

DSSSB (TGT-Computer Science)
Time Allowed: 2 Hours
Maximum Marks: 200
परीक्षार्थियों के लिए निर्देश

1. OMR उत्तर पत्र इस परीक्षा के अन्दर रखा है। जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर पत्र निकाल कर पृष्ठ-1 एवं पृष्ठ-2 पर ध्यान से केवल नीले बॉल पेन से विवरण भरें।
2. परीक्षा की अवधि 2 घंटे है एवं परीक्षा में 200 प्रश्न हैं। ऋणात्मक अंकन है, प्रत्येक गलत प्रश्न का 0.25 अंक कटेगा।
3. इस पृष्ठ पर विवरण अंकित करने एवं उत्तर पत्र पर निशान लगाने के लिए केवल नीले बॉल पॉइंट पेन का प्रयोग करें।
4. एस पुस्तिका का संकेत है A. यह सुनिश्चित कर लें की इस पुस्तिका का संकेत, उत्तर पत्र के पृष्ठ-2 पर छपे संकेत से मिलता है। यह भी सुनिश्चित कर लें की परीक्षा संख्या और उत्तर पत्र संख्या मिलते हैं। अगर यह भिन्न हों तो परीक्षार्थी दूसरी प्रश्न पुस्तिका और उत्तर पत्र लेने के लिए निरीक्षक को तुरंत अवगत कराएं।
5. इस पुस्तिका में दो भाग (भाग-1) और (भाग-2) हैं, जिनमें 200 वस्तुनिष्ठ प्रश्न हैं, जो प्रत्येक 1 अंक का है:

भाग-1

सामान्य जानकारी	(प्र. 1 से प्र. 20)
सामान्य बुद्धिमत्ता तथा तार्किक योग्यता	(प्र. 21 से प्र. 40)
अंकगणितीय एवं संख्यात्मक योग्यता	(प्र. 41 से प्र. 60)
भाषा परीक्षण: हिंदी	(प्र. 61 से प्र. 80)
भाषा परीक्षण: अंग्रेजी	(प्र. 81 से प्र. 100)

भाग-2

कम्प्यूटर साइंस	(प्र. 101 से प्र. 200)
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एफ कार्य परीक्षा पुस्तिका में इस प्रयोजन के लिए दी गई खाली जगह पर करें।

सभी उत्तर केवल OMR उत्तर पत्र पर ही अंकित करें। अपने उत्तर ध्यानपूर्वक अंकित करें। उत्तर बदलने हेतु श्वेत रंजक का प्रयोग निषिद्ध है।

INSTRUCTIONS FOR CANDIDATES

1. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars on Side-1 and Side-2 carefully with blue ball point pen only.
2. The test is of 2 hours duration and consists of 200 questions. The paper carries negative markings, for each wrong answer 0.25 mark will be deducted.
3. Use Blue Ball Point Pen only for writing particulars on this page/markings responses in the Answer Sheet.
4. The OCDE for this Booklet is A, Make sure that the CODE printed on Side-2 of the answer sheet is the same as that on this booklet. Also ensure that you test booklet no. and answer sheet no. are the same. In case of discrepancy, the candidate should immediately report the matter to the invigilator for replacement of both the test booklet and the answer sheet.
5. This test booklet has two parts (Section-1 & Section -2), consisting of 200 objective type questions, each carrying 1 mark:

Part - 1

General Awareness	(Q. 1 to Q. 20)
General Intelligence & Reasoning Ability	(Q. 21 to Q. 40)
Arithmetical & Numerical Ability	(Q. 41 to Q. 60)
Test of Language: HINDI	(Q. 61 to Q. 80)
Test of Language: English	(Q. 81 to Q. 100)

Part - 2

Computer science	(Q. 101-200)
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7. Rough work should be done only in the space provided in the Test booklet for the same.
8. The answer are to be recorded on the OMR answer sheet only. Mark your responses carefully. No whitener is allowed for changing answer.

Part-1

GENERAL AWARENESS

- Q1. Intensive cultivation refers to
(a) production with the intensive use of labor
(b) production with the intensive use of fertilizer
(c) raising production by intensive use of existing land
(d) None of these
- Q2. Vikram pandit associated with which of the following banks.
(a) Yes Bank (b) ICICI Bank
(c) Citigroup (d) HSBC
- Q3. Nobel Laureate Muhammad Yunus belongs to which one of the following countries.
(a) Sri Lanka (b) Pakistan
(c) Maldives (d) Bangladesh
- Q4. With which one of the following fields was Pandit Bhimsen Joshi associated?
(a) Dance (b) Music's
(c) Short-story writing (d) None of these
- Q5. Name the film that is a four minute documentary film on girl child education, has been invited for special screening at the 42nd Seattle International Film Festival (SIFF), Washington DC.
(a) Bahu (b) Putri
(c) Beti (d) Ladly
- Q6. Article 21 of the Fundamental Rights deals with which subject
(a) Protection of certain rights regarding freedom of speech,
(b) Protection in respect of conviction of offence
(c) Protection against arrest and detention in certain cases
(d) Protection of life and personal liberty
- Q7. The Directive Principles of State Policy seek
(a) To establish the supremacy of the Constitution
(b) To curb the authoritarian rule
(c) To strengthen judiciary
(d) To make the Constitution an instrument of social change.
- Q8. Who said in the Constituent Assembly that the Directive Principles of State Policy are like a 'cheque on a bank payable at the convenience of the bank'?
(a) Jawaharlal Nehru (b) K T Shah
(c) B R Ambedkar (d) K M Munshi
- Q9. Name the Formula One racer who defeated four-time Formula One World Champion to lift his fifth title at the Chinese Grand Prix.
(a) Nick Roseburg (b) Sebastian Vettel
(c) Lewis Hamilton (d) Michael Schumacher
- Q10. World Homeopathy Day is observed globally on _____.
(a) 15 April (b) 13 April
(c) 17 March (d) 10 April
- Q11. Name the Indian-origin woman who was named 'Asian Businesswoman of the Year' at an event in Birmingham, England.
(a) Asha Khemka (b) Kiran Khelkar
(c) Vibha Bedi (d) Aruna Chanda
- Q12. President Pranab Mukherjee has inaugurated the "Namami Brahmaputra" festival on the banks of the river Brahmaputra in 21 districts of-
(a) Jharkhand (b) Tripura
(c) Assam (d) West Bengal
- Q13. Which among the following countries has become the first country in the world to ban metals mining nationwide?
(a) Panama (b) El Salvador
(c) Guatemala (d) Belize
- Q14. Name the Indian-origin British Director who has been honored with the Sikh Jewel Award for 2017.
(a) Joe Rajan
(b) Gurinder Chadha
(c) Kasinadhuni Viswanath
(d) Jaspal Bhatti
- Q15. The Indian Navy has recently inducted surveillance ship INLCU L51 in which of the following Indian cities?
(a) Chennai (b) Port Blair
(c) Mumbai (d) Kolkata
- Q16. Who started the modern Local Self Government?
(a) Lord Irwin (b) Lord Ripon
(c) Lord Curzon (d) Lord Auckland
- Q17. During the time of Alauddin's invasion, Warangal was ruled by.
(a) Chalukya dynasty (b) Chola dynasty
(c) Kakatiya dynasty (d) Yadava dynasty
- Q18. Ancient Pushkalavati has been identified with.
(a) Balkh (b) Charsadda
(c) Hadda (d) Sirkap
- Q19. Just as the division of cytoplasm is called cytokines is, the division of nucleus is called:
(a) Heterocyst (b) Mitosis
(c) Meiosis (d) Karyokinesis
- Q20. The two strands of the DNA double helix and held together by—
(a) Hydrogen bonds (b) C=C double bonds
(c) Hydrophobic bonds (d) Peptide bonds

