

Roll No.

Question Booklet Number

O. M. R. Serial No.

--	--	--	--	--	--	--	--

596542

**B. B. A. (Second Semester) (NEP)
EXAMINATION, 2022-23**

F010203T-A : BUSINESS MATHEMATICS

F010203T-B : ADVERTISING MANAGEMENT

Paper Code							
F	0	1	0	2	0	3	T

Questions Booklet
Series

B

Time : 1:30 Hours]

[Maximum Marks : 75

Instructions to the Examinee :

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. Booklet is in two Sections : Section-A (1-50) & Section-B (51-100). Candidate should select 37 or 38 questions respectively from both sections. 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.

परीक्षार्थियों के लिए निर्देश :

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। प्रश्न-पुस्तिका दो खण्डों—खण्ड-A (1-50) तथा खण्ड-B (51-100) में है। परीक्षार्थी को प्रत्येक भाग से क्रमशः 37 या 38 प्रश्न करने हैं। 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)

286245

Section-A

(Business Mathematics)

1. Ajay and Raj together have ₹ 1,050. On taking ₹ 150 from Ajay, Ajay will have same amount as what Raj had earlier. Find the ratio of amounts with Ajay and Raj initially :
(A) 3 : 4
(B) 7 : 1
(C) 1 : 3
(D) 4 : 3
2. What will be the fraction of 4% ?
(A) $1/20$
(B) $1/5$
(C) $1/75$
(D) $1/25$
3. The ratio 5 : 20 expressed as percent equals to :
(A) 50 %
(B) 125 %
(C) 25 %
(D) None of above
4. 2.09 can be expressed in terms of percentage as :
(A) 2.09 %
(B) 20.9 %
(C) 209 %
(D) 0.209 %
5. Half of 1 percent written as decimal is :
(A) 5
(B) 0.5
(C) 0.05
(D) 0.005
6. What is 15 percent of 34 ?
(A) 5.10
(B) 4.10
(C) 3.10
(D) 2.10
7. The price of cooking oil has increased by 25%. By what percent should a family reduce the consumption of cooking oil so as not to increase the expenditure in this account ?
(A) 20 %
(B) 25 %
(C) 18 %
(D) 16 %
8. Ramesh's salary was reduced by 10% and then the reduced salary was increased by 10%. What was his ultimate loss ?
(A) 0%
(B) 10%
(C) 1%
(D) 5%

9. 24.5% of ₹ 100 is :
- (A) ₹ 0.25
(B) ₹ 0.50
(C) ₹ 10
(D) ₹ 25
10. Sam borrowed some money from his friend at simple interest of 6% per annum. He returned his friend ₹ 15,600. After how much time did Sam return the money if he borrowed ₹ 12,000 ?
- (A) 8 years
(B) 2.5 years
(C) 5 years
(D) 3.5 years
11. Kabir paid ₹ 9,600 as interest on a loan he took 5 years ago at 16% rate of simple interest. What was the amount he took as loan ?
- (A) ₹ 16,400
(B) ₹ 12,000
(C) ₹ 12,500
(D) ₹ 18,000
12. Suresh for 2 years invested ₹ 500 in SBI. He also invested ₹ 300 in ICICI for 4 years. At the end he received ₹ 220 from both banks as simple interest. What must have been rate of interest ?
- (A) 10 %
(B) 12 %
(C) 11 %
(D) 5.5 %
13. Raman paid ₹ 11,400 as interest after 9 years. He had borrowed some money at rate of 6% for first two years, 9% for next three years and 14% for rest of the period. How much money did he borrow ?
- (A) ₹ 10,000
(B) ₹ 15,000
(C) ₹ 12,000
(D) ₹ 12,500
14. Ram gets ₹ 2,600 for ₹ 2,000 in 5 years at some rate of simple interest. Had he invested in other places where rate of simple interest is 3% more than current rate, how much would have Ram got in same time ?
- (A) ₹ 2,900
(B) ₹ 3,000
(C) ₹ 3,100
(D) ₹ 2,800

