

Roll No.

Question Booklet Number

O. M. R. Serial No.

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399542

B. C. A. (Second Semester) (B. P.)

EXAMINATION, 2022-23

MATHEMATICS-II

Paper Code						
B	C	A	2	0	5	N

Questions Booklet
Series

B

Time : 1:30 Hours]

[Maximum Marks : 75

Instructions to the Examinee :

परीक्षार्थियों के लिए निर्देश :

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(Remaining instructions on the last page)

(शेष निर्देश अन्तिम पृष्ठ पर)

(Only for Rough Work)

1. Let $A = \{1, 2, 3\}$, $B = \{1, 3, 5\}$. If relation R from A to B is given by $R = \{(1, 3), (2, 5), (3, 3)\}$, then R^{-1} is :
 - (A) $\{(3, 3), (3, 1), (5, 2)\}$
 - (B) $\{(1, 3), (2, 5), (3, 3)\}$
 - (C) $\{(3, 1), (5, 2)\}$
 - (D) None of the above
2. If $f(x) = x^2$ and $g(x) = \sin x$, then the value of $g \circ f(x)$ is :
 - (A) $\cos x$
 - (B) $\sin x$
 - (C) $-\sin x^2$
 - (D) $\sin x^2$
3. Let R be a relation on a set A such that $R = R^{-1}$, then R is :
 - (A) Reflexive
 - (B) Symmetric
 - (C) Transitive
 - (D) None of the above
4. If function $f : Q \rightarrow Q$ is defined by the relation $f(x) = 3x - 2$, $x \in Q$, where Q , set of rational numbers, then f is :
 - (A) many-one-onto mapping
 - (B) many-one-into mapping
 - (C) one-one-onto mapping
 - (D) one-one-into mapping
5. Let $f : R \rightarrow R$ be defined by $f(x) = 3x - 2$, then $f^{-1}(x)$ is :
 - (A) $\frac{x+2}{3}$
 - (B) $\frac{x}{3} - 2$
 - (C) $3x - 2$
 - (D) $3x + 2$
6. The relation $\{(a, a), (a, b)\}$ on the set $\{a, b\}$ is :
 - (A) reflexive
 - (B) symmetric
 - (C) transitive
 - (D) None of the above
7. If $R \subset A \times B$ and $S \subset B \times C$ be two relations, then $(S \circ R)^{-1}$:
 - (A) $S^{-1} \circ R^{-1}$
 - (B) $S \circ R$
 - (C) $R \circ S$
 - (D) $R^{-1} \circ S^{-1}$
8. If $f : A \rightarrow B$ is one-one and onto, then $f^{-1} : B \rightarrow A$ is :
 - (A) one-one
 - (B) onto
 - (C) one-one-onto
 - (D) None of the above

9. Let $f: \mathbb{Z} \rightarrow \mathbb{Z}$ (set of integers) be defined

by $f(x) = x^2 + x - 1$, then $f(f(1))$ is :

- (A) 2
- (B) 1
- (C) 3
- (D) -2

10. The relation R in the set of integers given by :

$$R = \{(a, b) : a - b \text{ is divisible by } 3\}$$

is :

- (A) reflexive
- (B) symmetric
- (C) reflexive but not symmetric
- (D) equivalence relation

11. The relation "less than" in the set of natural numbers is :

- (A) only symmetric
- (B) only reflexive
- (C) only transitive
- (D) equivalence relation

12. If $f(x) = x^2 + 1$, $x \in \mathbb{R}$, then the range of $f(x)$ is :

- (A) $[1, \infty)$
- (B) $(-\infty, 1]$
- (C) $(-\infty, 1) \cup (1, \infty)$
- (D) $(-1, 1)$

13. Which laws are satisfied for a lattice ?

- (A) Associative law
- (B) Commutative law
- (C) Absorption law
- (D) All of the above

