K-284\285

Roll No	Paper Code 284 / 285
	(To be filled in the OMR Sheet)
O.M.R. Serial No.	

प्रश्नपुस्तिका क्रमांक Question Booklet No.

प्रश्नपुस्तिका सीरीज Question Booklet Series

A

# BBA-Part-I (Second Semester) Examination, July-2022 F010203T(A+B)

## **Business Mathematics + Advertising Management**

Time: 3:00 Hours Maximum Marks-200

# 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 200 प्रश्न हैं, जो दो खण्डों में विभाजित हैं। प्रथम खण्ड में 100 एवं द्वितीय खण्ड में 100 प्रश्न हैं। इस प्रकार परीक्षार्थीं को प्रत्येक खण्ड से 75–75 प्रश्नों के उत्तर देने हैं। इस प्रकार परीक्षार्थी को कुल 150 प्रश्नों के उत्तर देने हैं। 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 भलीमॉित छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।

#### (Section First) प्रथम खण्ड

#### To be Filled in the OMR Sheet (Paper Code-284) F010203T-A (Business Mathematics)

1.	In a language survey of students it is found that 80 students know English, 60 know
	French, 50 know German, 30 known English and French, 20 know French and
	German, 15 know English and German and 10 students know all the three
	languages. How many students know at least one language?

- (A) 135
- (B) 30
- (C) 10
- (D) 145

2. In a class of 40 students, 12 enrolled for both English and German. 22 enrolled for German. If the students of the class enrolled for at least one of the two subjects, then how many students enrolled for only English and not German?

- (A) 30
- (B) 10
- (C) 18
- (D) None of these

3. The n<sup>th</sup> term of an A.P. is given by  $a_n = 5 + 4n$ . The common difference is:

- (A) 7
- (B) 3
- (C) 4
- (D) None of these

4. If a, b, c are in AP then:

- (A) b = a + c
- (B) 2b = a + c
- (C)  $b^2 = a + c$
- (D) None of these

5. The third term of geometric progression is 9. The product of the first five terms is :

- (A)  $3^3$
- (B)  $3^5$
- (C)  $3^{10}$
- (D) None of these

6.	The first term of a GP is 1. The sum of the third term and fifth term is 90. The
	common ratio of GP is:
	(A) 1
	(B) 2
	(C) 3
	(D) 4
7.	If a=10 and d=10, then first four terms will be:
	(A) 10,30,50,60
	(B) 10,20,30,40
	(C) 10,15,20,25
	(D) 10,18,20,30
8.	Find the general term of the series 4,7,10,13
	(A) 3n - 7
	(B) $3n + 7$
	(C) $3n+1$
	(D) 3n -1
9.	30 <sup>th</sup> term of the A.P: 10, 7, 4,, is:
	(A) 97
	(B) 77
	(C) -77
	(D) -87
10.	The $2^{nd}$ term of an AP is 13 and its $5^{th}$ term is 25. What is the $17^{th}$ term?
	(A) 69
	(B) 73
	(C) 77
	(D) 81

- 11. What is the Sum that Amounts to ₹1680 in 5 years at the rate of 8% per annum simple interest?
  - (A)  $\neq \{100 \times 1680/100 \times (5+8)\}$
  - (B)  $\neq \{100 \times 1680/(100 + 5)x8\}$
  - (C)  $\neq$  {1680x5x8/100}
  - (D)  $\neq \{(100+5)x8x100/1680\}$
- 12. If ₹12000 taken for 2 years at 4% per annum compounded quarterly, then time period and rate is :
  - (A) n = 2, R = 16%
  - (B) n = 4, R = 1%
  - (C) n = 8, R = 1%
  - (D) n = 8, R = 16%
- 13. Which of the following represents 3:4?
  - (A) 50%
  - (B) 35%
  - (C) 25%
  - (D) 75%
- 14. A Sum of money at simple interest of 20% p.a. will take how many years to double itself?
  - (A) 4 years
  - (B) 5 years
  - (C) 8 years
  - (D) 10 years
- 15. Rs. 4000 is invested at 8% p.a. simple interest for 5 years, find the interest :
  - (A) Rs. 800
  - (B) Rs.1600
  - (C) Rs.600
  - (D) Rs.1900

16.	are the ways to represent a group of objects by selecting them in a set
	and forming subsets.
	(A) Permutation
	(B) Combination
	(C) Both (A) and (B)
	(D) None of the above
17.	Permutation relates to the act of arranging all the members of a set into some
	sequence or order:
	(A) True
	(B) False
	(C) Can be true or false
	(D) None of the above
18.	Find the number of permutations if $n = 12$ and $r = 2$ :
	(A) 24
	(B) 60
	(C) 106
	(D) 132
19.	The formula for permutations and combinations are related as: $nCr = nPr/r!$ :
	(A) Yes
	(B) No
	(C) Can't say
	(D) None of the above
20.	Find the number of ways of arranging the letters of the words DANGER, so that no vowel occupies odd place :
	(A) 36
	(B) 48 (C) 144
	(D) 96