Directions (21-25): Read the information and answer the questions given below:

Eight family members Dhruv, Garima, Avinash, Varsha, Aakash, Deepti, Charu and Moksh are sitting around a square table in such a way that two persons sit on each of the four sides of the table facing the centre. Members sitting on opposite sides are exactly opposite each other. Aakash and Garima are exactly opposite each other. Deepti is immediately right to Garima. Dhruv and Moksh are sitting on the same side. Moksh is exactly opposite Avinash, who is to the immediate left of Varsha. Dhruv is towards right of Deepti.

Q21. Which of the following statements is definitely true?

- (a) Charu is opposite Varsha.
- (b) Aakash is to the left of Garima.
- (c) Avinash is towards the right of Aakash
- (d) Moksh is sitting opposite Dhruv.

Q22. Who is sitting opposite Dhruv?

- (a) Charu
- (b) Deepti
- (c) Varsha
- (d) Moksh

Q23. Who is sitting opposite Deepti?

- (a) Moksh
- (b) Charu
- (c) Varsha
- (d) Charu or Varsha

Q24. Who is next to Varsha in anti-clockwise direction?

- (a) Garima
- (b) Avinash
- (c) Dhruv
- (d) Deepti

Q25. Which of the following pair are sitting on a same side?

- (a) Aakash — Moksh
- (b) Moksh — Charu
- (c) Dhruv — Aakash
- (d) None of the above

Q26. M, T, B, D and R are five friends each of them having a different weight. R is heavier than M and T but lighter than only B. M is heavier than only T. Who among the following is at the third position according to their weights?

- (a) R
- (b) M
- (c) D
- (d) T

Directions (27): Letters of the words given below have been jumbled up. You are required to construct the words. Each letter has been numbered and each word is followed by four options. Choose the option which gives the correct order of the letters as indicated by the numbers to form words.

Q27. C E L S M U

1 2 3 4 5 6

- (a) 4, 6, 3, 5, 2, 1
- (b) 4, 6, 5, 2, 3, 1
- (c) 5, 2, 3, 1, 6, 4
- (d) 5, 6, 4, 1, 3, 2

Q28. Meera is eleventh from the left end in a row of 35 girls and Seema is twenty seventh from the right

end in the same row. How many girls are there between them in the row?

- (a) None
- (b) One
- (c) Two
- (d) Three

Q29. From the given alternative words, select the word which cannot be formed using the letters of the given word : ENCYCLOPEDIA

- (a) CYCLE
- (b) PLEASE
- (c) PLEAD
- (d) CANOPY

Q30. What will come next in the given alphabetical series?

XVU WUT VTS USR ?

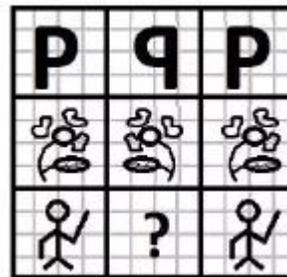
- (a) TRQ
- (b) RST
- (c) SRQ
- (d) TUV

Q31. Arrange the following words as per order in the dictionary.

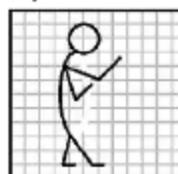
1. Exploit
2. Explosive
3. Exponent
4. Exposition
5. Explore

- (a) 1, 3, 4, 5, 2
- (b) 1, 5, 2, 3, 4
- (c) 1, 5, 3, 2, 4
- (d) 1, 2, 5, 3, 4

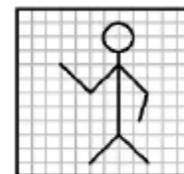
Q32. Which answer figure will complete the pattern in the Question figure?



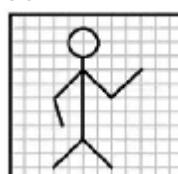
(a)



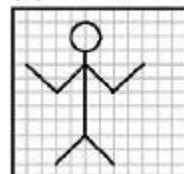
(b)



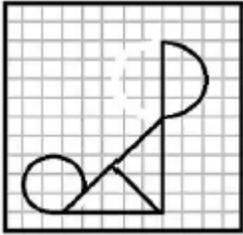
(c)



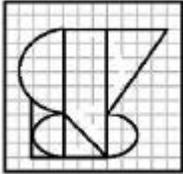
(d)



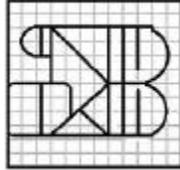
Q33. From the given answer figures, select the one in which the Question figure is hidden/embedded



(a)



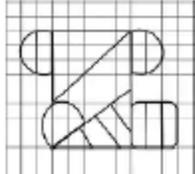
(b)



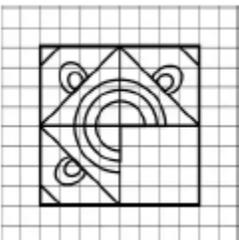
(c)



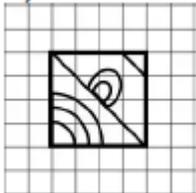
(d)



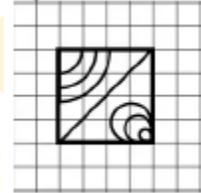
Q34. Which answer figure will complete the pattern in the question figure?



