J. C. Bose University of Science & Technology YMCA
Faridabad (HR)
Sector 6, Faridabad (Haryana)- 121006 Ph-0129-2310112, 2310158, 2242141, 2242143 (F)
A State Govt. University Estb vide State Legislature Act 21 of 2009:
www.jcboseust.ac.in

Examination Branch

Ref: Exam/Ent-26/..2132

Date: July 02, 2026

NOTICE

Sub: Display of Question papers along with Answer key of the Entrance examinations held on July 02, 2026 for admission to MCA programme

Reference the above cited subject, the Question paper is hereby made available on the website of the University www.jcboseust.ac.in along with the Answer keys for information of all concerned.

The observation/ representation/ objection/ comments, if any, in this regard may be intimated up-to 5:00 pm on July 03, 2026 through e-mail only at entrance@jcboseust.ac.in Please note that no observation/ representation/ objection will be received/ considered thereafter.

02.07.2026

Deputy Registrar (Exams)
for Controller of Exams

Copy to:

- All concerned
- Web Administrator: to upload on the University website

Test Booklet Series

A

Test Booklet

MCA

Test Booklet No.

Name of Applicant ..... Answer Sheet No. .....

Applicant Roll No. : ..... Signature of Applicant : .....

Date of Examination: ..... Signature of the Invigilator(s)

1. .....

Time of Examination : ..... 2. .....

Duration : 1½ Hours] **[Maximum Marks : 90**

IMPORTANT INSTRUCTIONS

(i) The question paper is in the form of Test-Booklet containing **90 (Ninty)** questions. All questions are compulsory. Each question carries four answers marked (A), (B), (C) and (D), out of which only one is correct. Choose the correct option or the most appropriate option.

(ii) On receipt of the Test-Booklet (Question Paper), the candidate should immediately check it and ensure that it contains all the pages, i.e., **90** questions. Discrepancy, if any, should be reported by the candidate to the invigilator immediately after receiving the Test-Booklet.

(iii) A separate Answer-Sheet is provided with the Test-Booklet/Question Paper. On this sheet there are **90** rows containing four circles each. One row pertains to one question.

(iv) The candidate should write his/her Roll number at the places provided on the cover page of the Test-Booklet/Question Paper and on the Answer-Sheet and NOWHERE ELSE.

(v) No second Test-Booklet/Question Paper and Answer-Sheet will be given to a candidate. The candidates are advised to be careful in handling it and writing the answer on the Answer-Sheet.

(vi) For every correct answer of the question **One (1) mark will be awarded.**

(vii) Marking shall be done only on the basis of answers responded on the Answer-Sheet.

(viii) To mark the answer on the Answer-Sheet, candidate should **darken** the appropriate circle in the row of each question with Blue or Black pen.

(ix) For each question only **one** circle should be **darkened** as a mark of the answer adopted by the candidate. If more than one circle for the question are found darkened or with one black circle any other circle carries any mark, the answer will be treated as incorrect.

(x) The candidates should not remove any paper from the Test-Booklet/Question Paper. Attempting to remove any paper shall be liable to be punished for use of unfair means.

(xi) Rough work may be done on the blank space provided in the Test-Booklet/Question Paper only.

(xii) *Mobile phones (even in Switch-off mode) and such other communication/programmable devices are not allowed inside the examination hall.*

(xiii) No candidate shall be permitted to leave the examination hall before the expiry of the time.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL ASKED TO DO SO.

Directions (Qs. 1-5) : Read the passage carefully and answer the questions based on what is stated or implied within the text.

The economic history of the modern world is largely a narrative of structural transformations propelled by technological shifts. While classical economic frameworks postulated that land, labour, and capital were the sole, finite inputs driving aggregate production, the emergence of the digital paradigm has fundamentally shattered these paradigms. In a digitized economy, data has transitioned from a passive byproduct of operational metrics to an autonomous, non-rivalrous factor of production. Unlike traditional physical capital, which exhibits diminishing marginal returns and is depleted upon usage, data yields increasing returns to scale. The marginal cost of replicating and distributing a byte of information is asymptotically close to zero, allowing platforms to exponentially scale operations without a linear increase in overhead.