14. Let $R = \{a, a\}$ be a relation on a set A .

Then R , is :

- (A) symmetric
- (B) anti-symmetric
- (C) Both (A) and (b)
- (D) None of the above

15. Which of the following relations is a partial order as well as an equivalence relation ?

- (A) Equal to ($=$)
- (B) Less than ($<$)
- (C) Greater than ($>$)
- (D) None of the above

16. $a \wedge (b \vee c) = (a \wedge b) \vee c$ is :

- (A) Distributive law
- (B) Associative law
- (C) Commutative law
- (D) None of the above

17. A self-complemented distributive lattice is called :

- (A) Boolean algebra
- (B) Modular lattice
- (C) Complete lattice
- (D) Dual lattice

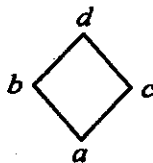
18. Greatest element exists in a poset, will be :

- (A) unique
- (B) not unique
- (C) does not exist
- (D) None of the above

19. If S is a non-empty finite subset of a Poset P , then S has :

- (A) Maximal element
- (B) Minimal element
- (C) Both (A) and (B)
- (D) None of the above

20. Which element is maximal in the following diagram ?



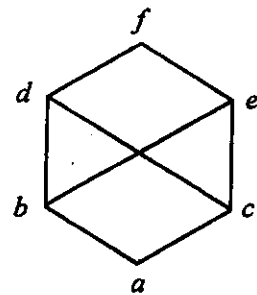
- (A) b
- (B) c
- (C) d
- (D) a

21. The dual of the statement

$$(b \vee c) \wedge (c \vee a) :$$

- (A) $(b \wedge c) \wedge (c \wedge a)$
- (B) $(b \vee c) \vee (c \vee a)$
- (C) $(b \wedge c) \vee (c \wedge a)$
- (D) None of the above

22. The graph given below is an example of :



- (A) Non-lattice
- (B) Semi-lattice
- (C) Lattice
- (D) None of the above

23. The set N of natural numbers under the usual $\leq$ satisfies which of the following properties ?

- (A) Reflexivity
- (B) Anti-symmetry
- (C) Transitivity
- (D) All of the above

24. The set of natural numbers under divisibility forms :

- (A) Poset
- (B) Non-poset
- (C) Both (A) and (B)
- (D) None of the above

25. $a \wedge (b \vee c) = (a \wedge b) \vee (a \wedge c)$ is :

- (A) Distributive law
- (B) Associative law
- (C) Commutative law
- (D) All of the above

26. A Poset in which every pair of element has both a least upper bound and a greatest lower bound is :

- (A) sublattice
- (B) walk
- (C) lattice
- (D) None of the above

27. If $u = x^2 + xy + y^2$ is homogeneous function of degree :

- (A) 3
- (B) 2
- (C) 1
- (D) None of the above

28. If u is homogeneous function of degree 5,

then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$:

- (A) $5u$
- (B) 5
- (C) u
- (D) None of the above

29. If $u = x^3 + y^3$, then $\frac{\partial u}{\partial x}$ at (1, 2) is :

- (A) 3
- (B) 2
- (C) 4
- (D) 5

30. If $u = \frac{x^4 + y^4}{x + y}$ is homogeneous function of degree :

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

31. If $z = xy \cdot f\left(\frac{x}{y}\right)$, then $x \frac{\partial z}{\partial x} + y \frac{\partial z}{\partial y}$:

