Roll No.----------

Paper Code		
3	7	1

(To be filled in the OMR Sheet)

प्रश्नपुस्तिका क्रमांक
Question Booklet No.

O.M.R. Serial No. | | | | | | | | |

प्रश्नपुस्तिका सीरीज
Question Booklet Series
A

BCA (Second Semester) Examination, July-2022

BCA-2005

Mathematics-II

Time : 1:30 Hours **Maximum Marks-100**

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

निर्देश : –

1. परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही– सही भरें, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।
2. **इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमे से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने है। प्रत्येक प्रश्न के चार वैकल्पिक उत्तर प्रश्न के नीचे दिये गये हैं। इन चारों में से केवल एक ही उत्तर सही है। जिस उत्तर को आप सही या सबसे उचित समझते हैं, अपने उत्तर पत्रक (O.M.R. ANSWER SHEET) में उसके अक्षर वाले वृत्त को काले या नीले बाल प्वांइट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा किसी प्रश्न का एक से अधिक उत्तर दिया जाता है, तो उसे गलत उत्तर माना जायेगा।**
3. प्रत्येक प्रश्न के अंक समान हैं। आप के जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
4. सभी उत्तर केवल ओ०एम०आर० उत्तर पत्रक **(O.M.R. ANSWER SHEET)** पर ही दिये जाने हैं। उत्तर पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
5. ओ०एम०आर० उत्तर पत्रक **(O.M.R. ANSWER SHEET)** पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाय।
6. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी ओ०एम०आर० शीट उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।
7. निगेटिव मार्किंग नहीं है।

महत्वपूर्ण : – **प्रश्नपुस्तिका खोलने पर प्रथमतः जॉच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभॉति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।**

1. Which of the following two sets are equal ?

   (A) $A = \{1, 2\}$ and $B = \{1\}$

   (B) $A = \{1, 2, 3\}$ and $B = \{2, 1, 3\}$

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

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

2. Let $n(\cup) = 700$, $n(A) = 200$, $n(B) = 300$ and $n(A \cap B) = 100$, then $n(A \cup B)^c$ is equal to :

   (A) 400

   (B) 600

   (C) 300

   (D) 200

3. If $A = \{2, 4, 5\}$, $B = \{7, 8, 9\}$ then $n(A \times B)$ is equal to :

   (A) 6

   (B) 3

   (C) 0

   (D) 9

4. If A, B and C are any three sets, then $A - (B \cap C)$ is equal to :

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

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

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

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

5. If A and B be any two sets, then $(A \cap B)'$ is equal to :

   (A) $A' \cap B'$

   (B) $A' \cup B'$

   (C) $A \cap B$

   (D) $A \cup B$

6. $n(A \cup B)$ is equal to :

   (A) $n(A) + n(B) - n(A \cap B)$

   (B) $n(A) + n(B)$

   (C) $n(A) \cup n(B)$

   (D) $n(A) + n(B) + n(A \cap B)$

7. If $A = \{1, 3, 5\}$, $B = \{4, 5, 7\}$ and $C = \{1, 3, 4, 11\}$ then $(A \cup B) \cap C =$

(A) $\{1, 3, 4, 7, 9, 11\}$

(B) $\{3, 4, 9, 11\}$

(C) $\{7\}$

(D) None of these

8. If $A \cup B = A \cup C, A \cap B = A \cap C$, then :

(A) $B = C$

(B) $A = B$

(C) $A = C$

(D) None of these

9. $A = \{1, 2, 3\}$ and $B = \{3, 8\}$, then $(A \cup B) \times (A \cap B)$ is :