However, this structural shift introduces systemic market distortions, most notably the phenomenon of "network effects". As a digital platform aggregates data from an expanding user base, its predictive algorithms refine their outputs, thereby enhancing the platform's utility to new and existing consumers. This creates a self-reinforcing feedback loop: more users generate more data, which improves the algorithmic service, which in turn attracts even more users. Consequently, digital markets display a natural propensity toward oligopolistic or monopolistic consolidation. Traditional antitrust frameworks, which evaluate market health primarily through price-centric metrics like consumer surplus and predatory pricing, struggle to regulate these data-driven conglomerates. Because many of these services are offered to consumers for "free"–the actual currency being user data and attention–standard legal indicators of monopoly power remain largely unoptimized for the digital landscape.

1. Which of the following best captures the main theme of the passage?

   (A) A historical analysis of the transition from agricultural economies to early physical industrial setups.

   (B) How traditional physical inputs remain superior to modern algorithmic data in calculating real GDP.

   (C) The unique economic properties of data and the regulatory challenges they pose to traditional antitrust systems.

   (D) A defensive overview of how digital conglomerates maintain pricing equity for contemporary consumers.

2. According to the author, how does "data" fundamentally differ from "traditional physical capital"?
   (A) Data cannot be replicated without incurring immense industrial overhead and labour costs.
   (B) Data displays increasing returns to scale and its marginal replication cost approaches zero.
   (C) Physical capital is entirely non-rivalrous and does not face diminishing marginal returns.
   (D) Data requires a strict, linear increase in physical land and hardware to be distributed effectively.

3. Based on the passage, the self-reinforcing feedback loops driven by "network effects" naturally lead to which market outcome?
   (A) The rapid decentralization of tech platforms into minor local operations.
   (B) A steady decline in user utility as more consumers register on a digital interface.
   (C) Market consolidation toward monopolistic or oligopolistic structures.
   (D) An immediate shift to traditional physical currency exchanges for all basic digital services.

4. Why do classical price-centric antitrust frameworks encounter difficulties when regulating modern digital conglomerates?
   (A) Modern digital monopolies intentionally inflate consumer prices to extreme highs.
   (B) Many digital platforms offer services for "free" while extracting user attention and data as currency.
   (C) Tech conglomerates refuse to refine their predictive algorithms for the open consumer market.
   (D) Antitrust frameworks are explicitly banned from evaluating digital data structures by global trade laws.

5. What can be inferred from the phrase "the marginal cost of replicating and distributing a byte of information is asymptotically close to zero"?
   (A) Distributing data becomes vastly more expensive as a digital company scales its operations.
   (B) Digital businesses face minimal financial friction when copying and sharing informational assets.
   (C) Physical inputs like land are completely irrelevant to creating the initial framework of a database.
   (D) Copying data requires a high amount of initial manual labour but zero computer processing power.

6. Rearrange the following five sentences A, B, C, D, and E in the proper sequence to form a meaningful paragraph.

A. This shift has forced traditional financial institutions to rapidly digitise their core operations to prevent customer churn.

B. Over the past decade, the global banking sector has witnessed an unprecedented surge in fintech disruptions.

C. Consequently, digital-only neobanks are now capturing a significant market share among younger demographics.

D. These agile startups leverage cloud-native architecture to offer seamless, low-fee transaction services.

E. Furthermore, consumers are increasingly demanding hyper-personalised wealth management tools that legacy systems struggle to provide.

(A) B-D-E-A-C (B) B-C-D-E-A

(C) B-D-E-C-A (D) B-D-C-E-A

7. Choose the correct complex preposition to complete the sentence:

The judicial panel dismissed the preliminary appeals _____ the final judgement delivered by the apex court.

(A) subsequent to (B) prior to

(C) in front of (D) away from

8. Identify the part of the sentence that contains a grammatical error:

More than one research scholar (A) / have raised significant objections (B)/ against the newly introduced (C) / evaluation metrics (D).

(A) More than one research scholar (B) have raised significant objections

(C) against the newly introduced (D) evaluation metrics

9. Choose the grammatically correct option to fill in the blank:

The international crisis, together with its economic ramifications, _____ a severe challenge to the developing nations.

(A) pose (B) poses

(C) are posing (D) have posed

10. **Passive voice of the statement** "Who wrote this beautiful poem?" is .....

(A) By whom was poem written?

(B) By whom is poem written?

(C) Who has written?

(D) By whom poem was written?

11. **Indirect Speech** of the below sentence is:

She: "Where are you going for vacations?"