21.	in mathematics, are an organized Collection of objects and can be
	represented in set-builder form or roster form.
	(A) List
	(B) Sets
	(C) Relations
	(D) Functions
22.	Usually, sets are represented in curly braces?
	(A) []
	(B) ()
	(C) % %
	(D) {}
23.	A set is usually represented by the capital letter:
	(A) True
	(B) False
	(C) Can be true or false
	(D) None
24.	A set which does not contain any element is called?
	(A) Singleton set
	(B) Empty set
	(C) Finite set
25.	(D) Infinite set IF $A = [5, 6, 7]$ and $B = [7, 8, 9]$ then $A \cup B$ is equal to :
	(A) $[5, 6, 7]$
	(B) [5, 6, 7, 8, 9]
	(C) [7, 8, 9]
	(D) None of the above

26.	Equivalent set represented as: $n(A) = n(B)$ :
	(A) True
	(B) False
	(C) Can be true or false
	(D) Can not say
27.	The number of ways of painting the faces of a cube with six different colors is:
	(A) 1
	(B) 6
	(C) 6!
	(D) None of these
28.	The number of combination of n distinct objects taken r at a time be x is given by:
	$(A)$ $^{n/2}Cr$
	(B) $^{n/2}C_{r/2}$
	$(C)$ ${}^{n}C_{r/2}$
	$(D)$ ${}^{n}C_{r}$
29.	The number of ways in which 8 distinct toys can be distributed among 5 children
	is:
	(A) $5^8$
	(B) $8^5$
	(C) ${}^{8}P_{5}$
	(D) ${}^{5}P_{5}$
30.	Which of the following are well-defined sets?
	1. All the colors in the rainbow
	2. All the honest members in the family
	(A) Statement 1
	(B) Statement 2
	(C) Both (A) and (B)
	(D) None of these

31.	Whi	ch of the following is a finite set?
	1.	The set of days in a week
	2.	$A = \{x : x \in N   x > 1\}$
	3.	$B = \{x : x \text{ is an even prime number}\}\$
	(A)	Statement 1
	(B)	Statement 2
	(C)	
	` /	
22		None of these
32.		Spercent is written as:
	(A)	0.05
	(B)	0.005
	(C)	0.002
	(D)	0.02
33.	The	re are 25 boys and 25 girls in a class. The ratio of the number of boys to the
	total	number of students is:
	(A)	1:2
	(B)	1:3
	(C)	2:3
	(D)	3:2
34.	Whi	ch of the following ratios is equivalent to 2:3?
	(A)	
	(B)	4:9
	(C)	6:9
	(D)	6:12
35.	The	ratio of 25 minutes to 1 hour is:
	(A)	
		5:12
	(C)	12:5
	(D)	5:7

•	
36.	The cost of 1 dozen bananas is ₹30. The cost of 6 oranges is ₹18. The ratio of the
	cost of a banana to the cost of an orange is:
	(A) 3:2
	(B) 2:3
	(C) 6:5
	(D) 5:6
37.	100 students appeared in annual examination. 60 students passed. The ratio of the
	number of students who failed to the total number of students is :
	(A) 5:2
	(B) 2:5
	(C) 2:3
	(D) 3:2
38.	If a: b: $c = 3$ : 4: 7, then the ratio $(a + b + c)$ : c is equal to:
	(A) 2:1
	(B) 14:3
	(C) 7:2
	(D) 1:2
39.	Two numbers x and y are in the ratio 5:7 and their sum is 36: Then x is:
	(A) 12
	(B) 15
	(C) 18
	(D) 19
40.	If A and B are in the ratio 3: 4, and B and C in the ratio 12: 13, then A and C will
	be in the ratio:
	(A) 3:13
	(B) 9:13
	(C) 36:13
	(D) 13:9

- 41. A man spends Rs.1800 monthly on an average for the first four months and Rs.2000 monthly for the next eight months and saves Rs.5600 a year. His average monthly income is:
  - (A) Rs.2000
  - (B) Rs.2200
  - (C) Rs.2400
  - (D) Rs.2600
- 42. The average of four consecutive odd numbers is 24. Find the largest number :
  - (A) 25
  - (B) 27
  - (C) 29
  - (D) 31
- 43. Find the average of all numbers between 6 and 34 which are divisible by 5:
  - (A) 15
  - (B) 20
  - (C) 25
  - (D) 30
- 44. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?
  - (A) 6.25
  - (B) 6.5
  - (C) 6.75
  - (D) 7
- 45. If  $A = \begin{bmatrix} a & b \\ b & a \end{bmatrix}$  and  $A^2 = \begin{bmatrix} \alpha & \beta \\ \beta & \alpha \end{bmatrix}$ , then:
  - (A)  $\alpha = a^2 + b^2$ ,  $\beta = ab$
  - (B)  $\alpha = a^2 + b^2$ ,  $\beta = 2ab$
  - (C)  $\alpha = a^2 + b^2, \beta = a^2 b^2$
  - (D)  $\alpha = 2ab, \beta = a^2 + b^2$