(A) $\{(3, 1), (3, 2), (3, 3), (3, 8)\}$

(B) $\{(1, 3), (2, 3), (3, 3), (8, 3)\}$

(C) $\{(1, 1), (2, 2), (3, 3), (8, 8)\}$

(D) $\{(8, 3), (8, 2), (8, 1), (8, 8)\}$

10. If $A \subseteq B$, then :

(A) $A - B = A$

(B) $A - B = B$

(C) $A \cup B = A$

(D) $A - B = \phi$

11. If A, B, C are three sets, then $A \cap (B \cup C)$ is equal to :

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

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

(C) $(A \cup B) \cup (A \cup C)$

(D) None of these

12. If A, B, C are subsets of a Universal set S, then $(A - C) \cup (B - C) =$

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

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

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

(D) None of these

13. The number of elements in the power set of a set having n-elements is :

(A) $2^n - 2$

(B) $2^n - 1$

(C) 2^n

(D) 2^{n-1}

14. If the set A has m-elements, B has n-elements, then the number of elements in $A \times B$ is :

(A) mn

(B) $m + n + 1$

(C) $m + n - 1$

(D) None of these

15. Let A and B be two sets such that $n(A) = 0.16, n(B) = 0.14, n(A \cup B) = 0.25,$ Then $n(A \cap B)$ is equal to :

(A) 0.3

(B) 0.5

(C) 0.05

(D) None of these

16. 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

17. The set is infinite if it has the numbers of elements :

(A) Zero

(B) One

(C) Finite

(D) Infinite

18. If A, B, C are sets, which of the following is correct ?

(A) $A \cup (B \cap C) = (A \cup B) \cap C$

(B) $A \cap (B \cup C) = (A \cap B) \cup C$

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

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

19. The Cardinality of the set $A = \{1, 2, 3, 5\}$ is :

(A) 4

(B) 5

(C) Integer

(D) None of these

20. In a group of 60 people, 27 like cold drinks and 42 like hot drinks and each person like at least one of the drinks. How many like both hot drinks and cold drinks ?

(A) 30

(B) 15

(C) 14

(D) 9

21. The subset of the set $\{0\}$ will be :

(A) ϕ

(B) $\phi, \{0\}$

(C) $\{0\}$

(D) None of these

22. The set of Positive integers is :

(A) Infinite

(B) Subset

(C) Finite

(D) Empty

23. 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 these

24. 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) $\{(1, 3), (5, 2)\}$

(D) None of these

25. Let R and S two equivalence relations on a set A. Then :

(A) $R \cup S$ is an equivalence relation on A

(B) $R \cap S$ is an equivalence relation on A

(C) $R - S$ is an equivalence relation on A

(D) None of these

26. If R is on equivalence relation on a set A, then R^{-1} is :

(A) Reflexive only

(B) Symmetric but not transitive

(C) Equivalence

(D) None of these

27. Let R be a Reflexive relation on a set A and I be the identity relation on A. Then :

(A) $R \subset I$

(B) $I \subset R$

(C) $R = I$

(D) None of these

28. Let $A = \{a, b, c\}$ and $B = \{1, 2\}$ consider a relation R defined from set A to set B. Then R is equal to set :

(A) A

(B) B

(C) $A \times B$

(D) $B \times A$

29. If $R \subset A \times B$ and $S \subset B \times C$ be two Relations, then $(SoR)^{-1}$equal to :

(A) S^{-1}o R^{-1}

(B) R^{-1}o S^{-1}

(C) SoR

(D) RoS

30. If $R = \{(2, 1), (4, 3), (4, 5), (3, 5)\}$ 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 $R = \{2, 3, 4, 5\}$

31. The relation $R = \{(1, 1), (2, 2), (3,3), (1, 2), (2, 3), (1, 3)\}$ on set $A = \{1, 2, 3\}$ is :

(A) Reflexive but not symmetric

(B) Reflexive but not transitive

(C) Symmetric and transitive

(D) None of these

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

(A) Only Symmetric

(B) Only reflexive

(C) Only transitive

(D) Equivalence relation

33. Let $f: R \to R$ be defined by $f(x) = 3x - 4$, then $f^{-1}(x)$ is :

(A) $\frac{x+4}{3}$

(B) $\frac{x}{3} - 4$

(C) $3x + 4$

(D) None of these

34. If function f: Q → Q is defined by the relation $f(x) = 3x - 4,\ x \in Q$ where Q, set of rational numbers, then f is :

(A) Many one-onto mapping

(B) One-one into mapping

(C) Many one-into mapping

(D) One-one onto mapping

35. If $f: R \to R$ and $g: R \to R$ are two mappings, where $f(x) = 2x$ and $g(x) = x^2 + 2$ then the value of $f(g(2))$ will be :

