

Sample Paper MS, ME & M.Phil Programs Spring-2019

- MS (Management Science)
- MS (Computer Science & Software Engineering)
- MS (Applied Mathematics)
- ME
- M.Phil (Education)

| VERBAL | | | | |
|------------------------------|-----------------------|-----------|-----------------|------------|
| S.No | Core Areas | Questions | Total Questions | Percentage |
| 1 | Synonyms | 05 | 35 | 35% |
| 2 | Antonyms | 05 | | |
| 3 | Use of Preposition | 05 | | |
| 4 | Error Detection | 05 | | |
| 5 | Sentence Structure | 05 | | |
| 6 | Reading Comprehension | 10 | | |
| QUANTITATIVE ANALYSIS | | | | |
| S.No | Core Areas | Questions | Total Questions | Percentage |
| 1 | Averages | 05 | 35 | 35% |
| 2 | Ratio & Proportion | 05 | | |
| 3 | Percentage | 04 | | |
| 4 | Probability | 04 | | |
| 5 | Permutation | 04 | | |
| 6 | Algebra | 04 | | |
| 7 | Equations | 04 | | |
| 8 | Inequalities | 05 | | |
| ANALYTICAL ANALYSIS | | | | |
| S.No | Core Areas | Questions | Total Questions | Percentage |
| 1 | Logical Analysis | 15 | 30 | 30% |
| 2 | Analytical Reasoning | 15 | | |

Total # of Questions: 100

Time Allowed: 120 Minutes

VERBAL (35%)

VOCABULARY: SYNONYMS (5 Questions)

Instructions: Sentences are given below with a word underlined in each. Below each sentence a multiple choice is given. Find out the proper word that is **similar in meaning** to the underlined word in each sentence, and shade its answer letter from multiple choice of words A, B, C or D against the corresponding number in the answer sheet.

1. Love is a passion that inspires one to make marvels.

- A. miracles B. puzzles C. wonders D. mazes

2. Love prepares man to surmount great heights and achieve brilliant success.

- A. overcome B. subdue C. vanquish D. defeat

VOCABULARY: ANTONYMS (5 Questions)

Instructions: Sentences are given below with a word underlined in each. Below each sentence a multiple choice is given. Find out the proper word that is **opposite in meaning** to the underlined word in each sentence, and shade its answer letter from multiple choices of words A, B, C or D against the corresponding number in the answer sheet.

1. The romantic gestures testify that every person is lover of one's own self.

- A. falsify B. justify C. intensify D. rectify

2. You are enamoured of only their physical qualities.

- A. bored B. disgusted C. annoyed D. proud

USE OF PREPOSITIONS: (5 Questions)

Instructions: Sentences are given below. In each sentence, you have to put the correct preposition. Choose **the correct preposition** for every sentence and shade its answer letter A,B,C or D against the corresponding number in the answer sheet.

1. I came.....an old friend of mine in Liberty Market this morning.

- A. around B. by C. across D. with

2. The region is noted.....its quality cattle.

- A. for B. by C. on D. to

ERROR DETECTION (Finding out mistakes) (5 Questions)

Instructions: **Find the errors** in the given sentences set below. Choose the possible word (s) from the given multiple choice (A,B,C or D) in each sentence that renders (makes) the sentence incorrect and shade the correct answer letter A,B,C or D against the corresponding number in the answer sheet.

1. It is a long time since we exchanged letters last.
A B C D
2. I am waiting for you since morning.
A B C D

SENTENCE STRUCTURES: (5 Questions)

Incomplete sentences are given below with the multiple choices of words under each sentence. Pick a word that best completes the sense in each sentence, and write its letter A,B,C or D in the answer sheet.