(A) She asked where I was going for vacations

(B) She told me where I am going for vacations

(C) She asked that where I was going for vacations

(D) She inquired where was I going for vacations

12. Choose the grammatically correct alternative to improve the underlined phrase:

Supposing <u>if it rains</u>, what shall we do?

(A) Supposing it rains

(B) Supposing if it will rain

(C) If it would rain

(D) No improvement

13. Most appropriate one-word substitution of **"Indifferent to pain/pleasure"** –

(A) Stoic

(B) Epicurean

(C) Sadist

(D) Masochist

14. Most appropriate meaning of phrase: **"Through thick and thin"** –

(A) All conditions

(B) Dense forests

(C) Weight fluctuation

(D) Narrow path

15. Most appropriate **antonym** for : **AUDACIOUS –**

(A) Timid (B) Bold

(C) Courageous (D) Impudent

16. Most appropriate **antonym** for : **TRANQUIL –**

(A) Calm (B) Serene

(C) Agitated (D) Peaceful

17. Closest **synonym** for : **METICULOUS –**

(A) Careless (B) Thorough

(C) Sluggish (D) Arrogant

18. Closest **synonym** for : **EXCULPATE –**

(A) Accuse (B) Vindicate

(C) Sentence (D) Punish

19. Fill in the blank with most suitable option:

The reliable witness walked _____ the courtroom with absolute confidence.

(A) into (B) in

(C) to (D) inside

20. Fill in the blank with most suitable option:

You must comply _____ the regulations set by the management committee.

(A) with (B) by

(C) to (D) of

21. If in a certain code, 'RUN' is written as 'UXQ', how is 'JUMP' written in that code?

(A) MXPS (B) MXQS

(C) MXPQ (D) MYPS

22. Find the missing number in the series :

3, 6, 18, 72, ?

(A) 144 (B) 216

(C) 288 (D) 360

23. If 'Sky' is called 'Cloud', 'Cloud' is called 'Rain', 'Rain' is called 'Water', and 'Water' is called 'Sea', where will the birds fly?

(A) Sky (B) Cloud

(C) Rain (D) Sea

24. Find the odd pair :

(A) 16 : 4 (B) 30 : 6

(C) 72 : 9 (D) 45 : 5

25. Arrange the words in a meaningful logical order :

1. Seed 2. Fruit 3. Plant 4. Tree 5. Flower

(A) 1, 3, 4, 5, 2 (B) 1, 3, 5, 4, 2

(C) 1, 4, 3, 5, 2 (D) 1, 3, 4, 2, 5

26. Pointing to a man, a woman said, "His mother is the only daughter of my mother." How is the woman related to the man?

(A) Mother (B) Sister

(C) Aunt (D) Daughter

27. M is the father of N who is the son of V. In order to know the relation of M to V, which of the following statements is necessary?

(A) V is the mother of N (B) V is the wife of M

(C) M is the brother of V (D) N is the son of M

28. One morning after sunrise, Vimal was standing facing a pole. The shadow of the pole fell exactly to his right. Which direction was Vimal facing?

(A) East (B) West

(C) South (D) North

29. **Statements :**

All cats are dogs.

All dogs are birds.

Conclusions :

I. All cats are birds.

II. Some birds are cats.

(A) Only I follows (B) Only II follows

(C) Both I and II follow (D) Neither follows

30. If today is Monday, what day will it be after 61 days?

(A) Tuesday (B) Wednesday

(C) Saturday (D) Sunday

31. In a row of students, Ram is 7th from the left and Shyam is 12th from the right. If they interchange their positions, Ram becomes 22nd from the left. How many students are there in the row?

(A) 29 (B) 31

(C) 33 (D) 34

32. Six persons A, B, C, D, E, and F are sitting in a circle facing the center. A is sitting between B and C. E is sitting between D and F. Who is sitting opposite to A?

(A) E (B) F

(C) D (D) Cannot be determined

33. How many times in a day do the hands of a clock coincide?

(A) 20 (B) 21

(C) 22 (D) 24

34. A, B, C, D, and E are five friends. A is shorter than B but taller than E. C is the tallest. D is a little shorter than B and a little taller than A. Who is the shortest?

(A) A (B) E

(C) B (D) D

35. If '3a, 2b, 7c' means 'Truth is Eternal'; '7c, 9a, 8b, 3a' means 'Enmity is not Eternal' and '9a, 4d, 2b, 8b' means 'Truth does not perish'. What does 'Enmity' stand for?