15. The order of matrix A is . And the order of B is . Then the order of matrix AB is :

- (A) $m \times n$
- (B) $n \times m$
- (C) $n \times p$
- (D) $m \times p$

16. If A and B are matrices, then which from the following is true ?

- (A) $A + B \neq B + A$
- (B) $(A^t)^t \neq A$
- (C) $AB \neq BA$
- (D) All are true

17. If A is any square matrix, then which of the following is skew-symmetric ?

- (A) $A + A^T$
- (B) $A - A^T$
- (C) AA^T
- (D) $A^T A$

18. Total number of possible matrices of order 3×3 with each entry 2 or 0 is :

- (A) 9
- (B) 27
- (C) 81
- (D) 512

19. If A and B are matrices of the same order, then $(AB' - BA')$ is a :

- (A) skew-symmetric matrix
- (B) null matrix
- (C) symmetric matrix
- (D) unit matrix

20. Two numbers are in the ratio 5 : 7. If the sum of the numbers is 192, then the greater number is :

- (A) 112
- (B) 102
- (C) 116
- (D) 108

21. x varies inversely as y and if $x = 3$ then $y = 4$. If $y = 6$ then the value of x is :

- (A) 3
- (B) 1
- (C) 1.5
- (D) 2

22. A sum will be double itself at a simple interest p.a. in 8 years. The simple interest is :

- (A) 10 %
- (B) 10.5 %
- (C) 12 %
- (D) 12.5 %

23. If $(x - 1)$, $(x + 1)$ and $(2x + 3)$ are in A.P, then the value of x is :
 (A) -2
 (B) 0
 (C) 2
 (D) 4
24. The 8th term of the series 256, 128, 64 is.
 (A) 2
 (B) 4
 (C) 8
 (D) 16
25. If P and Q are two disjoint sets, then $n(P \cap Q)$ is :
 (A) 1
 (B) 0
 (C) 2
 (D) 3
26. If p varies directly as q and if $q = 2$ then $p = 4$. If $p = 2$, the value of q is :
 (A) 1.5
 (B) 2
 (C) 1
 (D) 3
27. The mean proportional between 4 and 16 is :
 (A) 8
 (B) 10
 (C) 9
 (D) ± 8
28. The 6th term of an A.P 2, 5, 8 is :
 (A) 18
 (B) 16
 (C) 17
 (D) 19
29. The 7th term of the series 16, 8, 4, 2 is :
 (A) $1/8$
 (B) $1/4$
 (C) $1/2$
 (D) $1/16$
30. If $A \subset B$ and $n(A) = 18$, $n(B) = 40$, then $n(A \cap B)$ is :
 (A) 18
 (B) 22
 (C) 58
 (D) 40
31. Three numbers are in the ratio 5 : 7 : 12 and the sum of the first and third numbers is greater than the second by 50. The sum of the three numbers is :
 (A) 130
 (B) 120
 (C) 128
 (D) 125

32. In a certain time ₹ 1,400 becomes ₹ 1,848 at 8% p.a. simple interest. When ₹ 2,100 will become ₹ 2,604 at the same time, the rate of interest is :

- (A) 8.2 %
- (B) 7 %
- (C) 10 %
- (D) 6 %

33. The year by which a sum of rupees would be 1.21 times of itself at 10% per annum C.I is :

- (A) 2 years
- (B) 3 years
- (C) 3.5 years
- (D) 2.5 years

34. Which term 128 is of the progression 1, 2, 4, 8

- (A) 8th term
- (B) 7th term
- (C) 9th term
- (D) 10th term

35. If ${}^5C_r - {}^3C_2 = {}^7C_1$, then r is :

- (A) 4
- (B) 3
- (C) 2
- (D) Both (C) and (B)

