INDIAN STATISTICAL INSTITUTE BANGALORE CENTRE
Documentation Research and Training Centre

M. S. (Library and Information Science) 2018-20
Second Year, Semester III (Final)

Paper 16: Web Technology and Web based Information Services
Date: 13th Nov 2019

Duration: 3 hours

Full marks: 50

Answer any 5 questions. All questions carry equal marks.

1. Write HTML code with appropriate CSS styles for the following web page:

Library Portal			
Quick Links	**New Arrivals**		
• Home			
• Catalogue	Sl. No. / Title / Author / Year		
• Policies			
• Contact			
	1 — Sample Title 1 — Sample Author 1 — 2010		
	2 — Sample Title 2 — Sample Author 2 — 2012		
[width: 25%]	3 — Sample Title 3 — Sample Author 3 — 2014		
	Contact | Feedback		

2. Describe highlights of CSS3, including rules of specificity.

3. Explain the difference between DTD and XML Schema.

4. Write a DTD for which the following XML document will be valid:

```xml
<recentTitles>
  <record id="rec1">
      <title> The Five Laws of Library Science </title>
      <author>Ranganathan, S. R.</author>
      <publisher>
          <name>Ess Ess Publications</name>
          <year>2006</year>
      </publisher>
      <keyword>Library science</keyword>
      <keyword lang="en">Classification</keyword>
  </record>
  <record id="rec2">
      <title>Classified catalogue code</title>
      <author>Ranganathan, S. R.</author>
      <author>Neelameghan, A.</author>
  </record>
</recentTitles>
```

5. Explain major types of SQL joins with examples.

6. Discuss the usage of database abstraction in web applications.