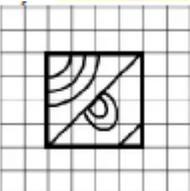
(a)



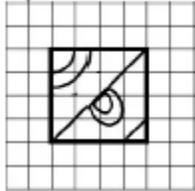
(b)



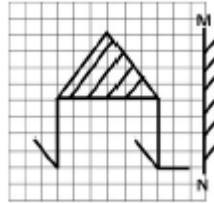
(c)



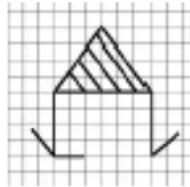
(d)



Q35. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



(a)



(b)



(c)



(d)



Q36. If 'book' is 'duster', 'duster' is 'pen', 'pen' is 'board', 'board' is 'chalk' and 'chalk' is 'eraser', then with which object Shailesh will write on a Board?

- (a) chalk (b) duster
(c) board (d) eraser

Q37. A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's

- (a) Brother (b) Son
(c) Uncle (d) Son-in-law

Q38. Pointing to a man in a photograph, a woman said, "His brother's father is the only son of my grandfather." How is the woman related to the man in the photograph?

- (a) Mother (b) Aunt
(c) Sister (d) Daughter

Directions (39): In each of the following letters series, some of the letters are missing which are given in that order as one of the alternatives below it. Choose the correct alternative.

Q39. aa _ _ aba _ bca _ aab _ a _

- (a) bbcc (b) bbabcb
(c) bcabcb (d) cbabac

Q40. If D = 4, DESK = 39, then the value of DRAW is

- (a) 57 (b) 46 (c) 45 (d) 36

ARITHMETICAL & NUMERICAL ABILITY

- Q41. The ratio between the speeds of two trains is 7:8. If the second train runs 400 km in 5 hours, the speed of the first train is:
(a) 70 km/hr (b) 200 km/hr
(c) 250 km/hr (d) 350 km/hr
- Q42. The average age of 5 boys is 16 yr and the average age of 4 boys is 16 yr 3 months. The age of the 5th boy is
(a) 15 yr (b) 15 yr 6 months
(c) 15 yr 4 months (d) 15 yr 2 months
- Direction (43):** A question which is given below followed by three statements. You have to study the question and the statements and decide which of the statement(s) is/are necessary to answer the question?
- Q43. What is the population of State 'A'?
- I.** After increasing the population of State A by 15% it becomes 1.61 lakhs
II. Ratio of population of State A to that of State B is 7: 8 respectively
III. Population of State B is 1.6 lakhs
- (a) I only
(b) II and III only
(c) I and II only
(d) Either only I or II and III
- Q44. A prism has the base a right-angled triangle whose sides adjacent to the right angle are 12 cm and 14 cm long. The height of the prism is 30 cm long. The density of the material of the prism is 7 g/cu cm. The weight of the prism is:
(a) 13.34 kg (b) 14.80 kg
(c) 16.54 kg (d) 17.64 kg
- Q45. The difference between the simple interest received from two different sources on Rs. 1200 for 5 years is Rs. 24. The difference between their rates of interest is:
(a) 0.1% (b) 0.2%
(c) 0.3% (d) 0.4%
- Q46. Two trains, A and B, start from stations X and Y towards each other, they take 4 hours 48 minutes and 3 hours 20 minutes to reach Y and X respectively. After they meet, if train A is moving at 45 km/hr, then the speed of the train B is
(a) 60 km/hr (b) 64.8 km/hr
(c) 54 km/hr (d) 37.5 km/hr
- Q47. A is twice as fast as B and B is thrice as fast as C is. The journey covered by C in 1 (1/2) hours will be covered by A in
(a) 15 minutes (b) 2 minutes
(c) 30 minutes (d) 1 hour
- Q48. In a regular polygon, the exterior and interior angles are in the ratio 1: 4. The number of sides of the polygon is
(a) 5 (b) 10 (c) 3 (d) 8
- Q49. Among the angles 30°, 36°, 45°, 50° one angles cannot be an exterior angle of a regular polygon. The angle is
(a) 30° (b) 36° (c) 45° (d) 50°
- Q50. The LCM of two numbers is 3 times their HCF. The sum of LCM and HCF is 120. If one of the numbers is 180, then the other number is:
(a) 50 (b) 15 (c) 150 (d) 120
- Q51. Reena spends Rs. 44668 on her clothes, Rs. 56732 on buying gifts for the friends and the remaining 22% of the total amount she had as cash with her. What was the total amount?
(a) Rs. 286000 (b) Rs. 130000
(c) Rs. 101400 (d) Rs. 338000
- Q52. One half of the cube-root of which number is 0.3?
(a) 0.192 (b) 0.296
(c) 0.216 (d) 0.256
- Q53. Two concentric circle whose radii are 17 cm and 7 cm. Then using $\pi = 22/7$, find the area of ring -
(a) 374 cm² (b) 360 cm²
(c) 320 cm² (d) 540 cm²
- Q54. Radius of a circle is 13 cm and xy is a chord which distance from centre is 12 cm. Therefore, length of chord is -
(a) 15 cm (b) 12 cm
(c) 10 cm (d) 20 cm
- Q55. Work of 4 male is equal to work of 6 female and 9 female is equal to 12 Boys. 8 male and 6 female together work 8 hr/day to complete a work in 15 days. 2 male and 3 female and 4 Boy together work 6hr/day to complete that work. So how many days will takebythem?
(a) 30 days (b) 40 days
(c) 34 days (d) 43 days

Q56. A and B can do a work in 20 and 30 days. Starting with A, work doing by alternate day. Then in how many days work completed.

- (a) 30 (b) 10 (c) 24 (d) 28

Q57. If 90% of A = 30% of B and B = x% of A, then the value of x is?

- (a) 800 (b) 300
(c) 700 (d) 400

Q58. The average of three consecutive odd numbers is 12 more than one-third of the first of these numbers. What is the last of the three numbers?

- (a) 15 (b) 17 (c) 19 (d) 21

Q59. 60 cubes of 1 cm side, Priya formed a cuboid.

What is the volume of the cuboid?

- (a) 50 cu cm (b) 60 cu cm
(c) 55 cu cm (d) 84 cu cm

Q60. In a school, total rooms are 26. Four plants are planted in each room. Two cups of water pour in each plant. What is the total cup required to pour all plants?