36. When the number of rows and the number of columns of a matrix are equal, the matrix is :

- (A) Square matrix
- (B) Row matrix
- (C) Column matrix
- (D) None of these

37. If all the elements of a matrix are zeros, then the matrix is a

- (A) Unit matrix
- (B) Square matrix
- (C) Zero matrix
- (D) None of these

38. When all the elements of a matrix are zeros, the matrix is called

- (A) Unit matrix
- (B) Square matrix
- (C) Null matrix
- (D) Row matrix

39. When the number of rows is not equal to the number of columns then the matrix is said to be :

- (A) Unit matrix
- (B) Rectangular matrix
- (C) Null matrix
- (D) Row matrix

40. The ratio of the present age of father to that of son is 7 : 2. After 10 years their ages will be in the ratio of present ages of the father is :
- (A) 35 years
(B) 40 years
(C) 30 years
(D) 25 years
41. ₹ 8,400 is divided among A, B, C and D in such a way that the shares of A and B, B and C, and C and D the ratios of 2 : 3, 4 : 5 and 6 : 7 respectively. The share of A is :
- (A) ₹ 1,280
(B) ₹ 8,400
(C) ₹ 8,210
(D) ₹ 1,320
42. A's salary is 50% more than B's. How much percent is B's salary less than A's ?
- (A) $33\frac{1}{4}\%$
(B) $33\frac{1}{3}\%$
(C) $33\frac{1}{2}\%$
(D) 33%
43. C.I. stands for
- (A) Compound Interest
(B) Simple Interest
(C) Rate Of Interest
(D) No. of years
44. Principal (or) Present Value is denoted by :
- (A) A
(B) n
(C) P
(D) None of the above.
45. Compound Interest is always the Simple Interest.
- (A) Lesser than
(B) Equal to
(C) Greater than
(D) None of the above
46. Simple interest will be the income for
- (A) Lender
(B) Borrower
(C) Both
(D) Neither lender nor borrower

47. The simple interest on ₹ 5,000 at 10% for 3 years is

- (A) 500
- (B) 1,000
- (C) 1,500
- (D) 2,000

48. In calculation of interest 'n' stands for :

- (A) Rate of interest
- (B) Amount
- (C) Principal
- (D) No. of years

49. The formula for finding the compound interest is

- (A) $A = P(1 + ni)$
- (B) $A = P(1 + i)$
- (C) $A = Pnr/100$
- (D) $A = P(1 + i)^n$

50. In a library, the ratio of number of story books to that of non-story books was 4 : 3 and total number of story books was 1248. When some more story books were bought, the ratio became 5 : 3. Find the number of story books bought.

- (A) 312
- (B) 321
- (C) 936
- (D) 1560

Section-B

(Advertising Management)

51. In which type of Advertising a common Ad campaign is carried out for all markets ?

- (A) Global Advertising
- (B) Local Advertising
- (C) Outdoor Advertising
- (D) Covert Advertising

52. Which tool of IMC is used by organisations to contact directly to the target customers to generate a response ?

- (A) Advertising
- (B) Direct Marketing
- (C) Publicity
- (D) Internet Marketing

53. "Advertising is any paid form of non personal presentation and promotion of goods, services and ideas by an identified sponsor ". This definition is given by :

- (A) American Marketing Association
- (B) Mason and Rath
- (C) Sheldon
- (D) Frank Presby

54. Which one of the following is a channel of Verbal Communication ?
- (A) Radio
 - (B) Television
 - (C) Telephone
 - (D) All of the above
55. Which is the last stage that takes place in communication process ?
- (A) Reciever
 - (B) Media
 - (C) Sender
 - (D) Feedback
56. When an industrial enterprise uses a single brand for all its products and for all its segments, it is known as ?
- (A) Individual Brand
 - (B) Family Brand
 - (C) Product Line Brand
 - (D) None of the above
57. Name the brand in which manufacturers uses his own name as brand for its products
- (A) Manufacturer Brand
 - (B) Middlemen Brand
 - (C) Retailers Brand
 - (D) Fighting Brand
58. Name the brand in which a manufacturer does NOT use his own name as brand for its products :
- (A) Manufacturer Brand
 - (B) Middlemen Brand
 - (C) Retailers Brand
 - (D) Fighting Brand
59. Which strategy is used by the manufacturers to promote the sales of their goods through various middlemen in the channel of distribution ?
- (A) Push Strategy
 - (B) Pull Strategy
 - (C) Both (A) and (B)
 - (D) None of the above
60. Which type of advertising is used by Banks, Insurance companies, Financial institutions ?
- (A) Consumer Advertising
 - (B) Classified Advertising
 - (C) Trade Advertising
 - (D) Financial Advertising