(A) 3a (B) 7c

(C) 8b (D) 9a

36. If 4 + 4 = 20, 5 + 5 = 30, 6 + 6 = 42, then 7 + 7 = ?

(A) 50 (B) 54

(C) 56 (D) 58

37. If all roses are red and some red are beautiful, which conclusion logically follows?

(A) Some roses are beautiful (B) All beautiful things are roses

(C) Some beautiful things are red (D) None of the above

38. Hardworking : Determined :: Happy : ?

(A) Sad (B) Upbeat

(C) Lovely (D) Hilarious

39. Complete the series :

23, 45, 67, ?, 54, 32.

(A) 28 (B) 62

(C) 76 (D) 63

40. How many even numbers are there in the following series of numbers, each of which is immediately preceded by an odd number, but not immediately followed by an even number?

6 2 8 9 1 3 4 5 7 5 8 9 7 9 10 8 1 4 9 2 6

(A) 4 (B) 3

(C) 2 (D) 1

41. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?

(A) 810 (B) 1440

(C) 2880 (D) 50400

42. The diagonal of the floor of a rectangular room is 7.5 m and its shorter side is 4.5 m. What is the area of the floor?

(A) 27 m^2 (B) 36 m^2

(C) 54 m^2 (D) 60 m^2

43. A metallic sheet is of a rectangular shape with dimensions 48 cm × 36 cm. From each one of its corners, a square of 8 cm is cutoff. An open box is made of the remaining sheet. Find the volume of the box.

(A) 5120 cm^3 (B) 4800 cm^3

(C) 6400 cm^3 (D) 7200 cm^3

44. Three unbiased coins are tossed. What is the probability of getting at most two heads?

(A) 3/4 (B) 1/4

(C) 3/8 (D) 7/8

45. A shopkeeper gives a discount of 10% on the marked price of an item but charges a sales tax of 8% on the discounted price. If a customer pays ₹ 3,402 as the final price, what is the marked price?

(A) ₹ 3,400 (B) ₹ 3,500

(C) ₹ 3,600 (D) ₹ 3,800

46. A dishonest dealer professes to sell his goods at cost price but uses a false weight of 920 grams for a kilogram. Find his real gain percentage.

(A) 8% (B) 8.69%

(C) 7.41% (D) 9.15%

47. A and B can complete a work in 15 days and 10 days respectively. They started doing the work together, but after 2 days, B had to leave and A alone completed the remaining work. The whole work was completed in how many days?

(A) 8 days
(B) 10 days
(C) 12 days
(D) 15 days

48. Pipe A can fill a tank in 10 hours and Pipe B can empty the full tank in 15 hours. If both pipes are opened simultaneously in an empty tank, how much time will they take to fill it completely?

(A) 25 hours
(B) 30 hours
(C) 20 hours
(D) 12 hours

49. A person borrowed ₹ 20,000 from a bank at 12% per annum compound interest, compounded half-yearly. What is the total interest paid after exactly 1 year?

(A) ₹ 2,400
(B) ₹ 2,436
(C) ₹ 2,472
(D) ₹ 2,500

50. A swimmer's speed downstream is 11 km/hr and the speed of the stream is 1.5 km/hr. Find the upstream speed of the swimmer.

(A) 8 km/hr
(B) 9.5 km/hr
(C) 7.5 km/hr
(D) 6 km/hr

51. A sum of ₹ 1,250 is divided among A, B, and C so that A gets 2/9 of B's share and C gets 3/4 of A's share. How much money does B get?

(A) ₹ 250
(B) ₹ 750
(C) ₹ 900
(D) ₹ 1,000

52. If $0.75 : x :: 5 : 8$, then the value of x is equal to :

(A) 1.12
(B) 1.20
(C) 1.25
(D) 1.30

53. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. If this ratio is to be 1 : 2, then the quantity of water to be further added is :

(A) 20 litres (B) 30 litres

(C) 40 litres (D) 60 litres

54. The ages of A and B differ by 16 years. If 6 years ago, the elder one be 3 times as old as the younger one, find their present ages.