- (a) 32 cups (b) 106 cups
(c) 112 cups (d) 208 cups

Test of Language: HINDI

Directions (61 – 63): नीचे दिए गए प्रत्येक प्रश्न में एक रिक्त स्थान छोटा हुआ है और उसके नीचे चार शब्द सुझाए गए हैं। इनमें से कोई एक उस रिक्त स्थान पर रख देने से वह वाक्य एक अर्थपूर्ण वाक्य बन जाता है। सही शब्द ज्ञातकर उसको उत्तर के रूप में अंकित कीजिए। दिए गए शब्दों में सर्वाधिक उपयुक्त का चयन करना है।

Q61. अपनी गलती तुरंत स्वीकार करने वाले व्यक्तिहोते हैं।

- (a) गुणग्राहक (b) ललतत्यपूर्ण
(c) सदगुणी (d) इनमें से कोई नहीं

Q62. जिसके पास है, वह कसी भी परिस्थिति का सामना कर सकता है।

- (a) मन (b) धान्य
(c) धनुष (d) धैर्य

Q63. हमें उत्तम अवसर प्रदान करती हैं।

- (a) मनौतियाँ (b) असहमतियाँ
(c) नीरवता (d) चुनौतियाँ

Directions (64-65): नीचे कुछ वाक्यांश या शब्द समूह दिए गये हैं और उसके बाद चार शब्द दिए गये हैं जो एक ही शब्द समूह का अर्थ प्रकट करते हैं। आपको पता लगाना है की वह शब्द कौन -सा है जो वाक्यांश का ही सही अर्थ प्रकट करता है। उस विकल्प की संख्या ही आपका उत्तर है।

Q64. सूर्य के उदय होने का स्थान-

- (a) उदय स्थल

(b) पूर्वाचल

(c) उदयाचल

(d) इनमें से कोई नहीं

Q65. एक पुष्प जो अभी तक सत नहीं हुआ है-

- (a) बौर (b) मंजरी
(c) कोश (d) मुकुल

Directions (66-75): नीचे दिए गए गाथांश को ध्यानपूर्वक पढ़िए और उस पर आधारित प्रश्नों के उत्तर दीजिए। कुछ शब्दों को मोटे अक्षरों में मुद्रित किया गया है, जिससे आपको कुछ प्रश्नों के उत्तर देने में सहायता मिलेगी। दिए गए विकल्पों में से सबसे उपयुक्त का चयन कीजिए।

देश में कुपोषण की समस्या से न केवल गरीब बल्कि मध्यम और उच्च आय वर्ग के परिवार भी प्रभावित हैं। संसद की कृषि से संबंधित स्थाई समिति ने हाल में पेश एक रिपोर्ट में भारतीय कृषि अनुसंधान परिषद के एक अध्ययन के हवाले से कहा है कि मध्यम आय वर्ग के 50 प्रतिशत से अधिक तथा उच्च आय वर्ग के 30 प्रतिशत से अधिक परिवार कुपोषण से प्रभावित हैं। ये परिवार अपेक्षित जरूरत से कम पोषक तत्वों का सेवन कर रहे हैं। परिषद ने धान, गेहूं आदि फसलों की कुछ ऐसी कस्में तक सत की हैं, जिनमें सूक्ष्म पोषक तत्व अधिक हैं। समिति को बताया गया है कि ग्रामीण क्षेत्रों में लोगों ने सूक्ष्म पोषक तत्वों की कमी को दूर करने के लिए नौ राज्यों के 45 चुने हुए गांवों में 510 पोषण बागान स्थापित किए गए हैं।

कुपोषण और जीवन शैली संबंधी रोगों से निपटने के लए खाद्य उत्पादों तथा पोषक तत्वों से भरपूर उत्पाद बनाने के लए कृष, पशुधन एवं जल उत्पाद से "स्वस्थ खाद्य पदार्थ" नामक अनुसंधान परियोजना शुरू कए जाने का प्रस्ताव है।

समिति ने भारतीय कृष अनुसंधान परिषद को स्वस्थ खाद्य पदार्थ संबंधी अनुसंधान परियोजना को जल्द से जल्द शुरू करने के लए अतिरिक्त राश प्राप्त करने के लए पर्याप्त प्रयास करने को कहा है। सरकार ने पोषक तत्वों से संबंधित अपने उत्तर में कहा है क अनाजों और दलहनों में लौह, जिंक और प्रोटीन को बढ़ाने के उद्देश्य से मसूर का जैव प्रबलीकरण आरंभ कया गया है।

वटा मनों, कैल्शियम, लौह तथा आइसोफ्लेवॉस जैसे पोषक तत्वों के साथ सोयाबीन अच्छी गुणवत्ता वाले प्रोटीन का समृद्ध और सस्ता स्रोत है। सोयाबीन के खाद्य उपयोग को बढ़ावा देने के लए सोयाबीन अनुसंधान निदेशालय इंदौर ने उच्च ओलीक अम्ल, दुर्गन्ध को कम करने की क्षमता तथा सब्जी प्रकृति के सोयाबीन के जीन प्ररूप वक सत कए हैं।

सरकार ने कहा है क स्वस्थ खाद्य पदार्थ अनुसंधान परियोजना के लए 127 करोड़ रूपए का प्रावधान कया गया है तथा 31 केन्द्रों पर अनुसंधान कार्य शुरू करने का प्रस्ताव है। वभाग ने असम, बिहार, छत्तीसगढ़, झारखंड, ओडशा, मध्य प्रदेश, राजस्थान, उत्तर प्रदेश और उत्तराखंड के 100 उच्च कुपोषण प्रभावित जिलों में न्यूट्री फार्मा की स्थापना के लए प्रायोगिक योजना को कार्यान्वित कया गया है।

इसका उद्देश्य बाजरा, मक्का, मडुवा, गेहूं और शकरकंद के सूक्ष्म पोषक तत्व युक्त फसलों के उत्पादन को बढ़ावा देना है।

Q66. परियोजना के कार्यान्वयन के लए वभाग ने कसकी स्थापना करने की योजना बनायी है?

- (a) फलों के बगान (b) न्यूट्री फार्मा
(c) खाद्य बागान (d) उपरोक्त सभी

Q67. कुपोषण से निपटने के लए कौन सी योजना को शुरू कया गया है?

- (a) स्वस्थ खाद्य योजना (b) स्वस्थ खाद्य पदार्थ
(c) सूक्ष्मपोषण योजना (d) कुपोषण हटाओ योजना

Q68. उच्च वर्ग का कतना प्रतिशत हिस्सा कुपोषण की चपेट में है?