- (A) 0
- (B) 2
- (C) $2z$
- (D) None of the above

32. If $u = \sin^{-1} \frac{x^2 + y^2}{x + y}$, then the value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$:
- (A) $\sin u$
 (B) $\cos u$
 (C) $\tan u$
 (D) None of the above
33. Euler's theorem is applicable for :
- (A) homogeneous function
 (B) non-homogeneous function
 (C) Both (A) and (B)
 (D) None of the above
34. If u is homogeneous function of degree 3, then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z}$:
- (A) u
 (B) $2u$
 (C) $3u$
 (D) None of the above
35. If $u = \tan^{-1} \frac{x^3 + y^3}{x + y}$, then the value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$:
- (A) $\tan u$
 (B) $\sin u$
 (C) $\sin 2u$
 (D) None of the above
36. The degree of homogeneous function $u = \frac{xy}{x^2 + y^2}$ is :
- (A) 2
 (B) 0
 (C) 1
 (D) 4
37. If $u = \log(x + y)$, then $\frac{\partial u}{\partial x}$ at (2, 1) is :
- (A) $\frac{1}{3}$
 (B) $\frac{1}{2}$
 (C) $\frac{1}{4}$
 (D) 3
38. If $f(x, y, z) = x^2y + xyz + z^3$, find $\frac{\partial f}{\partial x}$ at (1, 1, 1) is :
- (A) 0
 (B) 1
 (C) 3
 (D) None of the above
39. If $u(x, y, z) = xy + yz + zx$, then $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z}$:
- (A) $x + y$
 (B) $x + y + z$
 (C) $2(x + y + z)$
 (D) $3(x + y + z)$

40. $\frac{\sqrt{x} + \sqrt{y}}{\sqrt{x} - \sqrt{y}}$ is a homogeneous function of

degree :

(A) 0

(B) 1

(C) $\frac{1}{2}$

(D) None of the above

41. For function $f(x, y)$ to have maximum value at (a, b) is :

(A) $rt - s^2 > 0$ and $r > 0$

(B) $rt - s^2 < 0$ and $r < 0$

(C) $rt - s^2 < 0$ and $r > 0$

(D) $rt - s^2 > 0$ and $r < 0$

42. If $f(x, y) = x^2 + y^2 + 2$, then f has extreme value at :

(A) (0, 0)

(B) (1, 0)

(C) (0, 1)

(D) None of the above

43. Stationary points of the function $u(x, y)$ are obtained by :

(A) $\frac{\partial u}{\partial x} = 0$

(B) $\frac{\partial u}{\partial x} = 0$ and $\frac{\partial u}{\partial y} = 0$

(C) $\frac{\partial u}{\partial y} = 0$

(D) None of the above

44. If $f(x, y) = x^2 + y^2 + 6x + 12$, then has extreme value at :

(A) (-3, 0)

(B) (0, 0)

(C) (0, -3)

(D) None of the above

45. If a straight line makes angles α , β and γ with the co-ordinate axes, then $\sin^2 \alpha + \sin^2 \beta + \sin^2 \gamma$ is :

(A) 0

(B) 1

(C) 2

(D) None of the above

46. The angle between the planes $2x + y + z = 7$ and $x - y + 2z = 9$ is :

(A) 120°

(B) 60°

(C) 30°

(D) 90°

47. The locus of a point for which $x = 0$ is :

(A) xy -plane

(B) yz -plane

(C) zx -plane

(D) None of the above

48. The direction cosines of a line segment whose projections on the co-ordinate axes are $-6, 3, 2$ are :

- (A) $\frac{-6}{7}, \frac{3}{7}, \frac{2}{7}$
 (B) $\frac{6}{7}, \frac{3}{7}, \frac{2}{7}$
 (C) $\frac{6}{7}, \frac{-3}{7}, \frac{-2}{7}$

(D) None of the above

49. If the lines $\frac{x-2}{3} = \frac{y-3}{4} = \frac{z-4}{5}$ and

$$\frac{x-1}{\lambda} = \frac{y-2}{3} = \frac{z-3}{4} \text{ are coplanar, then } \lambda$$

is equal to :

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

50. If l_1, m_1, n_1 and l_2, m_2, n_2 be the direction cosines of two perpendicular straight lines, then :

- (A) $l_1 l_2 + m_1 m_2 + n_1 n_2 = 0$
 (B) $\frac{l_1}{l_2} + \frac{m_1}{m_2} + \frac{n_1}{n_2} = 0$
 (C) $l_1 l_2 + m_1 m_2 + n_1 n_2 = 1$
 (D) None of the above