- 46. Find the inverse of the matrix  $A = \begin{bmatrix} 1 & 2 \\ 3 & 7 \end{bmatrix}$  using elementary row transformation:
  - $(A) \begin{bmatrix} 7 & -3 \\ -2 & 1 \end{bmatrix}$
  - (B)  $\begin{bmatrix} 5 & -3 \\ -2 & 1 \end{bmatrix}$
  - (C)  $\begin{bmatrix} 1 & -3 \\ -2 & 1 \end{bmatrix}$
  - (D)  $\begin{bmatrix} 1 & -3 \\ 2 & 1 \end{bmatrix}$
- 47. For any square matrix A,  $AA^{T}$  is a:
  - (A) Unit matrix
  - (B) Symmetric matrix
  - (C) Skew-symmetric matrix
  - (D) Diagonal matrix
- 48. If a matrix A is both symmetric and skew-symmetric, then:
  - (A) A is a diagonal matrix
  - (B) A is a zero matrix
  - (C) A is a scalar matrix
  - (D) A is a square matrix
- 49. The matrix  $\begin{bmatrix} 3 & 0 & 0 \\ 0 & 6 & 0 \\ 0 & 0 & 2 \end{bmatrix}$  is :
  - (A) A skew-symmetric matrix
  - (B) A symmetric matrix
  - (C) A diagonal matrix
  - (D) An upper triangular matrix
- 50. The matrix  $A = \begin{bmatrix} 1 & 1 & -1 \\ 1 & 2 & 0 \\ -1 & 0 & 5 \end{bmatrix}$  is a:
  - (A) Unit matrix
  - (B) Symmetric matrix
  - (C) Diagonal matrix
  - (D) Skew-symmetric matrix

- 51. If  $\begin{bmatrix} x+y & y+z \\ x+z & x+w \end{bmatrix} = \begin{bmatrix} 4 & 5 \\ 5 & 6 \end{bmatrix}$  then the values of x, y, z and w respectively are :
  - (A) 2, 2, 3, 4
  - (B) 2, 3, 1, 2
  - (C) 3, 3, 0, 1
  - (D) None of these
- 52. If A is a matrix of order  $m \times n$  and B is a matrix such that  $AB^T$  and  $B^T$  A are both defined, then the order of matrix B is:
  - (A)  $m \times m$
  - (B)  $n \times n$
  - (C)  $n \times m$
  - (D)  $m \times n$
- 53. If A is an  $m \times n$  matrix such that AB and BA are both defined, the B is a :
  - (A)  $m \times n$  matrix
  - (B)  $n \times m$  matrix
  - (C)  $n \times n$  matrix
  - (D)  $m \times n$  matrix
- 54. If  $A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ -1 & 0 & -1 \end{bmatrix}$  then find  $a_{22}$ :
  - (A) 5
  - (B) 4
  - (C) 6
  - (D) 3
- 55. If the order of the matrix is  $m \times n$ , then how many elements will there be in the matrix?
  - (A) mn
  - (B)  $m^2 n^2$
  - (C) mn<sup>2</sup>
  - (D) 2mn

- 56. What is the order of the matrix  $A = \begin{bmatrix} 3 & 9 \\ -1 & 2 \end{bmatrix}$ ?
  - (A)  $2\times3$
  - (B)  $2\times2$
  - (C) 3×3
  - (D) 4×4
- Consider the matrix  $A = \begin{bmatrix} -1 & 0 & 5 \\ 2 & 0 & -1 \\ 1 & 6 & 4 \end{bmatrix}$  Find the element  $a_{32}$ :
  - (A) 5
  - (B) 6
  - (C) 4
  - (D) 8
- 58. Which of the following property of matrix multiplication is correct?
  - (A) Multiplication is not commutative is general
  - (B) Multiplication is associated
  - (C) Multiplication is distributive over addition
  - (D) All of the mentioned
- 59. The determinant of identity matrix is:
  - (A) 1
  - (B) 0
  - (C) Depends on the matrix
  - (D) None of the above
- 60. If determinant of a matrix A is zero:
  - (A) Then A is a singular matrix
  - (B) A is a non singular matrix
  - (C) Can't say
  - (D) None of the above

- 61. For a matrix A if a matrix B is obtained by changing its rows into columns and columns into rows then the relation between a and b is: (A)  $A^2 = B$ (B)  $A^T = B$ (C) Depends on the matrix (D) None of the above For Matrix  $(A^T)^T$  is equals to : 62. (A) A (B) B (C) Can't say (D) None of the above If A is a lower triangular Matrix then A<sup>T</sup> is: 63. (A) A lower triangular matrix (B) Upper triangular matrix (C) Null matrix (D) None of the above If for a square matrix  $A^2 = A$  then such a matrix is known as: 64. (A) Idempotent matrix (B) Orthogonal matrix
  - (C) Null matrix
  - (D) None of the above
- 65. The matrix which follows the condition m = n is called:
  - (A) Square matrix
  - (B) Rectangular matrix
  - (C) Scalar matrix
  - (D) Diagonal matrix