- (a) 1.50 फीसदी (b) 40 फीसदी
(c) 30 फीसदी (d) 25 फीसदी

Q69. ससंद की कृष से सम्बंधित स्थाई समिति की रिपोर्ट कस संस्था/सामग्री पर आधारित थी?

- (a) कृष मंत्रालय (b) सार्वजनिक अध्ययन
(c) रेडयो रिपोर्ट (d) भारतीय कृष अनुसंधान परिषद

Q70. गद्यांश में कुपोषण से क्या तात्पर्य है?

- (a) खाद्य की कमी (b) न्यून पोषण
(c) गन्दा भोजन (d) उपरोक्त सभी

Q71. गद्यांश में दिया गया शब्द मध्यम का क्या अर्थ है?

- (a) माध्यम
(b) धीमा
(c) न अधिक न कम आय वर्ग
(d) उत्तम

Q72. परिषद् ने कस कमी को दूर करने के लए 510 पोषण बागान स्थापित कए हैं?

- (a) कुपोषण (b) भूखमरी
(c) सूक्ष्मपोषक तत्व (d) खाद्य पदार्थ

Q73. प्रबलीकरण का समानार्थी निम्न में से क्या है?

- (a) सख्त (b) कठोर
(c) मजबूत (d) उपरोक्त सभी

Q74. सोयाबीन के खाद्य उपयोग को बढ़ावा देने के लए कस संस्था ने सोयाबीन के जीन प्ररूप वक सत कए हैं?

- (a) उत्थान कृष संशोधन योजना
(b) भारतीय कृष अनुसंधान परिषद
(c) स्वस्थ खाद्य पदार्थ अनुसंधान
(d) सोयाबीन अनुसंधान निदेशालय

Q75. गद्यांश में कार्यान्वित शब्द का प्रयोग कया गया है, निम्न में से भन्न शब्द चुनें?

- (a) संचालन (b) क्रयाशील
(c) कार्यान्वयन (d) समापन

Directions (76-80): निम्न लखत प्रश्नों के उत्तर दीजिये:

Q76. नौका झील में डूब गयी रेखांकित पद में कौन सा कारक है?

- (a) अ धकरण (b) कर्म
(c) अपादान (d) करण
- Q77. 'यथाक्रम' कस समास का उदहारण है?
(a) कर्मधारय (b) बहुब्रिही
(c) तत्पुरुष (d) अट्वयी भाव
- Q78. राजन का स्त्री लंग क्या है?
(a) रानी (b) राज्ञी

- (c) राजनी (d) राजिनी
- Q79. क्रूर शब्द कौन सा है?
(a) सर्वनाम (b) विशेषण
(c) संज्ञा (d) क्रया
- Q80. तद्रूप में सं ध का प्रकार क्या है?
(a) स्वर गुण (b) व्यंजन
(c) वसर्ग (d) इनमे से कोई नहीं

Test of Language: English

Directions (81-85): An expression followed by four words is given in each of the following questions. The expression carries the meaning of one of the words. Identify the word and mark its number as your answer.

- Q81. Causing damage to both parties involved
(a) mutual (b) internecine
(c) interdict (d) interstitial
- Q82. A person who is very good at something especially music
(a) adept (b) popular
(c) talented (d) virtuoso
- Q83. An anxious and eager concern for someone
(a) solicitude (b) worry
(c) elation (d) good will
- Q84. A cowardly and unfaithful person
(a) miscreant (b) mendicant
(c) pervert (d) recreant
- Q85. A fixed plan of food, sleep, etc. in order to improve one's health
(a) regimen (b) alidade
(c) resolution (d) encompassment

Directions (86-90): Choose the option which is the antonym of the word mentioned in the question.

- Q86. APPALLING
(a) Shocking (b) Consoling
(c) Scaring (d) Horrifying
- Q87. CONVICTED
(a) Charged (b) Relieved
(c) Dismissed (d) Acquitted
- Q88. MALADROIT
(a) Authoritative (b) Skillful
(c) Maladjusted (d) Malevolent
- Q89. MONOTONOUS
(a) Disastrous (b) Terrifying
(c) Terrible (d) Interesting
- Q90. PREDILECTION
(a) Acceptance (b) Attraction
(c) Dislike (d) Choice

Directions (91-93): These types of questions are designed to measure your ability to recognize language that is appropriate for standard written English. You will find incomplete sentences and beneath each sentence you will see words or phrases. Choose the one word or phrase that best completes the sentence.

- Q91. _____ the formation of the sun, the planets, and other stars begin with the condensation of an interstellar cloud.
(a) Except that
(b) Accepted that
(c) It is accepted that
(d) That is accepted
- Q92. In many ways, riding a bicycle is similar to _____.
(a) the driving of a car
(b) when you drive a car
(c) driving a car
(d) when driving a car
- Q93. Fast-food restaurants have become popular because many working people want _____.
(a) to eat quickly and cheaply
(b) eating quickly and cheaply
(c) eat quickly and cheaply
(d) the eat quickly and cheaply

Directions (94-95) : In these questions, a sentence has been given in Active Voice/Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active Voice:

- Q94. Our hosts treated us very kindly.
(a) We got kind treatment from our hosts.
(b) We were treated very kindly by our hosts.
(c) We were kindly treated by hosts.
(d) Our treatment was kind.
- Q95. Who painted the wall?
(a) By whom had the wall been painted?
(b) By whom was the wall painted?
(c) By whom is the wall been painted?

(d) By whom has the wall been painted?

Directions (96-100): In this section, you have one short passage. After this passage you will find several questions based on the passage. First, read Passage, and answer the questions based on it.

Ordinarily, nothing upsets the equilibrium of the pandit. But the loss of the necklace, which his wife had borrowed from a neighbour, and the fact that he had to replace it worried him. He spent all his time in devising ways and means to repay the debt. Six months later, he gave his wife a gold necklace. It was exactly what she had yearned for. "There is no need to repay it," she said. The pandit was surprised. She explained, "The necklace was not stolen. That was the only way I could think of making you get me one."

- Q96. The pandit was almost never upset as he
- (a) had the courage to face a problem
 - (b) had a balanced attitude
 - (c) was indifferent to ordinary incidents
 - (d) always succeeded in finding a solution to his problems.

