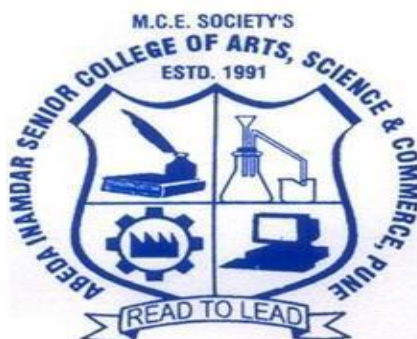


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Booklet of Practical Skeleton Papers for

B.C.A (Science) 2021 Pattern

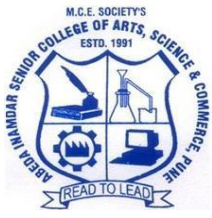
Credit System Syllabus

(From June-2021)

S.Y.B.C.A (Science)

SEMESTER-IV

PAPER - 21SBCA246
LAB-III-Programming in Go

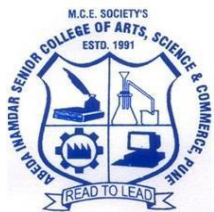


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S.Y.B.C.A. (SCIENCE) PRACTICAL EXAMINATION OCT / APRIL20__
Paper- 21SBCA246-LAB-III-Programming in Go
(Semester-IV, 2021 pattern) Credits: 2

Duration: 3hrs

Max Marks: 30

- Q.1) Write Program in Go language to check whether given number is odd or even.
[Marks 10]
- Q.2) Write Program in Go language to accept n students details like roll_no, stud_name, mark1, mark2, mark3. Calculate the total and average of marks using structure.
[Marks 15]
- Q.3) External Viva
[Marks 5]



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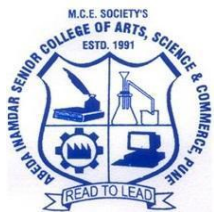
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to check whether a given year is a leap year or not.
[Marks 10]

Q.2) Write Program in Go language to accept two matrices and display its multiplication
[Marks 15]

Q3) External Viva
[Marks 5]



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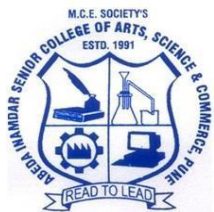
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language using function to check whether accepts number is palindrome or not. [Marks 10]

Q.2) Write Program in Go language to print out the numbers from 0 to 10, waiting 100ms after each one using the delay function. [Marks 15]

Q.3) External Viva [Marks 5]

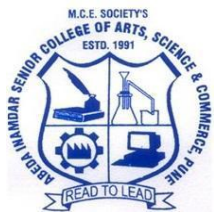


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Duration: 3hrs

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- Q.1) Write Program in Go language to accept two strings and compare them. [Marks 10]
- Q.2) Write Program in Go language to accept two matrices and display its addition. [Marks 15]
- Q.3) External Viva [Marks 5]



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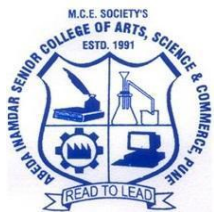
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to print table of given number. [Marks 10]

Q.2) Write Program in Go language to create an interface shape that includes area and Perimeter. Implements these methods in circle and rectangle type. [Marks 15]

Q.3) External Viva [Marks 5]



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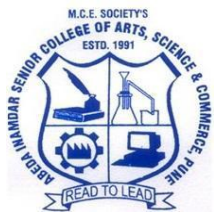
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to accept a character and check if it is a vowel or consonant. [Marks 10]

Q.2) Write Program in Go language to store n student information(rollno, name, percentage) and write a method to display student information in descending order of percentage. [Marks 15]

Q.3) External Viva [Marks 5]



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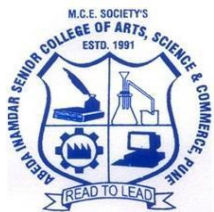
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to swap two numbers using call by reference concept. [Marks 10]

Q.2) Write Program in Go language to accept n records of employee information (eno, ename, salary) and display record of employees having maximum salary. [Marks 15]

Q.3) External Viva [Marks 5]



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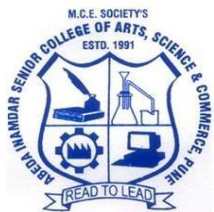
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to reverse an array. [Marks 10]

Q.2) Write Program in Go language to demonstrate working of slices (like insert, delete, append, copy and print slice). [Marks 15]

Q.3) External Viva [Marks 5]



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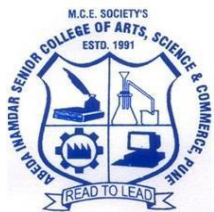
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to accept user choice and print answer using arithmetical operators. [Marks 10]

Q.2) Write Program in Go language to print prime numbers between 1 to 100. [Marks 15]

Q.3) External Viva [Marks 5]