66.	The Matrix which follows the condition m> n is called as:
	(A) Vertical matrix
	(B) Horizontal matrix
	(C) Diagonal matrix
	(D) Square matrix A
67.	The following is not a type of matrix:
	(A) Scalar matrix
	(B) Diagonal matrix
	(C) Symmetric matrix
	(D) Minor matrix
68.	Which of the following is not a possible ordered pair for a matrix with 6 elements?
	(A) (2,3)
	(B) (3, 2)
	(C) (1, 6)
	(D) (6, 2)
69.	The list of numbers -10, -6, -2, 2, is:
	(A) An A.P. with $d = -16$
	(B) An A.P. with $d = 4$
	(C) An A. P. with $d = -4$
	(D) Not an A. P.
70.	The 10 <sup>th</sup> term of the A.P. 5, 8, 11, 14, is:
	(A) 32
	(B) 35
	(C) 38
	(D) 185

- 71. If "a" is the first term and "r" is the common ratio, then the n<sup>th</sup> term of a G.P. is:

  (A) ar<sup>n</sup>
  - (B)  $ar^{n-1}$
  - (C)  $(ar)^{n-1}$
  - (D) None of these
- 72. Which of the following is an example of a geometric sequence?
  - (A) 1, 2, 3, 4
  - (B) 1, 2, 4, 8
  - (C) 3, 5, 7, 9
  - (D) 9, 20, 21, 28
- 73. If the n<sup>th</sup> term of an arithmetic progression is 3n-4, then the 10<sup>th</sup> term of an A.P. is:
  - (A) 10
  - (B) 12
  - (C) 22
  - (D) 26
- 74. An example of geometric series is :
  - (A) 9, 20, 21, 28
  - (B) 1, 2, 4, 8
  - (C) 1, 2, 3, 4
  - (D) 3, 5, 7, 9
- 75. The first term of a GP is 1. The sum of infinite term is:
  - (A)  $\frac{1}{1-r}$
  - (B)  $\frac{1}{1+r}$
  - (C)  $\frac{1}{1-r^n}$
  - (D)  $\frac{1}{r^{n}-1}$

- 76. If 2/3, k, 5/8 are in AP then the value of k is:
  - (A) 31/24
  - (B) 31/48
  - (C) 24/31
  - (D) 48/31
- 77. An example of A. P. series is:
  - (A) 9, 20, 21, 28
  - (B) 1, 2, 4, 8
  - (C) 1, 2, 3, 14
  - (D) 3, 5, 7, 9
- 78. If the positive numbers a, b, c, d are in A. P. then abc, bcd, adc are in:
  - (A) Not in A.P./G.P./H.P.
  - (B) A.P.
  - (C) G.P.
  - (D) H.P.
- 79. If  $Y = 3x^3 3/2x^2 2x + 3/2$  find dY/dX:
  - (A)  $9x^2 3x 2x + 3/2$
  - (B)  $9x^2 3x 2$
  - (C)  $3x^3 3x^2 2$
  - (D) None of the above
- 80. Find  $d^2Y/dX^2$ :
  - (A) 18x + 3
  - (B) 18x+2
  - (C) 18x-3
  - (D) 18x-2

- Find point of Maxima: 81.
  - (A) +1/3
  - (B) -1/3
  - (C) 2/3
  - (D) None of these
- 82. Find point of Minima:
  - (A) 2/3
  - (B) +1/3
  - (C) -1/3
  - (D) None of these
- 83. Find maximum value of function:
  - (A) 18/7
  - (B) 3/2
  - (C) 7/18
  - (D) None of these
- Find the minimum value of function: 84.
  - (A) 2/3
  - (B) 7/18
  - (C) 19/8
  - (D) None of these
- $dY/dX=x^3+3x^2+1/x$  Integrate to find Y: 85.
  - (A)  $Y = \frac{x^4}{4} + x^3 + \log_e^x$
  - (B)  $Y = x^4 + 3/3x^3 \log_e x$
  - (C)  $Y = x^4/+3/2x^3 + \log_e x$
  - (D) None of these

- 86. The first term of a GP is 1. The sum of n terms when common ratio is r ratio of GP is:
  - (A)  $\frac{(1-r)}{(1-r^n)}$
  - (B)  $\frac{(r-1)}{(r^n-1)}$
  - (C) Both (A) & (B)
  - (D) None of these
- 87. If a is the first term and r is the common ratio then the n<sup>th</sup> term of GP is:
  - (A)  $(ar)^{n-1}$
  - (B) axr<sup>n</sup>
  - (C) a r<sup>n-1</sup>
  - (D) None of these
- 88. If an A.P. is 3, 5, 7, 9 ..... Find 12<sup>th</sup> term of an A.P.:
  - (A) 12
  - (B) 21
  - (C) 22
  - (D) 25
- 89. Sum of an infinite G.P. is:
  - (A)  $a^{n}-1/a$
  - (B)  $a(r^{n}-1)/r-1$
  - (C)  $\frac{a}{1-r}$
  - (D) 1-a<sup>n</sup>/a
- 90. Rate of interest when principal, Time & interest are given can be calculated by :
  - (A) R=SI X T/100 X P
  - (B) P=SI X 100/P X T
  - (C) PX T/SI X 100
  - (D) SI X T/P X 100