(A) 4

(B) 6

(C) 12

(D) 10

36. Let $f: z \to z$ (Set of integers) be defined by $f(x) = x^2 + x - 2$, then $f(f(-2))$ is :

(A) -2

(B) -1

(C) 1

(D) 3

37. If $f(x) = x^2$ and $g(x) = \sin x$, then the value of $gof(x)$ is :

(A) $\cos x$

(B) $\sin x$

(C) $-\sin x^2$

(D) $\sin x^2$

38. If $f(x) = \frac{x+2}{x-3}$, $x \neq 3$, then $f^{-1}(x)$ is equal to :

(A) $\frac{x-1}{3x+2}$

(B) $\frac{3x+2}{x-1}$

(C) $\frac{x-3}{x+2}$

(D) None of these

39. If $f: R \to R$ and $g : R \to R$ are two mappings defined as $f(x) = 2x$ and $g(x) = x^2 + 2$, then the value of $(f + g)(2)$ is :

(A) 8

(B) 10

(C) 12

(D) 24

40. The domain of $\sin^{-1}(4x)$ is :

(A) $[0, 1]$

(B) $\left[-\frac{1}{4}, \frac{1}{4}\right]$

(C) $[-3, 3]$

(D) None of these

41. Let $A = \{-2, -1, 0\}$ and $f(x) = 2x - 3$ then the range of f is :

(A) $\{7, -5, -3\}$

(B) $\{-7, 5, -3\}$

(C) $\{7, 5, 3\}$

(D) $\{-7, -5, -3\}$

42. The domain of the function $f(x) = \sqrt{4 - x^2}$ is all real x such that :

(A) $x < 2$

(B) $x < -2$

(C) $-2 \leq x \leq 2$

(D) $x > -2$

43. Function $f: R \to R, f(x) = x^2$ is :

(A) One-one onto

(B) One-one into

(C) Many one into

(D) Does not exist

44. Let $f: R \to R$ be defined by $f(x) = \frac{1}{x}$ $\forall$ $x \in R$. then f is :

(A) One-one

(B) Onto

(C) Many one

(D) f is not defined

45. Let $R = \{(a, a)\}$ be a relation on a set A. Then R, is :

(A) Symmetric

(B) Anti-Symmetric

(C) Symmetric and Anti-Symmetric

(D) Neither Symmetric nor Anti Symmetric

46. The relation $\leq$ is a partial order, if it is :

(A) Reflexive antisymmetric and transitive

(B) Asymmetric, transitive

(C) Reflexive, symmetric

(D) Areflexive, transitive

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

(A) Equal to (=)

(B) Less than (<)

(C) Greater than (>)

(D) None of these

48. What's the another name for a partially ordered set ?

(A) P set

(B) Set

(C) Partial set

(D) PO set

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

(A) Sub lattice

(B) Lattice

(C) Walk

(D) None of these

50. What are the two binary operation defined for lattice ?

(A) Join, meet

(B) Union, Intersection

(C) Addition, subtraction

(D) None of these

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

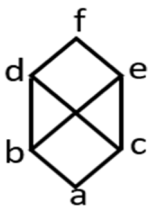
(A) Distributive law

(B) Associative law

(C) Commutative law

(D) None of these

52. The graph given below is an example of :



(A) Non lattice

(B) Semi lattice

(C) Lattice

(D) None of these

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

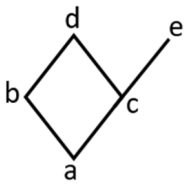
(A) Distributive law

(B) Associative law

(C) Commutative law

(D) None of these

54. Which element is 'minimal' in the following diagram ?



(A) d

(B) b

(C) c

(D) a

55. Let $D_{30} = \{1, 2, 3, 5, 6, 10, 15, 30\}$ and relation "a divides b" be a partial ordering on D_{30}. The lub of 10 and 15 respectively :

(A) 30

(B) 15

(C) 10

(D) 6

56. Let $X = \{2, 3, 6, 12, 24\}$, Let $\leq$ be the partial order defined by $X \leq Y$ if x divides y. Number of edges in the Hasse diagram of $(X, \leq)$ is :