Q97. What worried the pandit most was the

- (a) his wife had lost the necklace
- (b) he had to replace the necklace
- (c) his wife was so foolish and careless
- (d) the necklace was very expensive

Q98. The pandit struggled for six months so that

- (a) he could present the necklace to his wife
- (b) he could lend the necklace to others
- (c) his wife could replace the lost necklace
- (d) his wife could satisfy her desire to own a necklace

Q99. The reason why the pandit's wife refused to return the necklace was that

- (a) she had always wanted one like it
- (b) the real owner did not expect it back
- (c) she had not lost any necklace
- (d) she was tempted to keep this one for herself

Q100. The pandit's wife had told him a lie in order to

- (a) trick him into satisfying her yearning
- (b) punish him for refusing to get her what she desired
- (c) make him repay a debt
- (d) force him to work hard to earn more and mor

Part-2

COMPUTER SCIENCE

Q101. Fragmentation is

- (a) dividing the secondary memory into equal sized fragments
- (b) dividing the main memory into equal-size fragments
- (c) fragments of memory words used in a page
- (d) fragments of memory words unused in a page

Q102. Mutual exclusion problem occurs

- (a) between two disjoint processes that do not interact
- (b) among processes that share resources
- (c) among processes that do not use the same resource
- (d) none of the above

Q103. Match List-I with List-II select the correct answer using the codes given below the lists:

Codes:

List-I

- A. Disk scheduling
- B. Batch processing
- C. Time sharing
- D. Interrupt processing

List-II

- 1. Round robin
- 2. SCAN
- 3. LIFO
- 4. FIFO

- (a) A-3, B-4, C-2, D-1
- (b) A-4, B-3, C-2, D-1
- (c) A-2, B-4, C-1, D-3

(d) A-2, B-1, C-4, D-3

Q104. Bootstrap loader is always stored in

- (a) cache
- (b) ROM
- (c) RAM
- (d) disk

Q105. The jobs are assumed to have arrived at time 0 and in the order p, q, r, s, t. Calculate the departure time for job p if scheduling is round-robin with time slice of 1.

Job ID	CPU Burst Time
p	4
q	1
r	8
s	1
t	2

- (a) 16
- (b) 10
- (c) 11
- (d) 12

Q106. Suppose we have a system in which processes is in hold and wait condition then which of the following approach prevent the deadlock.

- (a) Request all resources initially
- (b) Spool everything
- (c) Take resources away

- (d) Order resources numerically
- Q107. Disk scheduling involves deciding
- which disk should be accessed next
 - the order in which disk access requests must be serviced
 - the physical location where files should be accessed in the disk
 - none of the above
- Q108. In Round Robin CPU scheduling, as the time quantum is increased, the average turn around time
- increases
 - decreases
 - remains constant
 - varies irregularly
- Q109. Which of the following algorithms favour CPU bound processes?
- round-robin
 - first-come-first-served
 - multilevel feedback queues
- 1 only
 - 2 only
 - 1 and 2 only
 - 1 and 3 only
- Q110. Spooling helps because
- it is a more secure method of accessing data
 - print job go more smoothly with less stop and go
 - the computer is released to do other things while still printing
 - None of these
- Q111. When a computer is "swapping", it is
- moving data from the hard drive to the floppy drive
 - moving data from memory to the swap file on the hard drive
 - moving data between registers in memory
 - None of the above
- Q112. An interrupt handler is a
- location in memory that keeps track of recently generated interrupts
 - peripheral device
 - utility program
 - special numeric code that indicates the priority of a request

Directions (113-114) Consider the following set of processes that arrive at time 0, with the length of the CPU-burst time given in milliseconds:

Process	Burst time
P ₁	24
P ₂	3
P ₃	3

- Q113. What is the average waiting time in milliseconds when we use the RR (Round Robin) scheduling algorithm with time quantum of 4 milliseconds
- 5.66
 - 10
 - 15.66
 - 2

- Q114. What is the average turn around time in milliseconds when we use the RR (Round Robin) scheduling algorithm with time quantum of 4 milliseconds?
- 5.66
 - 10
 - 15.66
 - 2
- Q115. The boolean expression $A + BC$ equals
- $(\bar{A} + \bar{B})(A + C)$
 - $(A + B)(A + C)$
 - $(A + B)(\bar{A} + C)$
 - None of these
- Q116. The main advantages of CMOS as compared to TTL are
- lower power consumption and better noise margins
 - lower power consumption with low fanout
 - higher speed operation with low power consumption
 - higher power consumption with high fanout
- Q117. A positive AND gate is also a negative
- NAND gate
 - NOR gate
 - AND gate
 - Or gate
- Q118. The 2's complement representation of $(539)_{10}$ in hexadecimal is
- ABE
 - DBC
 - DE5
 - 9E7
- Q119. A device that works in conjunction with a computer but not as part of it is called
- microprocessor
 - peripheral device
 - hardware
 - memory
- Q120. Which of the following is termed as minimum error code?
- Binary code
 - Gray code
 - Excess 3 code
 - Octal code
- Q121. Which of the following 4 bit combination are invalid in the BCD code?
- 0010
 - 0101
 - 110
 - 1100
- Q122. The number of possible boolean functions that can be defined for n boolean variables over n-valued boolean algebra is
- 2^{2^n}
 - 2^{n^2}
 - n^{2^n}
 - n^{n^n}
- Q123. $(1101101.1011)_2 = ()_{10}$
- 109.6875
 - 109.7865
 - 109.6880
 - 119.08
- Q124. The decimal number + 122 is expressed in 2's complement form as
- 01111010
 - 10000101
 - 01001011
 - 01110010
- Q125. Which statement is true from multiplexer?
- Number of input lines equals to number of outputs lines

