



Web Engineering (1070)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Answer **any five** questions.
5. Neat diagrams must be drawn wherever necessary.

1. a) What is Web Engineering ? Explain categories of Web applications. **10**
b) Explain product - related and usage related characteristics of web applications. **10**
2. a) Explain the principles for requirements engineering (RE) of web applications. **10**
b) Explain Modeling specifics in web engineering in detail. **10**
3. a) Explain 2 - layer and 4 - layer architectures for web applications. **10**
b) What is interaction design ? State and explain the four aspects of Interaction design. **10**
4. a) Explain client - side technologies and server-side technologies for web applications. **10**
b) Explain methods and techniques for web application testing. **10**
5. a) What is web usage analysis ? Explain usage analysis techniques, statistical indicators and user - behaviour analysis. **10**
b) Explain development related and product related challenges in web projects. **10**

6. a) What is usability ? Explain different trends in web usability engineering. 10
- b) What is performance ? Explain different performance optimization methods of web applications. 10
7. a) Explain different client security issues for web applications. 10
- b) Explain various aspects of semantic web services. 10
8. a) Explain following attacks on web applications. 10
- i) Cross - site scripting.
- ii) SQL injection.
- iii) Denial of service.
- iv) Buffer overflow.
- b) What are the requirements for a web application development process ? 10