(A) 3

(B) 9

(C) 4

(D) None of the above

57. The absorption law is defined as :

(A) $a \vee (a \vee b) = b$

(B) $a \vee (a \wedge b) = b$

(C) $a \wedge (a \wedge b) = a \vee b$

(D) $a \wedge (a \vee b) = a$

58. The domain of the function $f = \{(1, 3), (3, 5), (2, 6)\}$ is :

(A) 1, 3 and 2

(B) 3, 5, 6 and 2

(C) 1, 3, 2, 5, 6

(D) None of these

59. The dual of the statement $p \wedge [q \wedge (p \vee q) \wedge r]$ is :

(A) $p \vee [q \wedge (p \vee q) \vee r]$

(B) $p \wedge [q \vee (p \wedge q) \wedge r]$

(C) $p \vee [q \vee (p \wedge q) \vee r]$

(D) None of the above

60. If $u = ax^2 + 2hxy + by^2$ then using Euler's theorem find $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} =$

(A) u

(B) 2u

(C) 3u

(D) $n(n-1)$

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

(A) 3

(B) 2

(C) 4

(D) 5

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

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

(B) $\frac{1}{3}$

(C) $\frac{1}{4}$

(D) 3

63. If $f(x, y)$ is a homogeneous function of x and y of degree n, then :

(A) If the sum of powers of x and y in every term is same and it is equal to n

(B) It can be expressed of $x^n f\left(\frac{y}{x}\right)$

(C) It can be expressed of $y^n f\left(\frac{x}{y}\right)$

(D) All of the above

64. $\frac{\sqrt{x}-\sqrt{y}}{\sqrt{x}+\sqrt{y}}$ is a homogenous function of degree :

(A) 0

(B) 1

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

(D) $\frac{3}{2}$

65. A function $f(x, y)$ of two variable x and y is said to be homogeneous function of degree n, then :

(A) $x \frac{\partial f}{\partial x} + y \frac{\partial f}{\partial y} = nf$

(B) $\frac{\partial f}{\partial x} + \frac{\partial f}{\partial y} = -nf$

(C) $x \frac{\partial f}{\partial x} + y \frac{\partial f}{\partial y} = -nf$

(D) None of these

66. If $u = \frac{x^{\frac{1}{3}} + y^{\frac{1}{3}}}{x^{\frac{1}{4}} + y^{\frac{1}{4}}}$ is a homogenous function of degree :

