of the frequency

Answer: (a)

138. Which of the following is used to prevent hunting in a synchronous machine?

(a) Field windings

(b) Damper windings

(c) Armature windings

(d) Equalizer rings

Answer: (a)

139. Which of the following machine can be used to improve power factor?

(a) Three phase induction motor

(b) Dc motor

(c) Synchronous motor

(d) Single phase induction motor

Answer: (a)

Discipline3

141. How many T flip-flops are need to realise a mod-10 asynchronous counter?

(a) 4
(b) 5
(c) 10
(d) 3

Answer: (a)

142. EPROM stands for _____.

(a) Electrically programmable read-only memory
(b) Erasable programmable read-only memory
(c) Enabled Programmable read only memory
(d) Electronically Programmable read-only memory

Answer: (a)

143. Propagation delay of each flip-flops in a 4-bit synchronous counter is 30 nano seconds. The maximum possible time required for change of state of the counter is _____.

(a) 15 nano seconds
(b) 120 nano seconds
(c) 60 nano seconds
(d) 30 nano seconds

Answer: (a)

144. In an active high S-R latch, under which condition, output will be indeterminate?

(a) S=0 and R=1
(b) S=1 and R=0
(c) S=1 and R=1
(d) S=0 and R=0

Answer: (a)

145. Percentage resolution of a 4-bit DAC is _____.

(a) 6.67%
(b) 3.33%
(c) 3.67%
(d) 4.33%

Answer: (a)

147. If x[−n] = −x[n], the signal is said to be _____.

(a) Odd
(b) Causal
(c) Time invariant
(d) linear

Answer: (a)

152. Steady state error of a 'Type 2' system excited by a ramp input is _____.

(a) Unity
(b) Infinite
(c) Zero
(d) 0.5

Answer: (a)

153. Which among the following is not a time domain specification of a second order system?

(a) Steady state error
(b) Rise time
(c) Peak overshoot
(d) Gain margin

Answer: (a)

155. Lag compensator is essentially a _____ network.

(a) Band reject filter
(b) Bandpass filter
(c) High pass filter
(d) Low pass filter

Answer: (a)

Discipline4

161. Which among property of ROC of z-transform is incorrect?

(a) The ROC contain all the poles
(b) The ROC of X(z) consists of a ring in the z-plane centered about the origin.
(c) If x[n] is finite duration, the ROC is the entire z-plane, except possibly x=0 and x=∞
(d) If the z-transform X(z) is rational, then its ROC is bounded by poles or extends to infinity

Answer: (a)

163. The addressing mode in which the effective address is equal to the address part of the instruction is known as _____.

(a) Indirect Addressing Mode
(b) Register Indirect addressing Mode
(c) Direct Addressing Mode
(d) Immediate addressing Mode

Answer: (a)

164. Following instruction belongs to which addressing mode?
Add R4, #3

(a) Register indirect addressing mode
(b) Indirect Addressing Mode
(c) Immediate addressing Mode
(d) Direct Addressing Mode

Answer: (a)

165. In a two-bus organization, general-purpose registers are connected to _____.

(a) both buses
(b) ALU
(c) Only one bus
(d) ALU and two buses

Answer: (a)

166. Data is directly transferred from an I/O device to RAM or from RAM to an I/O device in _____.

(a) Programmed I/O
(b) DMA
(c) Interrupt-initiated I/O
(d) RAM transfer

Answer: (a)

167. The service routine is not having the instructions perform which among the following tasks?

(a) Turn the interrupt facility off
(b) Check which flag is set
(c) Service the device whose flag is set
(d) Save contents of processor registers

Answer: (a)

168. Which among the following pipeline units is used to implement computations encountered in scientific problems?

(a) Instruction Pipeline
(b) RISC Pipeline
(c) Data Pipeline
(d) Arithmetic Pipeline

Answer: (a)

169. D' Alembert's principle is used for _____.

(a) designing safe structures
(b) Analyzing the stability of ship and boat structures
(c) analysing stresses in bridges
(d) reducing the problem of kinetics to equivalent statics problem

Answer: (a)

170. If the time taken by an object to reach the ground while dropped from the top of a building is 4 seconds, neglecting the air resistance, height of the building is _____.

(a) 7.84 km
(b) 784 m
(c) 7.84 m
(d) 78.4 m

Answer: (a)

173. Two mirrors make an angle of 120° with each other. A ray is incident on mirror M1 at an angle of 65° to the normal. The angle of reflection of the ray from the normal of mirror M2 is ____.