51. The shortest distance between the lines

$$\frac{x-1}{0} = \frac{y}{1} = \frac{z}{0} \text{ and } \frac{x-2}{0} = \frac{y}{0} = \frac{z}{1} \text{ is :}$$

- (A) 3
 (B) 2
 (C) 1
 (D) 0

52. The angle between the planes

$$3x + 4y - 5z = 9 \text{ and } 2x + 6y + 6z = 7 \text{ is :}$$

- (A) $\frac{\pi}{6}$
 (B) $\frac{\pi}{4}$
 (C) $\frac{\pi}{2}$

(D) None of the above

53. The radius of a sphere whose centre is $(4, 4, -2)$ and which passes through the origin is :

- (A) 4
 (B) 1
 (C) 5
 (D) 6

54. Radius of the sphere

$$x^2 + y^2 + z^2 + 2ux + 2vy + 2wz + d = 0$$

is :

(A) $\sqrt{u^2 + v^2 + w^2}$

(B) $\sqrt{u^2 + v^2 + w^2 - d}$

(C) $\sqrt{u^2 + v^2 + w^2 + d}$

(D) None of the above

55. Center of sphere

$$x^2 + y^2 + z^2 + 4x - 6y + 4z + 14 = 0$$

is :

(A) $(-1, 1, -1)$

(B) $(-2, 3, -2)$

(C) $(1, -1, 1)$

(D) $(2, 3, 2)$

56. Mid-points of the line segment joining the points $(2, 3, 4)$ and $(8, -3, 8)$ are :

(A) $(5, 0, 6)$

(B) $(5, 6, 0)$

(C) $(6, 5, 0)$

(D) None of the above

57. If l, m, n represent the direction cosines, then $l^2 + m^2 + n^2$ is :

(A) 0

(B) -1

(C) 3

(D) 1

58. Equation of sphere in standard form is :

(A) $xyz = r^2$

(B) $x^2 + y^2 + z^2 = r^2$

(C) $(x-h)^2 + (y-k)^2 = r^2$

(D) None of the above

59. $\int_0^1 \int_0^1 \int_0^1 dx dy dz$ is :

(A) 4

(B) 0

(C) 2

(D) 1

60. $\int_0^\pi \int_0^\pi d\theta d\phi$ is :

(A) 1

(B) 0

(C) π

(D) π^2

61. $\int_a^b \int_c^d dx dy$ is :

(A) $abcd$

(B) $ad - bc$

(C) $\int_c^d \int_a^b dy dx$

(D) None of the above

62. Triple integral $\int_0^a \int_0^b \int_0^c dx dy dz$ represents :
- (A) area
(B) volume
(C) Both area and volume
(D) None of the above
63. The value of $\int_0^1 \int_0^x dx dy$ is :
- (A) $\frac{-3}{2}$
(B) $\frac{3}{2}$
(C) $\frac{1}{2}$
(D) None of the above
64. The value of $\int_{-1}^1 \int_{-1}^1 xy dx dy$ is :
- (A) 1
(B) $\frac{1}{4}$
(C) $-\frac{1}{4}$
(D) 0
65. $\int_0^1 \int_0^1 \int_0^1 e^{x+y+z} dx dy dz =$
- (A) $e - 1$
(B) $(e - 1)^2$
(C) $(e - 1)^3$
(D) 0
66. $\int_0^1 \int_0^2 \int_0^3 dx dy dz$ is :
- (A) 11
(B) 12
(C) 3
(D) 6
67. Double integral $\int_0^a \int_0^a dx dy$ represents :
- (A) volume
(B) area
(C) Both (A) and (B)
(D) None of the above
68. The change of the order of integration $\int_0^1 \int_0^x dx dy =$
- (A) $\int_0^1 \int_y^1 dy dx$
(B) $\int_0^1 \int_0^y dy dx$
(C) Does not exist
(D) None of the above
69. The value of $\int_0^1 \int_0^1 xy dx dy =$
- (A) 0
(B) 1
(C) $\frac{1}{2}$
(D) $\frac{1}{4}$

