

NOT MODERATED

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19-CS-43

**M.Sc. IV SEMESTER [MAIN/A.T.K.T.] EXAMINATION
APRIL-MAY, 2019**

COMPUTER SCIENCE

Paper - III

[Internet and Web Technology]

[Max. Marks : 75]

[Time : 3:00 Hrs.]

[Min. Marks : 26]

Note : Candidate should write his/her Roll Number at the prescribed space on the question paper.
Student should not write anything on question paper.
Attempt five questions. Each question carries an internal choice.
Each question carries **15 marks**.

- Q. 1 a)** What is HTTP ? Explain its utility and various methods used by HTTP ?
b) Describe generic servlet lifecycle and also explain the lifecycle methods of servlets.

OR

- a)** What do you mean by scripting languages ? Discuss their advantages.
b) What do you mean by an application and web servers. Write their installation.

- Q. 2 a)** Discuss in detail the architecture of servlets.
b) How to connect database with JDBC driver ? Explain with example.

OR

- a)** What do you mean by deployment descriptor ? Discuss various elements of it.
b) How Java servlets handles session handling. Discuss in detail.

- Q. 3 a)** What are different types of scripting elements in JSP. Discuss in detail.
b) Explain connection of servlet with database by taking an example.

OR

- a)** Define the term connection pooling and also discuss the need of connection pooling.
b) How to extract meta data from database via JDBC driver.

P.T.O.

- Q. 3** What are the uses of Symbol Tables. Compare stack implemented structured and stack implemented hash structured symbol tables.

OR

Discuss in detail about the organization for non - block structured language

- Q. 4 a)** Discuss in detail about specification of translation.
b) Explain about syntax directed translation scheme.
c) Discuss various translation schemes for programming language constructs

OR

Elucidate the issues in the design of a code generator. Also write the address code and construct the basic blocks for the following program segment.

```
sum = 0 ;
```

```
for (i = 0 ; i <= 10 ; i++)
```

```
sum = sum + a[i] ;
```

- Q. 5 a)** Define loop optimization. Also discuss peephole optimization.
b) How does loop unrolling improve system performance ?
c) Discuss in brief about various code generation methods.

OR

How will you explain about the role of lexical and syntax analyzer with the possible error recovery actions.