- 91. No of combinations that can be made from 'n' items selecting 'r' at a time is equal to:
  - (A) n!/(n-r)!
  - (B) n!/(n-r)!r!
  - (C) n!/r!
  - (D) r!/(n-r)!n!
- 92. If  $Y=2^X$ , then dy/dx is:
  - (A)  $x(2^{x-1})$
  - (B)  $2^{x}/\log 2$
  - (C)  $2^x \log 2$
  - (D) None of these
- 93. Find the derivative of  $m = 13x^4 7x^3 + 25x^2 2x 156$ :
  - (A)  $dm/dx = 52x^3 + 15x^2 + 48x 2$
  - (B)  $dm/dx = 52x^3 + 15x^2 + 36y^2 + 48x + 2x 2$
  - (C)  $dm/dx = 52x^3 + 15x^3 + 36y^2 + 48x + 2x 3$
  - (D)  $dm/dx = 52x^3 21x^2 + 50x 2$
- 94. Find dy/dx where  $Y=5x^{1.5}$ :
  - (A)  $dy/dx = 1.5x^{1.5}$
  - (B)  $dy/dx=7.5x^{0.5}$
  - (C)  $dy/dx = 3/2x^{0.5}$
  - (D) None of these
- 95. Find dy/dx where  $Y=(4+3x^2)/5x^3$ :
  - (A)  $dy/dx = -12x^{-4}/5 3x^{-2}/5$
  - (B)  $dy/dx = +12x^4/5+3x^2/5$
  - (C)  $dy/dx = -5x^3/5 + 3x^2/2$
  - (D) None of these

- 96.  $Y=(x+1)^{1/2}$  Find dy/dx:
  - (A) dy/dx = (x+1)
  - (B)  $dy/dx = \frac{1}{2}(x+1)^{-1/2}$
  - (C)  $dy/dx = \frac{1}{2}(x+1)^{\frac{1}{2}}$
  - (D) None of these
- 97. Twelve point five percent written as a decimal is:
  - (A) 0.125
  - (B) 0.025
  - (C) 0.0125
  - (D) 1.05
- 98. The cost of an article was Rs.75. The cost was first increased by 20% and later on it was reduced by 20%. The present cost of article is:
  - (A) 80
  - (B) 96
  - (C) 90
  - (D) 86
- 99. Power set of empty set has exactly \_\_\_\_\_ subset.
  - (A) One
  - (B) Two
  - (C) Zero
  - (D) Three
- 100. Which of the following two sets are equal?
  - (A)  $A=\{1,2\}$  and  $B=\{1\}$
  - (B)  $A=\{1,2\}$  and  $B=\{1,2,3\}$
  - (C)  $A=\{1,2,3\}$  and  $B=\{2,1,3\}$
  - (D)  $A=\{1,2,4\}$  and  $B=\{1,2,3\}$

# (Section Second) द्वितीय खण्ड

## [To be Filled in the OMR Sheet] (Paper Code-285)

## F010203T-B (Advertising Management)

1.	What is advertising?
	(A) Publicity
	(B) Sales promotion
	(C) Paid promotion
	(D) All of the above
2.	Advertising is any paid form of non-personal presentation of Ideas goods or
	services by an identified sponsor:
	(A) According to American Marketing Association
	(B) According to British Marketing Association
	(C) According to wheeler
	(D) According to Miller
3.	AIDA stands for:
	(A) Accessible, Interest, Desire, Attention
	(B) Attention, Interest, Desire, Action
	(C) Action, Income, Deserves, Attention
	(D) Action, Interest, Desire, Affection
4.	Advertising is affected by which forces?
	(A) Economic
	(B) Social
	(C) Technology
	(D) All of the above

5.	Sponsorship belongs to the promotional tool to:
	(A) Marketing
	(B) Management
	(C) HR
	(D) Finance
6.	Copywriting is related with:
	(A) Price
	(B) Promotion
	(C) Place
	(D) Product
7.	Which one is not a marketing tool?
	(A) Advertising
	(B) Publicity
	(C) Management
	(D) Direct selling
8.	Which one is not correct?
	(A) Advertising is a paid form
	(B) Advertising is a non-personal presentation
	(C) Advertising is a personal presentation
	(D) All of the above

9.	Which one is not a component of communication process?	
	(A)	Sender
	(B)	Receiver
	(C)	Product
	(D)	Feedback
10.	10. Scope of advertising:	
	(A)	To inform
	(B)	To influence
	(C)	To remind
	(D)	All of the above
11.	5 M'	s of advertising includes:
	(A)	Mission
	(B)	Money
	(C)	Message
	(D)	All of the above
12.	SMC	CRFN stands for:
	(A)	Source, machine, channel, reference, feedback, noise
	(B)	Source, message, channel, receiver, feedback, noise
	(C)	Sender, machine, control, reference, feedback, noise
	(D)	Sender, message, control, reference, feedback, noise