61. Advertising contributes to
- (A) Economic growth of society or country
 - (B) National Capital
 - (C) Power of marketing Firms
 - (D) Chaos in the already congested marketplace
62. Advertisements can change your attitude and behaviour. Do you agree with this statement ?
- (A) Yes
 - (B) No
 - (C) That depends upon the individual's relatives
 - (D) That depends upon the situation the marketer/ advertisers is in
63. The unit sale method of advertising budgeting is :
- (A) Involves the allocation of all available funds for advertising purposes
 - (B) Focuses on external market trends
 - (C) Takes the cost of advertising as an individual item and multiplies it by the number of units the advertiser wished to sell
 - (D) None of the above
64. The following is the biggest limitation of advertising :
- (A) It forces the consumer to buy the things he does not need
 - (B) It sells dreams to prospective buyers
 - (C) It tells consumers about the arrival of rival products in the market
 - (D) All of the above
65. By default advertising is done on a
- (A) Limited scale
 - (B) Mass Scale
 - (C) Corporate Level only
 - (D) Societal Level only
66. What kind of promotional material can be given to a photographer's shop ?
- (A) Catalogues of newly introduced camera
 - (B) Roll of Fuji film
 - (C) A newly introduced camera displayed in glass window
 - (D) All of the above

67. Who gave the 5Ms of Advertising ?

- (A) David Macland
- (B) Philip Kotler
- (C) Jay Beer
- (D) Rauck Fishkin

68. Which of the following is NOT included in the 5M's of Advertising ?

- (A) Mission
- (B) Myth
- (C) Money
- (D) Message

69. Which M of Advertising measures how effective an advertisement was to the target audience and for the product ?

- (A) Money
- (B) Message
- (C) Myth
- (D) Measurement

70. Awareness, knowledge, liking, preference, conviction and purchase the tasks in same order are in which model ?

- (A) AIDA model
- (B) Hierarchy of effects model
- (C) Innovation adoption model
- (D) Communications model

71. Under which method of advertising, the budget is prepared in such a way that it is on par with the competitors :

- (A) Affordable Method
- (B) Competitive Parity Method
- (C) Objective task method
- (D) Percentage Sales method

72. Surrogate Advertising refers to :

- (A) Advertising Directly
- (B) Advertising Indirectly
- (C) Both (A) and (B)
- (D) None of the above

73. The primary Purpose of advertising is to :

- (A) Remind
- (B) Inform
- (C) Persuade
- (D) All of the above

74. The number of readers who can recall of seeing advertisement is referred as ?

- (A) Net Recall
- (B) Gross Recall
- (C) Noting Score
- (D) Recall Score

75. Public Service Advertising is also known as :

- (A) Social Service Advertising
- (B) Development Advertising
- (C) Both (A) and (B)
- (D) None of the Above

76. When creativity is referred in the context of advertising, it is

- (A) purposive
- (B) informative
- (C) frequent
- (D) rare

77. Which of the following is more of personal medium of advertisement ?

- (A) internet advertisement
- (B) broadcast media
- (C) direct mail advertising
- (D) print media

78. Which one of the following should NOT be included in Research ?

- (A) Reliability
- (B) Validity
- (C) Trustworthiness
- (D) False Assumptions

79. Which of the following is NOT a method to evaluate Advertisement Effectiveness ?

- (A) Test of consumer Jury
- (B) Non Paired Test
- (C) Netnaps Test
- (D) Recall Test

80. Which test is meant to evaluate the memory and attention value of consumers ?

- (A) Recall Test
- (B) Memory Test
- (C) Readership Test
- (D) None of the above

81. What are barriers to International Advertising ?

- (A) Economic Conditions
- (B) Values
- (C) Customs and Rituals
- (D) All of the above

82. Which of the following is NOT a feature of Advertising ?

- (A) Mass Communication
- (B) Paid Form
- (C) Personal Presentation
- (D) Informative

83. Which type of advertising is basically used in the maturity period as well as the declining phase of product life cycle ?

