M.Tech. IN ADVANCED INFORMATION TECHNOLOGY – SOFTWARE TECHNOLOGY (MTECHST)

Term-End Examination

December, 2014

MINE-018 : ADVANCED ENTERPRISE WEB SOLUTIONS

Time : 3 hours   *Maximum Marks : 100*

Note :

   *(i)   Section I is **compulsory** and carries 30 marks.*

   *(ii)   In Section II, answer any **five** questions and it carries 70 marks.*

   (iii) Draw suitable sketches wherever required.

   (iv)   Italicized figures to the right indicate maximum marks.

SECTION I

1. ABC College is organizing an International Conference on "Recent Trends in Mobile Cloud Computing". To make participant registration they want to develop a Web based "Event Registration Application" with the following functionalities. Design two separate models.

   (a)   Saving registration data in the database

   (b)   Displaying the data from the database.

The registration form includes the following fields :

- Name
- ID
- Email
- Mobile phone
- College/Institute/Organization
- Designation
- Department
- Country

Problem :

For above (a) and (b) design a web based application using JSP, Servlet and Struts Framework. Write necessary code. *15+15=30*

SECTION II

2. If you want to create your own methods in Action Class, which class implantation is most suitable ? Give some scenario where such a way can be used in real application. Write code for this example. *2+3+9=14*

3. What is Model-View-Controller (MVC) framework ? Explain with example in Struts.

   4+10=14

4. What is SessionFactory and Session in Hibernate ? How do we instantiate both of these ? Give hibernate.cfg.xml deployment for both. *4+5+5=14*

5. What is Object Relational Mapping (ORM) ? What are the ORM solutions available ? Compare any two with Hibernate. *2+3+9=14*

6. Explain Dispatch Action in detail with an example. *14*

7. What is meant by Validation in Struts ? What is manual validation and automatic validation ? Explain how they are implemented in Struts. Give example. *2+3+5+4=14*

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