70. $\int_1^3 \int_1^4 dx dy =$

- (A) 3
- (B) 6
- (C) 12
- (D) 4

71. $\int_0^1 \int_0^1 x^2 dx dy =$

- (A) $\frac{1}{3}$
- (B) $\frac{1}{2}$
- (C) 1
- (D) None of the above

72. $\int_0^1 \int_0^{1-x} xy dx dy =$

- (A) 1
- (B) 0
- (C) $\frac{1}{2}$
- (D) $\frac{1}{24}$

73. The value of integral $\int_0^\pi \int_0^2 r dr d\theta =$

- (A) π
- (B) $\frac{\pi}{2}$
- (C) 2π
- (D) None of the above

74. The area between the parabolas $y^2 = 4x$

and $x^2 = 4y$ is :

- (A) 0
- (B) $\frac{16}{3}$
- (C) $\frac{2}{3}$
- (D) None of the above

75. What is the volume of a cube with

side 2 ?

- (A) 1
- (B) 4
- (C) $\int_0^2 \int_0^2 dx dy$
- (D) $\int_0^2 \int_0^2 \int_0^2 dx dy dz$

76. Curve $y^2 = 4ax$ is/an :

- (A) Straight line
- (B) Hyperbola
- (C) Ellipse
- (D) None of the above

77. Which of the following is a subset of set $\{1, 2, 3, 4\}$?
- (A) $\{1, 2, 1\}$
 (B) $\{1, 2, 3\}$
 (C) $\{1\}$
 (D) All of the mentioned
78. The union of the sets $\{1, 2, 5\}$ and $\{1, 2, 6\}$ is the set :
- (A) $\{1, 2, 6, 1\}$
 (B) $\{1, 2, 5, 6\}$
 (C) $\{1, 5, 6, 3\}$
 (D) None of the above
79. Two sets are called disjoint if their is the empty set.
- (A) Union
 (B) Difference
 (C) Intersection
 (D) Complement
80. The difference of $\{1, 2, 3\}$ and $\{1, 2, 5\}$ is the set :
- (A) $\{1\}$
 (B) $\{5\}$
 (C) $\{3\}$
 (D) $\{2\}$
81. Let the set A is $\{1, 2, 3\}$ and B is $\{2, 3, 4\}$, then $A \cap B$ is :
- (A) $\{1, 2, 3\}$
 (B) $\{2, 3\}$
 (C) $\{2, 4\}$
 (D) None of the above
82. The set is infinite if it has the number of elements :
- (A) zero
 (B) infinite
 (C) one
 (D) finite
83. Which of the following is a finite set ?
- (A) Set of natural numbers
 (B) Set of whole numbers
 (C) Set of even numbers
 (D) Set of even prime numbers
84. If the set A has m -elements, B has n -elements, then $n(A \times B)$ is :
- (A) mn
 (B) $m + n$
 (C) $m + n - 1$
 (D) $m + n + 1$