- (b) Number of input lines less than number of output lines
 (c) Number of input lines greater than the number of output lines
 (d) Any number of input and output lines
- Q126. In multiplexer, the number of input lines depend on
 (a) The number of output lines
 (b) The number of selector lines
 (c) The number of gates
 (d) None of these
- Q127. The sequential circuit contains
 (a) combinational circuit and memory elements
 (b) only combinational circuit with clock
 (c) gates and clock pulse
 (d) any of these
- Q128. The flip-flop can be constructed using only
 (a) AND gates (b) OR gates
 (c) Not gates (d) Universal gates
- Q129. The equivalent binary code of BCD number 10011000 is.
 (a) 01001100 (b) 1001001
 (c) 0011101 (d) 1100010
- Q130. The Gray code of 10110 is equivalent to
 (a) 01001 (b) 10111
 (c) 11101 (d) 11011
- Q131. In clocked RS flip-flop, the output is remain as previous output until
 (a) $R = 0, S = 1$ (b) $CP = 0$
 (c) $R = 1, S = 0$ (d) $R = 1, S = 1$
- Q132. Karnaugh map is used to
 (a) minimize the number of flip-flops in a digital circuit
 (b) minimize the number of gates only in digital circuit
 (c) minimize the number of gates and fan in of a digital circuit
 (d) design gates
- Q133. Match List-I with List-II and select the correct answer using the codes given below the lists:
- | List-I | List-II |
|-------------------|--------------------------|
| A. Multiplexer | 1. Combinational circuit |
| B. ALU | 2. Sequential circuit |
| C. Register | |
| (a) A-1, B-2, C-1 | (b) A-1, B-2, C-2 |
| (c) A-1, B-1, C-2 | (d) A-2, B-2, C-1 |
- Q134. Which memory unit has lowest access time?
 (a) cache (b) registers
 (c) magnetic disk (d) main memory
- Q135. What does CISC and RISC means?
 (a) common instruction set controller and rare instruction set controller
 (b) complex instruction set controller and reduced instruction set controller
 (c) compiled instruction set source code and recompiled instruction source code
 (d) none of the above
- Q136. A 32-bit address bus allows access to a memory of capacity
 (a) 64 Mb (b) 16 Mb
 (c) 1 Gb (d) 4 Gb
- Q137. Pipelining improves CPU performance due to
 (a) reduced memory access time
 (b) increased clock speed
 (c) the introduction of parallelism
 (d) additional functional units
- Q138. The system bus is made up of
 (a) data bus
 (b) data bus and address bus
 (c) data bus and control bus
 (d) data bus, control bus and address bus
- Q139. Cache memory enhances
 (a) Memory capacity
 (b) Memory access time
 (c) effective memory access time
 (d) secondary storage access time
- Q140. A hardware interrupt is
 (a) also called an internal interrupt
 (b) also called an external interrupt
 (c) an I/O interrupt
 (d) a clock interrupt
- Q141. A compiler is
 (a) A program that places programs into memory and prepares them for execution
 (b) a program that automates the translation of assembly language into machine language
 (c) program that accepts a program written in a high level language and produces an object program
 (d) a program that appears to execute a source program as if it were machine language
- Q142. A loader is
 (a) a program that place programs into memory and prepares them for execution
 (b) a program that automates the translations of assembly language into machine language
 (c) a program that accepts a program written in a high level language and produces an object program
 (d) a program that appears to execute a source program as if it were machine language
- Q143. An optimizing compiler
 (a) is optimized to occupy less space
 (b) is optimized to take less time for execution
 (c) optimized the code
 (d) none of the above
- Q144. A garbage is
 (a) unallocated storage

- (b) allocated storage with all access paths to it destroyed
(c) allocated storage
(d) uninitialized storage
- Q145. A packet-switching network
(a) is free
(b) can reduce the cost of using an information utility
(c) allows communications channels to be shared among more than one user
(d) both (b) and (c) above
- Q146. FDDI is
(a) ring network (b) star network
(c) mesh network (d) bus based network
- Q147. Communication via circuit switching involves three phases which are:
(a) circuit establishment, data transfer, circuit disconnect
(b) circuit establishment, data compression, circuit disconnect
(c) data transfer, data compression, circuit disconnect
(d) circuit establishment, data compression
- Q148. End-to-end connectivity is provided from host-to-host in
(a) Network layer (b) Session layer
(c) Data link layer (d) Transport layer
- Q149. Baseband is
(a) transmission of signals without modulation
(b) a signal all of whose energy is contained within a finite frequency range
(c) the simultaneous transmission of data to a number of stations
(d) all of the above
- Q150. Contentions is
(a) one or more conductors that serve as a common connection for a related group of devices
(b) a continuous frequency capable of being modulate or impressed with a second signal
(c) the condition when two or more stations attempt to use the same channel at the same time
(d) a collection of interconnected functional units that provides a data communications service among stations attached to the network
- Q151. A hub-in network is
(a) a multi port signal repeater or concentrator
(b) a multiplug like device to allow many computers to be connected
(c) the server which serves every node
(d) the central power supply
- Q152. The topology with highest reliability is
(a) bus topology
(b) star topology
(c) ring topology
(d) mesh topology
- Q153. Manchester code is a
(a) non-return to zero code
(b) polar code
(c) both (a) and (b) above
(d) none of these
- Q154. In the Ethernet network, what method is used to access the media?
(a) Demand priority (b) CSMA/CD
(c) Polling (d) CSMA/CA
- Q155. Which layer of OSI model is responsible for compression and decompression of data?
(a) Application (b) Presentation
(c) Session (d) Transport
- Q156. What is flow control?
(a) To find the best rout to a destination
(b) To be able to send a beacon message when congestion occurs
(c) To determine which machine transmits packets on the wire on a given instance
(d) To keep the transmitting device from transmitting no faster than the receiving device can receive
- Q157. At network layer protocol defined by TCP/IP is
(a) TCP
(b) UDP
(c) IP
(d) None of these
- Q158. Packets of the same session may be routed through different paths in
(a) TCP, but not UDP
(b) TCP and UDP
(c) UDP, but not TCP
(d) Neither TCP nor UDP
- Q159. Class _____ has the greatest number of hosts per given network address.
(a) B (b) A (c) D (d) C
- Q160. UML stands for
(a) Uniform modeling language
(b) Unified modeling language
(c) Unit modeling language
(d) Universal modeling language
- Q161. CASE Tool is
(a) Computer Aided Software Engineering
(b) Constructive Aided Software Engineering
(c) Constructive Analysis Software Engineering
(d) Computer Analysis Software Engineering
- Q162. FAST stands for
(a) Functional Application Specification Technique
(b) Fast Application Specification Technique

- (c) Facilitated Application Specification Technique
(d) None of the above
- Q163. Risk management activities are divided into
(a) 3 Categories (b) 2 Categories
(c) 5 Categories (d) 10 Categories
- Q164. Software reliability is
(a) the probability of failure free operation of a program for a specified time in a specified environment
(b) the probability of failure of a program for a specified time in a specified environment
(c) the probability of success of a program for a specified time in any environment
(d) None of the above
- Q165. Software testing is:
(a) the process of demonstrating that errors are not present
(b) the process of establishing confidence that a program does what it is supposed to do
(c) the process of executing a program to show that it is working as per specifications
(d) the process of executing a program with the intent of finding errors
- Q166. Software mistakes during coding are known as:
(a) failures (b) defects
(c) bugs (d) errors
- Q167. Functional testing is known as
(a) Structural testing (b) Behaviour testing
(c) Regression testing (d) None of the above
- Q168. Alpha testing is done by
(a) Customer (b) Tester
(c) Developer (d) All of the above
- Q169. Site of Beta testing is
(a) Software company (b) User's site
(c) Testers (d) All of the above
- Q170. Site of Beta testing is
(a) Software company (b) User's site
(c) Testers (d) All of the above
- Q171. Acceptance testing is done by
(a) Developers (b) Customers
(c) Testers (d) All of the above
- Q172. In which model, fixes are done without detailed analysis of the long-term effects?
(a) Reuse oriented model
(b) Quick-fix model
(c) Taute maintenance model
(d) None of the above
- Q173. `Printf("%C", 100);`
(a) prints 100
(b) prints the ASCII equivalent of 100
(c) prints garbage
(d) none of the above
- Q174. The following program fragment