1. **The police were shocked by the.....of the attack.**
A. ferocity B. fury C. fearfulness D. apprehension
2.you see him, give him this note.
A. When B. Provided C. If D. Where

(1) READING COMPREHENSION (10 Questions)

“I am writing to complain about the poor service provided by your train company. Yesterday I travelled on the 7:20 from Oxford to London Paddington. Not only was the train thirty minutes late leaving Oxford but we were further delayed at Reading and no explanation or apology was offered. Furthermore, the heating broke down and the train got colder and colder. I complained to a member of staff, who was most unhelpful and unsympathetic. As a result of the delays I was two hours late for an important meeting with a valuable client, which caused considerable difficulty and embarrassment. In the circumstances I believe I am entitled to compensation. I look forward to hearing from you very soon.”

Instruction: Read the above passage carefully and answer the following questions:

1. **The writer of the above cited letter is:**
A. a Manager B. a Traveler C. an Advisor D. a Railway Traffic Officer
2. **The train was initially late by:**
A. half an hour B. one and a half hours C. quarter of an hour D. 02 hours

QUANTITATIVE ABILITY (35%)

Instructions: Sentences are given below, for each sentence a multiple choice is given. Find out the choice that will answer the question and shade its answer letter from multiple choice of words A, B, C or D against the corresponding number in the answer sheet.

Average (05 Questions)

1. 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
C.6.75

B.6.5
D.7

2. A family consists of two grandparents, two parents and three grandchildren. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grandchildren is 6 years. What is the average age of the family?

A. $28\frac{4}{7}$ years
C. $32\frac{1}{7}$ years

B. $31\frac{5}{7}$ years
D. None of these

Ratio & Proportion (05 Questions)

1. A and B together have Rs. 1210. If $\frac{4}{15}$ of A's amount is equal to $\frac{2}{5}$ of B's amount, how much amount does B have?

A.Rs. 460
C.Rs. 550

B.Rs. 484
D.Rs. 664

2. Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

A.2 : 5
C.4 : 5

B.3 : 5
D.6 : 7

Percentage (04 Questions)

1 A batsman scored 110 runs which included 3 boundaries and 8 sixes. What percent of his total score did he make by running between the wickets?

A.45%
C. $54\frac{6}{11}$ %

B. $45\frac{5}{11}$ %
D.55%

2 Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:

A. 39, 30

B. 41, 32

C. 42, 33

D. 43, 34

Probability (04 Questions)

1. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

A. $\frac{1}{2}$

B. $\frac{2}{5}$

C. $\frac{8}{15}$

D. $\frac{9}{20}$

2. A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?

A. $\frac{10}{21}$

B. $\frac{11}{21}$

C. $\frac{2}{7}$

D. $\frac{5}{7}$

Permutation (04 Questions)

1. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

A. 564

B. 645

C. 735

D. 756

2. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?

A. 360

B. 480

C. 720

D. 5040

Algebra (04 Questions)

1. Convert the following SOP expression to an equivalent POS expression.

$$ABC + A\bar{B}\bar{C} + A\bar{B}C + AB\bar{C} + \bar{A}\bar{B}C$$

A. $(\bar{A} + \bar{B} + \bar{C})(A + B + \bar{C})(\bar{A} + B + C)$

B. $(A + B + C)(A + \bar{B} + C)(A + \bar{B} + \bar{C})$

C. $(\bar{A} + \bar{B} + \bar{C})(A + \bar{B} + C)(A + \bar{B} + C)$

D. $(A + B + C)(\bar{A} + B + \bar{C})(A + \bar{B} + C)$

2. Determine the values of A, B, C, and D that make the sum term $\bar{A} + B + \bar{C} + D$ equal to zero.

A. $A = 1, B = 0, C = 0, D = 0$

B. $A = 1, B = 0, C = 1, D = 0$

C. $A = 0, B = 1, C = 0, D = 0$

D. $A = 1, B = 0, C = 1, D = 1$

Equations (04 Questions)

1. The system of linear equations $4x + 2y = 1$, $2x + y = 6$ has

A. a unique solution

B. no solution

C. an infinite number of solutions

D. exactly two distinct solutions