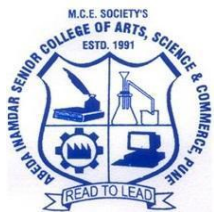


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Duration: 3hrs

Max Marks: 30

- Q.1) Write Program in Go language to print recursive sum of digits of given number. [Marks 10]
- Q.2) Write Program in Go language to print PASCALS triangle. [Marks 15]
- Q.3) External Viva [Marks 5]



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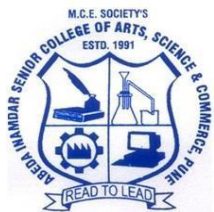
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to print fibonacci series of n terms. [Marks 10]

Q.2) Write Program in Go language to create structure student (rollno, name, marks) and write a method show() whose receiver is a pointer of struct student. [Marks 15]

Q.3) External Viva [Marks 5]



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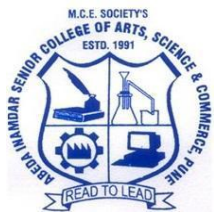
Q.1) Write Program in Go language to find the largest and smallest number in an array.
[Marks 10]

Q.2) Write Program in Go language to accept number and calculate the squares of each digit are calculated in a separate Go-routine, cubes of each digit in another Go-routine and the final summation happens in the main Go-routine

Example if number is 123 then squares = $(1 * 1) + (2 * 2) + (3 * 3)$ cubes = $(1 * 1 * 1) + (2 * 2 * 2) + (3 * 3 * 3)$.

Output Sum of squares= 170 Sum of cubes= 1366 Final sum of squares and cubes = 1536
[Marks 15]

Q.3) External Viva [Marks 5]



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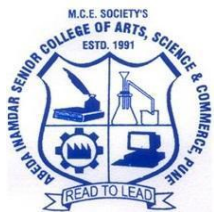
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Max Marks: 30

Q.1) Write Program in Go language to illustrate how to create an anonymous Go-routine.
[Marks 10]

Q.2) Write Program in Go language to accept the book details such as BookID, Title, Author, Price. Read and display the details of n number of books.
[Marks 15]

Q.3) External Viva
[Marks 5]



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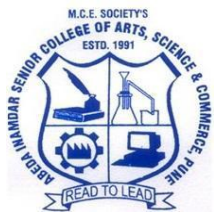
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to sort array elements in ascending order.
[Marks 10]

Q.2) Write Program in Go language to create structure author (book no, auth_id, auth_name, price) and write a method show() whose receiver is a pointer of struct author.
[Marks 15]

Q.3) External Viva
[Marks 5]



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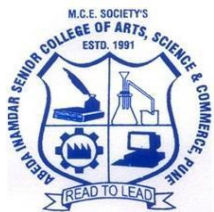
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to accept an array and put even and odd numbers in different arrays. [Marks 10]

Q.2) Write Program in Go language to print the numbers from 0 to 10, waiting between 0 and 250 ms after each number using delay function . [Marks 15]

Q.3) External Viva [Marks 5]



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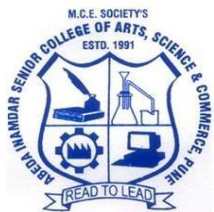
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to accept an array and count even and odd numbers in an array. [Marks 10]

Q.2) Write Program in Go language to create a file and write hello world in it and close the file by using defer statement. [Marks 15]

Q.3) External Viva [Marks 5]



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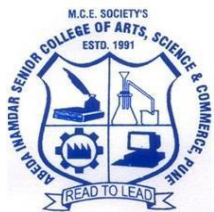
Duration: 3hrs

Max Marks: 30

Q.1) Write Program in Go language to accept a string and count the number of vowels and consonants. arrays. [Marks 10]

Q.2) Write Program in Go language such that the squares are calculated in a separate Goroutine, cubes in another Goroutine and the final summation happens in the main Goroutine. [Marks 15]

Q.3) External Viva [Marks 5]

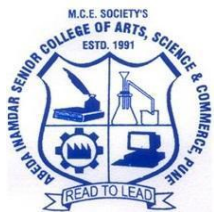


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- Q.1) Write Program in Go language to swap two numbers using call by reference concept. [Marks 10]
- Q.2) WAP in Go language to concatenate two strings using pointers. [Marks 15]
- Q.3) External Viva [Marks 5]



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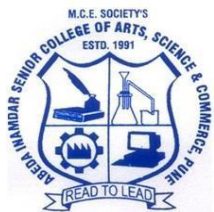
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Q.1) Write Program in Go language to find the factors of given number. [Marks 10]

Q.2) Write Program in Go language to accept a string and count the total number of appearances of particular alphabet in that string. [Marks 15]

Q.3) External Viva [Marks 5]



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Q.1) Write Program in Go language to calculate the power of the given number.

[Marks 10]

Q.2) Write Program in Go to print out the numbers from 0 to 10, waiting 100ms after each one using the delay function.

[Marks 15]

Q.3) External Viva

[Marks 5]