- `Int a = 4, b = 6 ;
Printf ("% d", a = b) ;`
(a) outputs an error message
(b) prints 0
(c) prints 1
(d) none of the above
- Q175. Pointers are of
(a) integer datatype
(b) character datatype
(c) unsigned integer datatype
(d) none of these
- Q176. Preorder is same as
(a) depth-first order
(b) breadth-first order
(c) topological order
(d) linear order
- Q177. The order of the binary search algorithm is
(a) n (b) n^2
(c) $n \log(n)$ (d) $\log(n)$
- Q178. Which of the following abstract data types can be used to represent a many to many relation?
(a) Tree (b) Stack
(c) Graph (d) Queue
- Q179. Merge sort uses
(a) divide and conquer strategy
(b) backtracking approach
(c) heuristic search
(d) greedy approach
- Q180. Stack is useful for implementing
(a) recursion
(b) breadth first search
(c) depth first search
(d) both (a) and (c)
- Q181. Which of the following algorithm design technique is used in the quick sort algorithm?
(a) Dynamic programming
(b) Backtracking
(c) Divide and conquer
(d) Greedy method
- Q182. Linked lists are not suitable for implementing
(a) insertion sort
(b) binary search
(c) radix sort
(d) polynomial manipulation
- Q183. The post fix form $A + (B * C)$ is
(a) $ABC + *$ (b) $ABC* +$
(c) $AB + C*$ (d) $AB*C +$
- Q184. The post fix form of $(A + B) * C$ is
(a) $AB + C*$ (b) $ABC* +$
(c) $ABC* C +$ (d) $ABC + *$
- Q185. The post fix form of $A \$ B * C - D + E / F (G + H)$ is
(a) $AB \$ C * D - EF / GH + / +$
(b) $AB \$ * C - D + EF / GH / +$
(c) $AB \$ C + D - EF / GH - / +$

- (d) AB & C - D * EF/GH /++
- Q186. The goals of hashing is to produce a search that takes
 (a) O (1) time (b) O (n^2) time
 (c) O (log n) time (d) O (n log n) time
- Q187. $f(n) = 3n^2 + 4n + 2$
 Which will be the exact value for $f(n)$
 (a) $\Theta (n^2)$ (b) $o (n^2)$
 (c) O (n^2) (d) $\Omega (n^2)$
- Q188. Which of the following is not good for linked list?
 (a) Sorting (b) queues
 (c) Binary reach (d) None of these
- Q189. The column of a table is referred to as the
 (a) tuple (b) attribute
 (c) entity (d) degree
- Q190. Choose the incorrect statements.
 1. In network model, data is represented by a collection of records, and relationship among data are represented by links.
 2. In hierarchical model, data and relationships among data are represented by records and links respectively.
 3. In hierarchical model, the records are organized as a collection of arbitrary graphs.
 4. In network model, the records are organized as a collection of trees.
 (a) 1 and 3 only (b) 2 and 3 only
 (c) 3 and 4 only (d) All are correct
- Q191. E-R modeling technique is a
 (a) top-down approach
 (b) bottom-up approach
 (c) left-right approach
 (d) both top-down and bottom-up
- Q192. Redundancy is dangerous as it is a potential threat to data
 (a) integrity
 (b) consistency
 (c) sufficiency
 (d) both (a) and (b) above
- Q193. An attribute of the table matching the primary key of another table, is called as
 (a) foreign key (b) secondary key
 (c) candidate key (d) composite key
- Q194. Which is one function of a database management system (DBMS)?
 (a) Ensuring usability
 (b) Identifying what a user needs
 (c) Deciding what to do with legacy systems
 (d) Preventing errors arising, while enabling multiple, simultaneous users

- Q195. If a system can enforce referential integrity, then this ensures that
 (a) a record can never contain a null value for a foreign key attribute.
 (b) a non-null foreign key attribute always refers to another record
 (c) a foreign key attributes in a record always refers to another record which contains nulls
 (d) a foreign key attribute in a record always refers to another record which does not contain nulls
- Q196. Which of the following is generally a benefit of normalization?
 (a) Performance is improved
 (b) Insertion anomalies are avoided
 (c) Selection anomalies are avoided
 (d) Number of tables is reduced
- Q197. A lack of normalization can lead to which one of the following problems?
 (a) Insertion problems (b) Deadlock
 (c) Lost Updates (d) Deferred updates
- Q198. Which of the following is true of the data manipulation language (DML)?
 (a) It refers to data using physical addresses
 (b) It cannot interface with high-level programming language
 (c) It is used to define the physical characteristics of each record
 (d) None of the above
- Q199. Locking was introduced into databases so that
 (a) Keys can be provided to maintain security.
 (b) All simultaneous transactions are prevented.
 (c) Passwords can be provided to maintain security.
 (d) Consistency can be enforced.
- Q200. Which level of locking provides the highest degree of concurrency flight in a relational database?
 (a) Page
 (b) Table
 (c) Row
 (d) Page, table and row level locking allow the same degree of concurrency

ROLL NO.

Roll number input boxes

Roll number grid (0-9)

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2. Use only blue/ black ball point pen to fill the circles.
3. Use of pencil is strictly prohibited.
4. Circles should be darkened completely and properly.
5. Cutting and erasing on this sheet is not allowed.
6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

WRONG METHODS



CORRECT METHOD



Candidate Sign

Invigilator Sign

Your Institute Name & Logo

OMR ANSWER SHEET

Name

Batch.....

Mobile No..... Test Date...../...../.....

A B C D

Answers 1-50 with A B C D options

A B C D

Answers 51-100 with A B C D options

A B C D

Answers 101-150 with A B C D options

A B C D

Answers 151-200 with A B C D options