- (A) Informative Advertising
- (B) Reminder advertising
- (C) Public Service Advertising
- (D) None of the Above

84. "100 Percent discount on Z Product" is an example of :

- (A) Offensive Advertisement
- (B) Deceptive Advertisement
- (C) Alluring Advertisement
- (D) All of the above

85. Under which method of advertising, the consumers are interviewed and a questionnaire is given and asked to give their opinion regarding advertisement :

- (A) Consumer Method
- (B) Readership Survey Method
- (C) Netnaps Method
- (D) Recall Test

86. Under which method of advertising, some people are hired and decorated in the manner that they advertise for the product, wherever they go :
- (A) Indoor Advertising
 - (B) Social Service Advertising
 - (C) Sandwich Board Advertising
 - (D) Print Advertising
87. Which media uses both Audio and Video Signals to make advertisement more effective ?
- (A) Newspaper
 - (B) Radio
 - (C) Television
 - (D) None of the above
88. Which factor does NOT affect the selection of media in Advertising ?
- (A) Market
 - (B) Cost of Media
 - (C) Budget
 - (D) Human Resource
89. In DAGMAR Model, the word G stands for ?
- (A) Grow
 - (B) Goals
 - (C) Gain
 - (D) Gap
90. The first step in the marketing research is to
- (A) Define the problem and research objectives
 - (B) Develop the research plan
 - (C) Preparation of advertisement copy
 - (D) Collect the information
91. Research on distribution policies does not include :
- (A) Inventory control
 - (B) transport cost
 - (C) Storage cost
 - (D) None of the above
92. Data that is freshly gathered for a specific purpose is called
- (A) Behavioral data
 - (B) Primary Data
 - (C) Syndicated data
 - (D) Secondary data

93. Which scale is unique bipolar ordinal scale format that captures attitudes or feelings about a given object ?
- (A) Likert
 - (B) Semantic differential
 - (C) Liking
 - (D) Ordinal
94. Which research is a formalized process of bringing a small group of people together for an interactive spontaneous discussion on one particular topic or concept ?
- (A) Role reversal
 - (B) Projective
 - (C) Role playing
 - (D) Focus group
95. Primary data can be collected by :
- (A) Any investigator or appointed by researcher
 - (B) Researcher himself/herself
 - (C) Both (A) and (B)
 - (D) None of the above
96. In marketing research process, preparation of research report is the step.
- (A) Last
 - (B) Third
 - (C) First
 - (D) None of the above
97. Which of the following is the most critical aspect in marketing research process ?
- (A) Prepare Sources of data
 - (B) Determine Information requirement
 - (C) Prepare Research Design
 - (D) Identify sample size
98. Which of the following types of research is best suited to develop an understanding of why certain market phenomena occur as they do ?
- (A) Casual research
 - (B) Exploratory research
 - (C) Secondary research
 - (D) Descriptive research
99. Which one of the following can affect market research ?
- (A) available resources to conduct research
 - (B) the objectives of the sponsor
 - (C) the decision maker understanding of the problem
 - (D) All of the above
100. Which type of Advertising is used for a specific product in a Particular Market ?
- (A) Global advertising
 - (B) Local Advertising
 - (C) Outdoor Advertising
 - (D) Covert Advertising

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) ☒ (C) (D)

Q.2 (A) (B) ☒ (D)

Q.3 (A) ☒ (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 छँटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

प्रश्न 1 (A) ☒ (C) (D)

प्रश्न 2 (A) (B) ☒ (D)

प्रश्न 3 (A) ☒ (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 भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।