13.	Communication barrier is:
	(A) Free flow of communication
	(B) Not a free flow of communication
	(C) Both (A) and (B)
	(D) All of the above
14.	When the whole world is covered for the advertisement then it is called:
	(A) National advertising
	(B) Local advertising
	(C) Global advertising
	(D) Mass advertising
15.	Functions of advertising:
	(A) Communication with consumers
	(B) Persuasion
	(C) Stimulate demand
	(D) All of the above
16.	Importance of advertising are:
	(A) Increase sale
	(B) Steady demand
	(C) Lower cost
	(D) All of the above

17.	Limitations of advertising include:
	(A) Lower cost
	(B) Quick turnover
	(C) Misrepresentation of facts
	(D) Creation of goodwill
18.	Advertising and publicity is:
	(A) Same
	(B) Different
	(C) Partial same
	(D) None of the above
19.	Indian copyright act:
	(A) 1953
	(B) 1957
	(C) 1959
	(D) 1967
20.	The act aims at protecting the best interest of the consumer:
	(A) Consumer protection Act
	(B) Indian copyright Act
	(C) Trademark Act
	(D) Drug Control Act

21.	Mar	keting mix is a combination of:
	(A)	Advertising, sales promotion, personal selling, publicity, public relation
	(B)	Advertising, channel, public, marketing
	(C)	Public, marketing, advertising, management
	(D)	Publicity, management, channel, marketing
22.	Imp	ortance of IMC:
	(A)	Consistent delivery of message
	(B)	Motivation
	(C)	Team Spirit
	(D)	All of the above
23.	Mar	ket segmentation is:
	(A)	Divide of market
	(B)	Undivided of market
	(C)	Promotion of market
	(D)	None of the above
24.	Segn	mentation of market based on location, size, population is called:
	(A)	Demographic segmentation
	(B)	Psychographic segmentation
	(C)	Geographic segmentation

25.	Segmentation of market on the basis of age, gender, income:
	(A) Psychographic segmentation
	(B) Physical segmentation
	(C) Demographic segmentation
	(D) Target segmentation
26.	Which one is an elaborate booklet usually bound with the special cover?
	(A) Leaflet
	(B) Brochure
	(C) Pamphlet
	(D) Hoarding
27.	What are the elite qualities of advertising?
	(A) Consumer view advertised product as standard and legitimate
	(B) Advertising is expressive allowing the dermatization of product
	(C) Advertising can be used to build up a long term image for a product
	(D) Can reach masses of geographically dispersed buyer at low cost exposure
28.	Newspaper advertising strength:
	(A) Audience in appropriate mental frame
	(B) Mass audience coverage
	(C) Flexibility
	(D) All of the above

29.	The medium on which U.S advertisers spend the most money each year is:
	(A) Radio
	(B) Magazines
	(C) Newspaper
	(D) Television
30.	Advertising can be used to sell:
	(A) Product
	(B) Services
	(C) Ideas
	(D) All of the above
31.	Copywriters are similar to:
	(A) Technical editor
	(B) Technical writer
	(C) Creative editor
	(D) Artist
32.	NBC stands for:
	(A) National Business Centre
	(B) National Broadcasting Company
	(C) National Broadcasting Centre
	(D) National Building Code

33.	ABC stands for:	
	(A) Audit Bureau of circulation	
	(B) Advertising Bureau of circulations	
	(C) American Bureau of circulation	
	(D) African Bureau of circulation	
34.	Advertising is done on a:	
	(A) Limited scale	
	(B) Mass scale	
	(C) Corporate level	
	(D) Societal level	
35.	Advertising contributes to:	
	(A) Economic growth of society	
	(B) Power of marketing firms	
	(C) National Integration	
	(D) None of the above	
36.	Brand switching is one of the objectives of:	
	(A) Management	
	(B) Marketing	
	(C) Advertising	
	(D) Publicity	
37.	Which one of the following is not a media vehicle?	
	(A) Brochure	
	(R) Television	

(C) Conference Hall

38.	Which media has the highest value of reach in the Indian context?
	(A) TV
	(B) Newspaper
	(C) Radio
	(D) Magazine
39.	Production is a part of which department?
	(A) Creative
	(B) Media
	(C) Client servicing
	(D) marketing research
40.	Which one is a long tool for promotion?
	(A) Marketing mix
	(B) Advertising
	(C) Management
	(D) None of the above
41.	Intellectual property refers to creation of the:
	(A) Team
	(B) Employees
	(C) Advertising agency
	(D) Mind
42.	The use of short term incentives to encourage the purchase or sale of a product or
	service is called:
	(A) Direct marketing
	(B) Sales promotion
	(C) Personal selling
	(D) Public relation

43.	Which one is the foundation of any advertising or marketing campaign?
	(A) Research
	(B) Target segmentation
	(C) Creative brief
	(D) Media planning
44.	Which one is a sequential model used to explain how advertising works?
	(A) AIRA
	(B) AIDA
	(C) ADD
	(D) SWOT
45.	Any device or word that identify the origin of the product, the manufacturer details
	etc. is known as:
	(A) Trade name
	(B) Brand name
	(C) Trademark
	(D) Identity
46.	Placement of advertisement inside or outside transportation vehicle is known as:
	(A) Aerial advertising
	(B) Outdoor advertising
	(C) Transit advertising
	(D) Classified

