**DHARMSINH DESAI UNIVERSITY, NADIAD**
**FACULTY OF TECHNOLOGY**
**B.TECH. SEMESTER VI [I.T.]**
**SUBJECT: (CT616) SOFTWARE ENGINEERING**

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| **Examination** | **: SECOND SESSIONAL** | **Seat No.** | **:** |
| **Date** | **: 11/02/2014** | **Day** | **:** |
| **Time** | **: 12:45 to 2:00** | **Max. Marks** | **: 36** |

**INSTRUCTIONS:**

1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

**Q.1 Do as directed.**

(a) List the items which should be designed during the design phase. **[2]**
(b) What do you mean by a neat arrangement? Discuss in brief. **[2]**
(c) Define the cohesion and coupling? Explain in brief. **[2]**
(d) What according to you is a good software design? **[2]**
(e) What is balancing of DFD? Illustrate your answer with a suitable example. **[2]**
(f) What is a model? Why it should be constructed? **[2]**

**Q.2** Attempt ***Any TWO*** of the following questions. **[12]**

(a) Enumerate the different types of cohesion that a module might exhibit. **[6]**
(b) Differentiate between the function-oriented and object-oriented design. **[6]**
(c) Develop the DFD level 0,1 and 2 for the following system: On-line admission system. **[6]**

**Q.3** (a) Draw the use-case diagram for the following system: **[6]**

Judiciary information system:
The system helps to handle court cases and also to make the past court cases easily accessible to lawyers and judges. For each court case, the name of the defendant, defendant's address, the crime type, when committed, where committed, name of the arresting officer and the date of the arrest are entered by the court registrar. The registrar assigns a date of hearing for each case.
Define number of users and their functionalities.

(b) Draw the class diagram for the system defined above. **[6]**

**OR**

**Q.3** (a) Draw the use-case diagram for the following system: **[6]**

On-line news paper agency.

(b) Draw the class diagram for the system given above in Q.3(a). **[6]**