INSTRUCTION:

Answer ALL questions.

Question 1 (CLO3, C3)

How many ways of 9 different vase can be arranged in a row at Syukri's garden?

[2 marks]

Question 2 (CLO3, C3)

How many ways can we select 3 consonants and then 3 vowels from the alphabets that can be repeated.

[2 marks]

Question 3 (CLO3, C3)

Find the number of arrangements for the word RESTAURANT.

[2 marks]

Question 4 (CLO3, C3)

If a three digit number is formed from the digits 1,2,3,4,5,6 and 7 without repetitions, calculate

(a) How many of these three digit numbers will have a number value between 100 and 500.

(b) How many of these digit number will be an even number and the first digit is odd number.

[4 marks]

Question 5 (CLO3, C3)

The diagram below shows 6 letters and 4 digits.

Z W Y T S R 9 8 7 6

A code is formes by using the letters and digits. Each code must consist of 4 letters, followed by 3 digits. How many different codes can be formed if repetition is not allowed?

[3 marks]

Question 6 (CLO3, C3)

How many ways can 4 girls and 5 boys be arranged in a row so that all the 4 girls are together.

[3 marks]

Question 7 (CLO3, C3)

A class contains 12 students with 5 boys and 7 girls. Find the number of ways to:

(a) Select 5 committee members from the students with no restriction.
(b) Select 6 committee members that comprises 2 boys and 4 girls.

[3 marks]

Question 8 (CLO3, C3)

A question paper consists of 12 questions divided into two parts A and B, containing 5 and 7 questions respectively. A student is required to attempt 6 questions in all, selecting at least 2 from each part. In how many ways can a student select a question?

[3 marks]

Question 9 (CLO3, C3)

A committee consisting of 5 members is chosen from 6 lecturers and 4 students. Find the number of ways if the committee is made up of:

(a) 3 lecturers and 2 students.
(b) All lecturers
(c) At least 2 lecturers and at least one student.

[4 marks]

Question 10 (CLO3, C3)

There are 5 Mathematics, 4 Physics and 5 Chemistry books. In how many ways can you arrange 4 Mathematics, 3 Physics and 4 Chemistry books

(a) If the books on the same subjects are arranged together but the order in which the books are arranged within a subject doesn't matter?

(b) If books on the same subejcts are arranged together and the order in which books are arranged whithin subject matters?

[4 marks]

~ END OF QUESTIONS ~