47.	Mass marketing is otherwise known as:
	(A) Undifferentiated marketing
	(B) Differentiated marketing
	(C) Concentrated marketing
	(D) Customized marketing
48.	The words used in an advertisement is referred to as:
	(A) Data
	(B) Artwork
	(C) Copy
	(D) Text
49.	Which one is a regular program sponsor by only one advertiser?
	(A) Program sponsorship
	(B) Franchise
	(C) Program editor
	(D) Full program sponsorship
50.	IMC is about:
	(A) Coordinated promotional tools
	(B) Bear for the marketing strategy
	(C) Harmonized message
	(D) A strategically resolute bend of internal and external messages

51. Which of these is a possible disadvantage of IMC? (A) Centralisation (B) Communications synergy (C) Coordinated product development (D) Customer focus 52. Sales promotion is an exercise in information persuasion and influence: (A) According to William J Stanton (B) According to AMA (C) According to Philip Kotler (D) According to wheeler 53. Free distribution of samples is a: (A) Consumer promotion tool (B) Management tool (C) Middleman promotion tool (D) Planning tool Brand is a name, term, sign, symbol or design or a combination of them which is 54. intended to identify the goods or services of one seller or a group of sellers and to differentiate them from those of competitors: (A) According to American Management Association (B) According to Philip Kotler (C) Acceding to Mellerowicz

(D) According to British Management Association

55.	Which one is not a level of Brand?
	(A) Attribute brand
	(B) Emotional brand
	(C) Value brand
	(D) Physical brand
56.	Types of brand can be classified:
	(A) According to ownership
	(B) According to market area
	(C) According to number of products
	(D) All of the above
57.	The term Branding is a:
	(A) Very broad concept
	(B) Narrow concept
	(C) Both (A) and (B)
	(D) None of the above
58.	Which one is not a brand element?
	(A) Brand names
	(B) Logos
	(C) Trademark
	(D) Price

59.	Which one is not a importance of branding?
	(A) Easy to recognise
	(B) Minimum fluctuation in price
	(C) Low cost
	(D) Mental satisfaction
60.	Build brand awareness is a:
	(A) Promotional objective
	(B) Management objective
	(C) Selling objective
	(D) None of the above
61.	DAGMAR model meaning:
	(A) Defining advertising goals for measured advertising results
	(B) Defining attention and goals for measure attractive results
	(C) Advertising goals for measured attractive results
	(D) None of the above
62.	Which one is the first phase in communication function according to DAGMAR
	technique?
	(A) Comprehension
	(B) Awareness
	(C) Conviction
	(D) Action

63.	Objectives of preparing advertising budget:
	(A) To communicate
	(B) To coordinate
	(C) To plan
	(D) All of the above
64.	Which one is not a method of budgeting?
	(A) Sales method
	(B) Judgement method
	(C) Product method
	(D) Quantitative method
65.	Which one is not main parameter in allocating advertising budget?
	(A) Media
	(B) Sales territories
	(C) Total exposure
	(D) Objectives
66.	Which one is not a main characteristics of advertisement copy?
	(A) Attractive
	(B) Size
	(C) Interesting
	(D) Educative

67.	The objectives of preparing and advertising copy can be:
	(A) Direct
	(B) Indirect
	(C) Both (A) and (B)
	(D) None of the above
68.	Which one is not a component of advertising copy?
	(A) Headlines
	(B) Logo
	(C) Channel
	(D) Illustration
69.	Which one is not a type of advertising copy?
	(A) Scientific copy
	(B) Narrative copy
	(C) Product copy
	(D) Personality copy
70.	Stages in copy writing:
	(A) Abstracting
	(B) Synthesizing
	(C) Hypothesizing
	(D) All of the above

71.	Importance of Creativity in advertising are:
	(A) Creativity helps in informing
	(B) Creativity helps in persuading
	(C) Creativity helps in reminding
	(D) All of the above
72.	Creative strategies in advertisement are:
	(A) Attitudinal strategy
	(B) Positive and negative strategy
	(C) Both (A) and (B)
	(D) None of the above
73.	Advertising channels are:
	(A) Newspaper
	(B) Television
	(C) Magazines
	(D) All of the above
74.	Which one is not a form of print media?
	(A) Newspaper
	(B) Television
	(C) Magazine
	(D) Brochure

75.	Static message is a main advantage of:
	(A) Broadcasting media
	(B) Print media
	(C) Outdoor media
	(D) None of the above
76.	Main merit of internet media is:
	(A) Flexibility
	(B) Personal touch
	(C) Speed
	(D) Limited coverage
77.	Objectives of media planning does not includes:
	(A) Create awareness
	(B) To provide best possible solution
	(C) To identify the market target
	(D) Audience Limitations
78.	Components of media strategy does not includes:
	(A) Target audience
	(B) Media selection
	(C) Product development
	(D) Media budgeting