85. If A and B be any two sets, then

$$(A \cap B)' =$$

- (A) $A' \cap B'$
- (B) $A' \cup B'$
- (C) $A \cap B$
- (D) $A \cup B$

86. The cardinality of the set $A = \{2, 3, 5\}$ is :

- (A) 3
- (B) 5
- (C) 0
- (D) Integers

87. If $A = \{2\}$, $B = \{3\}$, then $A \times B$ is :

- (A) $\{(2, 3)\}$
- (B) $\{2, 3\}$
- (C) $\{2\}$
- (D) $\{3\}$

88. If $n(A) = 20$, $n(B) = 20$ and

$$n(A \cup B) = 30, \text{ then } n(A \cap B) =$$

- (A) 20
- (B) 40
- (C) 10
- (D) 30

89. Empty set is a/an :

- (A) finite set
- (B) infinite set
- (C) Both (A) and (B)
- (D) None of the above

$$90. A - (B \cap C) =$$

- (A) $(A - B) \cup (A - C)$
- (B) $(A - B) \cap (A - C)$
- (C) $(A - B) \cup C$
- (D) $(A - B) \cap C$

91. Which of the following two sets are equal ?

- (A) $A = \{1, 2\}$ and $B = \{1\}$
- (B) $A = \{1, 2, 3\}$ and $B = \{3, 2, 1\}$
- (C) $A = \{1, 2, 4\}$ and $B = \{1, 2, 3\}$
- (D) $A = \{1, 2\}$ and $B = \{1, 2, 3\}$

92. If A, B and C are any three sets, then

$$A \times (B \cap C) \text{ is equal to :}$$

- (A) $(A \times B) \cup (A \times C)$
- (B) $(A \times B) \cap (A \times C)$
- (C) $(A \times B) \cap C$
- (D) None of the above

93. In a group of 60 people, 27 like coffee and 42 like tea. How many like both coffee and tea ?
- (A) 30
(B) 15
(C) 9
(D) None of the above
94. Power set of empty set has exactly subset.
- (A) one
(B) two
(C) zero
(D) three
95. The domain of the function $\{(1, 3), (3, 5), (4, 6)\}$ is :
- (A) 1, 3 and 4
(B) 3, 4, 6 and 2
(C) 1, 3, 4, 5 and 6
(D) None of the above
96. If $R = \{(2, 1), (4, 3), (3, 5)\}$, then range of the function is :
- (A) Range $R = \{2, 3, 4\}$
(B) Range $R = \{1, 3, 5\}$
(C) Range $R = \{1, 2, 3, 4, 5\}$
(D) Range $R = \{2, 3, 4, 5\}$
97. Let R and S two equivalence relations on a set A . Then :
- (A) $R \cup S$ is an equivalence relation on A .
(B) $R - S$ is an equivalence relation on A .
(C) $R \cap S$ is an equivalence relation on A .
(D) None of the above
98. A relation R is said to be an equivalence relation, if :
- (A) it is reflexive.
(B) it is symmetric.
(C) it is transitive.
(D) All of the above
99. $n(A \cup B)$ is equal to :
- (A) $n(A) + n(B) - n(A \cap B)$
(B) $n(A) + n(B)$
(C) $n(A) - n(B)$
(D) $n(A) \cup n(B)$
100. If $f(x) = x^4 - \frac{1}{x^4}$, then $f(x) + f\left(\frac{1}{x}\right)$ is equal to :
- (A) x^4
(B) x^3
(C) $2x^4$
(D) 0

4. Four alternative answers are mentioned for each question as—A, B, C & D in the booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

- Q. 1 (A) ☒ (B) ☐ (C) ☐ (D) ☐
 Q. 2 (A) ☐ (B) ☒ (C) ☐ (D) ☐
 Q. 3 (A) ☐ (B) ☒ (C) ☐ (D) ☐

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.
6. All answers are to be given on OMR Answer sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.
7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.
8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.
9. There will be no negative marking.
10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.
11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.
12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. : On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर—A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छोटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

- प्रश्न 1 (A) ☒ (B) ☐ (C) ☐ (D) ☐
 प्रश्न 2 (A) ☐ (B) ☒ (C) ☐ (D) ☐
 प्रश्न 3 (A) ☐ (B) ☒ (C) ☐ (D) ☐

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उन्हें निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।
8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।
9. निगेटिव मार्किंग नहीं है।
10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।
11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।
12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ मलीमाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरिज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।