

Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Back Exam-2077, Chaitra

Program: Diploma in Computer/IT Engineering

Full Marks: 80

Year/Part: II/II (2018 New Course)

Pass Marks: 32

Subject: System Analysis & Design

Time: 3 hrs.

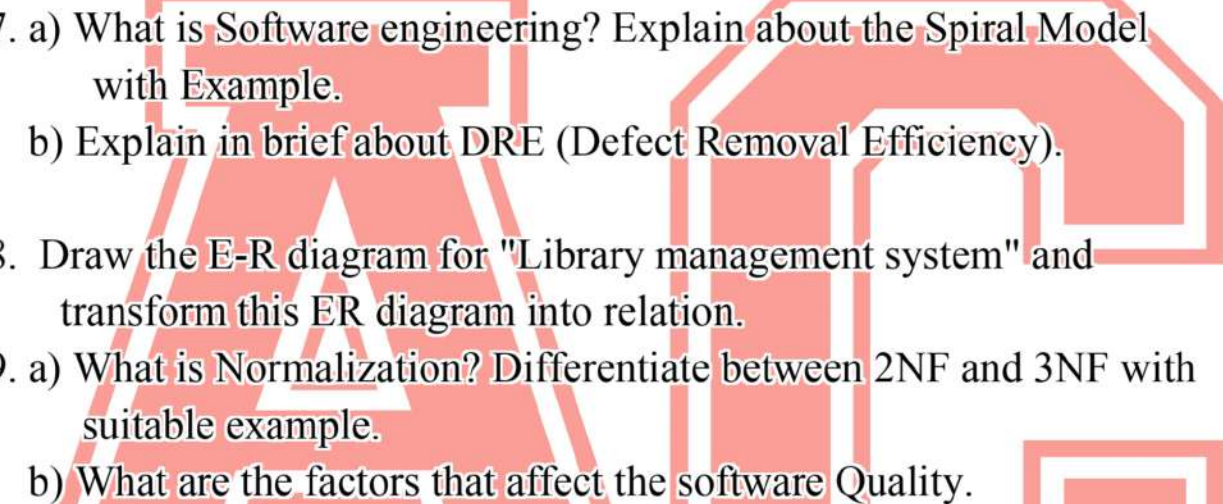
Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt Any Eight questions.

1. a) Who is a system Analyst? Explain his characteristics roles and responsibilities. [6]
b) What is an information system? Explain its components. [4]
2. a) Explain the different steps involved in system development life cycle (SDLC) [6]
b) Explain software measurement process with an example [4]
3. a) Write the importance of Information Gathering in requirement Analysis. How is Questionair differ from interview? [6]
b) Differentiate between logical and physical DFD. [4]
4. What is structured English? Draw context level, level 1 and level 2 DFD for "Youtube". [10]
5. a) What do you mean by Quality Assurance? Explain with example. [5]
b) Draw the class diagram for hospital management system. [5]
6. a) "Patients with medical insurance may or may not receive reimbursements for medical visits, depending on couple of factor. First of all, no charges are reimbursed to the patient until the deductible has been met. If the deductible has been met, then reimburse depends on the type of visit. Doctor's office visits are reimbursed at 50%, Hospital visits are reimbursed at 80% and lab visits are reimbursed at 70%". [7]
Construct decision table for this medical insurance policy.
- b) Explain sequence Diagram with an example. [3]

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7. a) What is Software engineering? Explain about the Spiral Model with Example. [7]
b) Explain in brief about DRE (Defect Removal Efficiency). [3]
8. Draw the E-R diagram for "Library management system" and transform this ER diagram into relation. [10]
9. a) What is Normalization? Differentiate between 2NF and 3NF with suitable example. [2+4]
b) What are the factors that affect the software Quality. [4]

Good Luck!

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