(a) 45°
(b) 35°
(c) 55°
(d) 65°

Answer: (a)

174. Electronic spectroscopy uses the _____ region of electromagnetic spectrum.

(a) 400 to 850 nm
(b) 200 to 760 nm
(c) 100 to 260 nm
(d) 50 to 180 nm

Answer: (a)

177. Which of the following motor has a trapezoidal ped back emf?

(a) Synchronous motor
(b) Brushless DC motor
(c) Induction motor
(d) Single phase induction motor

Answer: (a)

180. Which of the following motor is not used in Electric Vehicles?

(a) PMSM
(b) BLDC
(c) Three phase synchronous motor
(d) Three phase induction motor

Answer: (a)

Discipline5

181. While using the command RRC, which of the following flags are modified?

(a) P
(b) CY
(c) AC
(d) Z

Answer: (a)

182. Number of T-states in the STA command of 8085 microprocessor is _____.

(a) 13

(b) 8

(c) 9

(d) 7

Answer: (a)

185. A transmission line is provided with distance protection. Zone-1 of the protection system extends up to ____% of the line

(a) 50

(b) 60

(c) 80

(d) 100

Answer: (a)

186. Plug Setting Multiplier of a 5 A rated relay with a current setting of 125% and CT ratio 400/5 when a fault current of 4000 A flowing in the primary is _____.

(a) 16

(b) 8

(c) 4

(d) 2

Answer: (a)

188. Which among the following is not a method for harmonic assessment?

(a) Fourier Series

(b) Fourier Transform

(c) Laplace Transform

(d) Hartley Transform

Answer: (a)

189. Which among the following FACTS device do not have a series compensation function?

(a) TCSC

(b) SSSC

(c) STATCOM

(d) UPFC

Answer: (a)

191. A walk-through inspection of a facility to identify maintenance, operational or deficient equipment issues and to identify areas that need further evaluation is known as _____.

(a) Investment Grade Audit

(b) Complete audit

(c) Energy Diagnosis

(d) Walk-Through Audit

Answer: (a)

195. A three phase H-bridge voltage source inverter has ____ valid switch states.

(a) 6

(b) 4

(c) 8

(d) 9

Answer: (a)

196. In the case of bidirectional operation of converters, which among the following strategy is used?

(a) Two controllable switches in parallel

(b) Controllable switch in parallel with a capacitor

(c) Controllable switch in parallel with a diode

(d) Controllable switch in parallel with an inductor

Answer: (a)

198. Which of the following is not an assumption used in the modelling of synchronous machine for dynamic analysis?

(a) Air gap mmf is distributed sinusoidally

(b) Harmonics are considered

(c) Magnetic saturation and hysteresis are ignored

(d) Saliency is restricted to the rotor

Answer: (a)

200. Subsynchronous resonance is a phenomenon nerally occurs in _____.

(a) Uncompensated transmission syste

(b) Distribution system

(c) Shunt compensated transmission system

(d) Series compensated transmission system

Answer: (a)

Answer key

Answer key from the Delhi Subordinate Services Selection Board's official answer key for this sitting. "—" means the key gave none.

Mental Ability

1	(a)	2	(a)	3	(a)	4	(a)	5	(a)	6	(a)	7	(a)	8	(a)	9	(a)	10	(a)
11	(a)	12	(a)	13	(a)	17	(a)	18	(a)	19	(a)	20	(a)						

General Awareness

21	(a)	22	(a)	23	(a)	24	(a)	25	(a)	26	(a)	27	(a)	28	(a)	29	(a)	30	(a)
31	(a)	32	(a)	33	(a)	34	(a)	35	(a)	36	(a)	37	(a)	38	(a)	39	(a)	40	(a)

Arithmetic Ability

43	(a)	46	(a)	47	(a)	48	(a)	50	(a)	52	(a)	53	(a)	55	(a)				

General English

61	(a)	62	(a)	63	(a)	64	(a)	65	(a)	66	(a)	67	(a)	68	(a)	69	(a)	70	(a)
71	(a)	72	(a)	73	(a)	74	(a)	75	(a)	77	(a)	78	(a)	79	(a)				

Discipline1

113	(a)	114	(a)	115	(a)	116		.7	(a)	118	(a)	120	(a)						

Discipline2

122	(a)	126	(a)	127	(a)	129	(a)	130	(a)	133	(a)	134	(a)	135	(a)	137	(a)	138	(a)
139	(a)																		

Discipline3

141	(a)	142	(a)	143	(a)	144	(a)	145	(a)	147	(a)	152	(a)	153	(a)	155	(a)		

Discipline4

161	(a)	163	(a)	164	(a)	165	(a)	166	(a)	167	(a)	168	(a)	169	(a)	170	(a)	173	(a)
174	(a)	177	(a)	180	(a)														

Discipline5

181	(a)	182	(a)	185	(a)	186	(a)	188	(a)	189	(a)	191	(a)	195	(a)	196	(a)	198	(a)
200	(a)																		