(A) $\frac{1}{4}$

(B) $\frac{1}{3}$

(C) $\frac{1}{12}$

(D) 0

67. If $u = x^2 + 2xy + y^2 + x + y$, then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$ is equal to :

(A) 2u

(B) u

(C) 0

(D) None of these

68. If $u = f\left(\frac{y}{x}\right)$, then :

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

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

(C) $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = 1$

(D) None of these

69. If u is a homogeneous function of degree n, then $x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} =$

(A) nu

(B) $n(n-1)u$

(C) n^2u

(D) None of these

70. If $z = x^2 + y^2 + 3xy$ then, what is $\frac{\partial z}{\partial x}$?

(A) $3y$

(B) $2x$

(C) $2y + 3x$

(D) $2x + 3y$

71. The degree of homogenous function $u = \frac{x^2y^2}{x^2+y^2}$ is :

(A) 4

(B) 0

(C) -4

(D) 2

72. If $f(x, y) = \frac{x+y}{y}$, $x \frac{\partial f}{\partial x} + y \frac{\partial f}{\partial y} =$

(A) 0

(B) f

(C) $2f$

(D) $3f$

73. What is the value of $\frac{\partial^2 z}{\partial x \, \partial y}$ for the $z = 3x^2y + 5y$?

(A) $3xy$

(B) $6x$

(C) $3x + y$

(D) $6xy$

74. If $u = x^2 + 2y^2$, then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} =$

(A) u

(B) 0

(C) $3u$

(D) $2u$

75. What is saddle point ?

(A) Point where function has maximum value

(B) Point where function has minimum value

(C) Point where function neither have maximum value nor minimum value

(D) None of these

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

(A) $(1, 1)$

(B) $(0, 0)$

(C) $(1, 2)$

(D) None of these

77. For function $f(x, y)$ to have minimum 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 $r < 0$

78. 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 $r < 0$

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

(A) $(-3, 0)$

(B) $(0, 3)$

(C) $(0, -3)$

(D) None of these

80. The value of $\int_0^1 \int_0^x dx\, dy$ is :

(A) $-\frac{3}{2}$

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

(C) $\frac{3}{2}$

(D) None of these

81. The value of $\int_0^1 \int_0^2 \int_0^3 dx\, dy\, dz$ is :

(A) 11

(B) 12

(C) 3

(D) 6

82. The change of 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) $\int_0^1 \int_0^1 dy\, dx$

(D) None of these

83. Curve $y^2 = 4x$ is a :

(A) Parabola

(B) Hyperbola

(C) Straight line

(D) Ellipse

84. Double Integral $\int_0^a \int_0^d dx\, dy$ represents :

(A) Volume

(B) Area

(C) Both Volume and Area

(D) None of these

85. Triple Integral is used to calculate :

(A) Area

(B) Volume

(C) (A), (B) both

(D) None of these

86. What is the volume of a cube with side a ?

(A) $\int_0^a \int_0^a \int_0^a dx\, dy\, dz$

(B) a^2

(C) $\int_0^a \int_0^a dx\, dy$

(D) $\frac{a^3}{8}$

87. $\int_0^{\pi} \int_0^{\pi} d\theta\, d\phi$ is :

(A) 1

(B) 0

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

(D) π^2

88. Changing the order of integration the integral $\int_2^3 \int_0^1 f(x,y)\, dx\, dy$ is equal to :

(A) $\int_0^1 \int_2^3 f(x,y)\, dx\, dy$

(B) $\int_0^1 \int_2^3 f(x,y)\, dy\, dx$

(C) $\int_2^3 \int_0^1 f(x,y)\, dy\, dx$

(D) None of these

89. $\int_0^1 \int_0^1 x^2\, dx\, dy =$

(A) 0

(B) 1

(C) 3

(D) $\frac{1}{3}$

90. The value of $\int_0^1 \int_0^1 \int_0^1 e^{x+y+z}\, dx\, dy\, dz$:

(A) $(e-1)$

(B) $(e-1)^2$

(C) $(e-1)^3$

(D) 0

91. The value of $\int_0^2 \int_0^y xy\, dx\, dy$ is :

(A) 0

(B) -1

(C) 2

(D) 1

92. The value of integral $\int_0^{\frac{\pi}{2}} \int_0^2 r\, dr\, d\theta$:

(A) $\frac{\pi}{2}$

(B) π

(C) 1

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

93. The value of $\int_0^2 \int_0^2 \int_0^2 xyz\, dx\, dy\, dz$:

(A) 2

(B) 6

(C) 8

(D) 4

94. The value of $\int_{-1}^1 \int_{-1}^1 xy\, dx\, dy =$

(A) 1

(B) $\frac{1}{4}$

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

(D) 0

95. The value of $\int_1^2 \int_1^3 dx\, dy$

(A) 1

(B) 2

(C) 3

(D) 4

96. The area between the Parabolas $y^2 = 4ax$ and $x^2 = 4ay$ is :

(A) $\frac{2}{3}a^2$

(B) $\frac{14}{3}a^2$

(C) $\frac{16}{3}a^2$

(D) None of these

97. The area enclosed between the straight line $y = x$ and the parabola $y = x^2$ in the xy plane is :

(A) $\frac{1}{6}$

(B) $\frac{1}{4}$

(C) $\frac{1}{3}$

(D) None of these

98. Find the degree of homogeneous function $f(x, y) = x^2 + y^2 + 3xy$:

(A) 0

(B) -2

(C) 1

(D) 2

99. An empty set is also called :

(A) Null set

(B) Void set

(C) Both (A) and (B) are correct

(D) None of the above

100. If $u = x^3 + y^3 + z^3 - 3xyz$, then value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z} =$

(A) 0

(B) u

(C) 3u

(D) 2u

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Rough Work / रफ कार्य

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