

**B.Sc. (I. T.) Sem. - VI (2011 Course) : WINTER - 2018**  
**SUBJECT : BUSINESS APPLICATION DEVELOPMENT USING EJB, STRUTS**

Day : Tuesday  
Date : 04/12/2018

**W-2018-1111**

Time : 10.00 am to 12.00 Noon  
Max. Marks : 40

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**N. B. :**

- 1) Attempt **ANY FIVE** out of **SEVEN**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat and labeled diagrams **WHEREVER** necessary.
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- Q. 1** a) Enlist and explain **ANY FOUR** tags used in struts.xml file. (04)
- b) Explain the steps for creating a struts-based login application with “Welcome”, on success and display the same page with “Login Failed”, on failure. (04)
- Q. 2** a) Explain the general flow of Hibernate communication with RDMS using suitable diagram. (04)
- b) How do you define sequence generated primary key in Hibernate? Explain with code snippet. (04)
- Q. 3** Explain the concept of ORM? Describe the steps for developing a simple Hibernate application. (08)
- Q. 4** a) What is a Java Bean class? Explain the difference between POJO class and Java Bean class. (04)
- b) Explain Event Delegation Model in struts with a code snippet. (04)
- Q. 5** What are interceptors in Struts? Explain its life cycle in detail. Elaborate with an example. (08)
- Q. 6** What are the different ways to map Hibernate entities? How can we generate a primary key in Hibernate entity? (08)
- Q. 7** What does ORM stands for? Explain Hibernate architecture in detail, using diagram. (08)