(A) 14 and 30 years (B) 12 and 28 years

(C) 20 and 36 years (D) 10 and 26 years

55. The sum of the smallest and largest of five consecutive odd numbers with a mean average of 59 is :

(A) 112 (B) 118

(C) 124 (D) 130

56. What is the difference between the place values of the two '5's in the number 754853?

(A) 49,950 (B) 49,500

(C) 45,000 (D) 50,000

57. A positive number when decreased by 20 is equal to 69 times the reciprocal of the number. Find the number.

(A) 23 (B) 27

(C) 31 (D) 33

58. If the number 97215X6 is completely divisible by 11, then what is the value of the missing digit X?

(A) 1 (B) 3

(C) 5 (D) 6

59. Find the sum of all prime numbers lying between 50 and 70.

(A) 220 (B) 251

(C) 255 (D) 262

60. The calendar for the year 2007 will be identical and reusable again for which of the following years?

(A) 2014 (B) 2016

(C) 2018 (D) 2021

61. A clock strikes once at 1 o'clock, twice at 2 o'clock, thrice at 3 o'clock, and so on. How many times will it strike total in 24 hours?

(A) 78 times (B) 136 times

(C) 156 times (D) 196 times

62. A watch loses 5 minutes every hour. If it is set correctly at 12:00 p.m. noon, what time will it display when the actual time is 06:00 p.m. on the same day?

(A) 05:25 p.m. (B) 05:30 p.m.

(C) 05:35 p.m. (D) 05:40 p.m.

63. Solid metallic right circular cone of height 24 cm and radius of base 6 cm is melted and recast into a solid sphere. Find the surface area of the sphere.

(A) 36 π cm^2 (B) 144 π cm^2

(C) 72 π cm^2 (D) 288 π cm^2

64. In a 1000 m race, A beats B by 100 m, and in a 400 m race, B beats C by 40 m. By how many meters will A beat C in a 500 m race?

(A) 75 m (B) 95 m

(C) 100 m (D) 110 m

65. The edge of a cube is increasing at a rate of 7 cm/s. Find the rate of change of area of the cube when $x = 6$ cm.

(A) 578 cm^2/s (B) 498 cm^2/s

(C) 504 cm^2/s (D) 688 cm^2/s

66. The length of a side of a cube is 10 cm; if an error of 0.05 cm is made in measuring the side, then what is the value of relative error in calculating its volume?

(A) 0.0016 (B) 0.014

(C) 0.015 (D) 0.0015

67. If a relation R on the set {1, 2, 3} is defined by R = {(1, 1), (2, 2), (3, 3)}, then R is :

(A) Reflexive only (B) Symmetric only

(C) Transitive only (D) An equivalence relation

68. Let $f : R \rightarrow R$ be defined by $f(x) = x^4$. Then the function f is :

(A) One-one and onto (B) Many-one and onto

(C) One-one but not onto (D) Neither one-one nor onto

69. If $f(x) = 8x^3$ and $g(x) = x^{1/3}$, then the composite function $g(f(x))$ is equal to :

(A) $2x$ (B) $4x$

(C) $8x$ (D) x

70. The domain of the function $\cos^{-1}(x)$ is :

(A) $[0, \pi]$ (B) $[-1, 1]$

(C) $(-\infty, \infty)$ (D) $[0, 1]$

71. The value of $\sin(\pi/3 - \sin^{-1}(-1/2))$ is :

(A) 1/2 (B) 1/3

(C) 1/4 (D) 1

72. A matrix A = $[a_{ij}]_{m \times n}$ is a square matrix if :

(A) $m < n$ (B) $m > n$

(C) $m = n$ (D) None of these

73. For any square matrix A with real number entries, A + A′ is always a :

(A) Diagonal matrix (B) Symmetric matrix

(C) Skew-symmetric matrix (D) Unit matrix

74. If $\begin{vmatrix} x & 2 \\ 18 & x \end{vmatrix} = \begin{vmatrix} 6 & 2 \\ 18 & 6 \end{vmatrix}$, then x is equal to :

