



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A. Y. 2022-23)

SUMMER-2024	
Exam Seat No.:	
Academic Year:2023-2024	Semester: II
Class: FY	Program: MBA
Branch Code: M.B.A.	Pattern:2022
Name of Course: Business Research Methods	Course Code: MBA22202
Max. Marks:60	Duration:2.30 Hrs.

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 3 page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

**Question No. 1 Attempt following Question**

- 1a) Explain various trends in business research (6) CO1

**Question No. 2 Attempt following Question**

- 2a) Explain the difference between Quantitative and Qualitative research design. (6) CO2

**Question No. 3 Attempt following Question**

- 3a) Define below terms (8) CO3

Type I and Type II error

Semantic Differential scales

**OR**

- 3b) Write down advantages and disadvantages of secondary data. (8) CO3

- 3c) Prepare 12 questionnaire questions with options to find out the effectiveness of MBA program. (8) CO3

**OR**

- 3d) Prepare 12 questionnaire questions with options to find out if special road for cycling in Nashik will be useful or not. (8) CO3

**Question No. 4 Attempt following Question**

- 4a) There are 60 students in each of the below department. Civil (C1 to C60), MBA (M1 to M60), ENTIC (E1 to E60) and Chemical (CH1 to CH60). Draw random sample of 10 students using below sampling methods. ( Write down sample points for each method) (8) CO4

- 1) SRSWR
- 2) Systematic Sampling
- 3) Stratified Random Sampling
- 4) Cluster Sampling

**OR**

- 4b) KFC wants to check quality of their product so they send their 25 persons for every centre to collect the data from 5 centres. Centres are Ambad, Villholi, College Road, Cidco and RK. (8) CO4

Manager wants to analyse the data by selecting 15 samples in total. So select the 15 samples from given data by using below method.

- 1) SRSWOR
- 2) Systematic Sampling
- 3) Cluster sampling
- 4) Stratified sampling

- 4c) For the following data, calculate the coefficient of Rank Correlation. (8) CO4

<b>X</b>	80	91	99	71	61	81	70	59
<b>Y</b>	123	135	154	110	105	134	121	106

**OR**

- 4d) Ten students got the following percentage of marks in the BRM and Economics (8) CO4

<b>BRM</b>	8	36	98	25	75	82	92	62	65	35
<b>ECO</b>	84	51	91	60	68	62	86	58	35	49

Find the coefficient of rank correlation.

**Question No. 5 Attempt following Question**

- 5a) Ten students were given intensive coaching for a month in statistics. The scores obtained in tests 1 and 5 are given below. (8) CO5

S R	1	2	3	4	5	6	7	8	9	10
Marks in 1 <sup>st</sup>	50	52	53	60	65	67	48	69	72	80
Marks in 5 <sup>th</sup>	65	55	65	65	60	67	49	82	74	86

Does the score from test 1 to test 5 shows an improvement? Test at 5% level of significance.

**One tailed  $t_{0.95} = 1.833$**

Two tailed  $t_{0.95} = 2.262$

OR

- 5b) Theatre manager started a special scheme to attract the customers. Below data shows the customers occupancy before and after the scheme for 5 theatres. (8) CO5

Theatre		Vikas	Vijay	Mamata	Cinemax	Divya
Marks before training		100	90	120	125	90
Marks after training		140	98	132	130	80

Test whether the scheme is effective or not with 1% level of significance.

- 5c) Solve the following. (8) CO5

Before an increase in excise duty on tea 400 people out of a sample of 500 persons were found to be tea drinkers. After an increase in the duty, 400 were known to be tea drinkers out of 600. Do you think that there has been a significant decrease in the consumption of tea after increase in excise duty? Use 5 % los. Take  $Z_{\alpha} = 1.645$ .

OR

- 5d) In a sample of 300 units of manufactured products, 65 units were found to be defective and in another sample of 200 units there were 35 defectives. Is there significant difference in the proportion of defectives in the samples at 5% level of significance? (8) CO5

$Z_{95\%} = 1.96$

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