79.	Which one is not a main component of international advertising?
	(A) Strategy
	(B) Organisation
	(C) Product
	(D) Media
80.	Cultural Differences is a:
	(A) Limitation of international advertising
	(B) Advantage of international advertising
	(C) Advantage of national advertising
	(D) None of the above
81.	Marketing communication is used to achieve one of two principle goals the first
	concern the development of brand value. What is the other goal?
	(A) Informing about product
	(B) Increasing sales
	(C) Changing the behaviour of audience
	(D) Channelise communication tools
82.	means doing what the advertiser and the advertisers peers believe is
	morally right in a given situation.
	(A) Social advertising
	(B) Ethical advertising
	(C) Legal advertising
	(D) Physical advertising

83.	The product that reaches maturity and wide scale acceptance enter the	stage
	of advertising.	
	(A) Pioneer	
	(B) Competitive	
	(C) Retentive	
	(D) Relative	
84.	The team develops the message strategy from the copy platform.	
	(A) Creative	
	(B) Editor	
	(C) Accounts planner	
	(D) Producers	
85.	Advertising by a local merchants who sells directly to the customer is?	
	(A) End product advertising	
	(B) National advertising	
	(C) Retail advertising	
	(D) Direct response advertising	
86.	is a combination of marketing functions, including advertising, u	sed to
	sell a product.	
	(A) Sales promotion	
	(B) Marketing mix	
	(C) Public relation	
	(D) New advertising	

Which of the following is not an area of dependability for people who work in an 87. advertising agency? (A) Creativity (B) Printing (C) Buying (D) Research Newspaper advertising strength: 88. (A) Audience in appropriate mental frame (B) Mass audience coverage (C) Flexibility (D) All of the above Core brand values should be predictable via: 89. (A) Consistent messages (B) Conservative messages (C) Contradictory messages (D) Conflicting messages Importance of advertising research: 90. (A) Provides a basis for sound decision (B) Ensure effectiveness (C) Delivers goal explanation (D) All of the above

91.	Whic	h one is not a scope of advertising research?
	(A)	Media exposure
	(B)	Advertisement perception
	(C)	Behavioral response
	(D)	Increased cost
92.	Writt	en communication is a:
	(A)	Verbal communication
	(B)	Nonverbal communication
	(C)	Both (A) and (B)
	(D)	None of the above
93.	Effec	tive communication is a:
	(A)	Non continuous process
	(B)	Continuous process
	(C)	One-way process
	(D)	None of the above
94.	Sales	Promotion is:
	(A)	Consumer based
	(B)	Middleman based
	(C)	Salesman based
	(D)	All of the above
95.	Whic	h one is not correct related Primary principles of ethics in advertising?
	(A)	Honesty
	(B)	Social responsibility
	(C)	Monopoly
	(D)	Safety and health

- 96. Grapevine is:
  - (A) Formal communication
  - (B) Informal communication
  - (C) Both (A) and (B)
  - (D) None of the above
- 97. PLC stands for:
  - (A) Personal life cycle
  - (B) Product life cycle
  - (C) Product life circle
  - (D) Personal life circle
- 98. 4 P's stands for:
  - (A) Product, public, price, peace
  - (B) Public, Price, Packaging, Piece
  - (C) Product, Price, Place, Promotion
  - (D) Product, Peace, Place, Promotion
- 99. The best media to advertise a fertilizer is:
  - (A) Wall painting
  - (B) Hoarding
  - (C) Both (A) and (B)
  - (D) None of the above
- 100. Decision areas in international advertising:
  - (A) Positioning of the Global brand
  - (B) Target group
  - (C) Advertising objectives
  - (D) All of the above

\*\*\*\*\*

## Rough Work / रफ कार्य

## DO NOT OPEN THE QUESTION BOOKLET UNTIL ASKED TO DO SO

- 1. Examinee should enter his / her roll number, subject and Question Booklet Series correctly in the O.M.R. sheet, the examinee will be responsible for the error he / she has made.
- 2. This Question Booklet contains 200 questions, which is divided into 2 sections. Kindly attempt any 75 questions from section 1<sup>st</sup> and any 75 questions from section 2<sup>nd</sup>. In this way examinee has to attempt only 150 questions in total. Every question has 4 options and only one of them is correct. The answer which seems correct to you, darken that option number in your Answer Booklet (O.M.R ANSWER SHEET) completely with black or blue ball point pen. If any examinee will mark more than one answer of a particular question, then the answer will be marked as wrong.
- 3. Every question has same marks. Every question you attempt correctly, marks will be given according to that.
- 4. Every answer should be marked only on Answer Booklet (O.M.R ANSWER SHEET). Answer marked anywhere else other than the determined place will not be considered valid.
- 5. Please read all the instructions carefully before attempting anything on Answer Booklet(O.M.R ANSWER SHEET).
- 6. After completion of examination, please hand over the <u>O.M.R. SHEET</u> to the Examiner before leaving the examination room.
- 7. There is no negative marking.
- **Note:** On opening the question booklet, first check that all the pages of the question booklet are printed properly in case there is an issue please ask the examiner to change the booklet of same series and get another one.