(A) 6 (B) ± 6

(C) –6 (D) 0

75. The area of a triangle with vertices (3, 8), (–4, 2), and (5, 1) computed via determinants is :

(A) 61 sq. units (B) 61.2 sq. units

(C) 30 sq. units (D) 15.2 sq. units

76. If $y = \sin(x^2)$, then dy/dx is equal to :

(A) $\cos(x^2)$ (B) $2x \cos(x^2)$

(C) $x^2 \cos(x)$ (D) $-\cos(x^2)$

77. The derivative of $e^{\cos x}$ with respect to x is :

(A) $e^{\cos x}$ (B) $-\sin x \cdot e^{\cos x}$

(C) $\sin x \cdot e^{\cos x}$ (D) $\cos x \cdot e^{\sin x}$

78. If $y = x^x$, then dy/dx is equal to :

(A) $x \cdot x^{x-1}$ (B) $x^x (1 + \log x)$

(C) $x^x \log x$ (D) $1 + \log x$

79. The interval in which $y = x^2e^{-x}$ is increasing is :

(A) $(-\infty, \infty)$ (B) $(-2, 0)$

(C) $(2, \infty)$ (D) $(0, 2)$

80. The value of $\int 1/(1 + x^2)\, dx$ is :

(A) $\sin^{-1} x + C$ (B) $\tan^{-1} x + C$

(C) $\log(1 + x^2) + C$ (D) $\sec^{-1} x + C$

81. The area bounded by the parabola $y^2 = 4ax$ and its latus rectum is :

(A) $8/3\ a^2$ (B) $4/3\ a^2$

(C) $2/3\ a^2$ (D) $16/3\ a^2$

82. The integrating factor of the differential equation $dy/dx + y/x = x^2$ is :

(A) $\log x$ (B) x

(C) e^x (D) $1/x$

83. The position vector of a point (1, 2, –3) is written as :

(A) $i - 2j + 3k$ (B) $i + 2j - 3k$

(C) $-i + 2j + 3k$ (D) $i + 2j + 3k$

84. The scalar triple product $[a, b, c]$ is zero when :

(A) The vectors form a right-handed system

(B) The vectors are coplanar

(C) The vectors are mutually perpendicular

(D) One vector is a unit vector

85. The direction cosines of a line equally inclined to the coordinate axes are :

(A) (1, 1, 1)

(B) $(1/\sqrt{3}, 1/\sqrt{3}, 1/\sqrt{3})$

(C) $(\pm 1/\sqrt{3}, \pm 1/\sqrt{3}, \pm 1/\sqrt{3})$

(D) (0, 0, 0)

86. The vector equation of a line passing through the point (5, 2, −4) and parallel to the vector $3i + 2j - 8k$ is :

(A) $r = (3i + 2j - 8k) + \lambda(5i + 2j - 4k)$

(B) $r = (5i + 2j - 4k) + \lambda(3i + 2j - 8k)$

(C) $r = (5i - 2j + 4k) + \lambda(3i + 2j - 8k)$

(D) None of these

87. Two lines with direction cosines (l_1, m_1, n_1) and (l_2, m_2, n_2) are parallel if :

(A) $l_1l_2 + m_1m_2 + n_1n_2 = 0$

(B) $l_1/l_2 = m_1/m_2 = n_1/n_2$

(C) $l_1 + l_2 = m_1 + m_2 = n_1 + n_2$

(D) None of these

88. The optimal value of an objective function in a linear programming problem occurs at :

(A) Any internal point of the feasible region

(B) The corner points of the feasible region

(C) The origin always

(D) Infinity

89. Two events A and B are said to be mutually exclusive if :

(A) $P(A \cap B) = 1$

(B) $P(A \cap B) = 0$

(C) $P(A \cup B) = 0$

(D) $P(A) = P(B)$

90. The mean of a binomial distribution with parameters n and p is given by :

(A) npq

(B) np

(C) $\sqrt{npq}$

(D) np/q

ROUGH WORK

ROUGH WORK

Answer Key: 7 MCA

Q No	Key
1	c
2	b
3	c
4	b
5	b
6	d
7	a
8	b
9	b
10	a
11	a
12	a
13	a
14	a
15	a
16	c
17	b
18	b
19	a
20	a
21	a
22	d
23	b
24	a
25	a

Q No	Key
26	a
27	b
28	c
29	c
30	c
31	c
32	a
33	c
34	b
35	d
36	c
37	c
38	b
39	c
40	b
41	d
42	a
43	a
44	d
45	b
46	b
47	c
48	b
49	b
50	a

Q No	Key
51	c
52	b
53	d
54	a
55	b
56	a
57	a
58	b
59	b
60	c
61	c
62	b
63	b
64	b
65	c
66	d
67	d
68	a
69	b
70	b
71	d
72	c
73	b
74	b
75	c

Q No	Key
76	b
77	b
78	b
79	d
80	b
81	a
82	b
83	b
84	b
85	c
86	b
87	b
88	b
89	b
90	b