

Department of Computer Science and Engineering  
**CSE 3223: Information System Design and Software Engineering**  
Class Test # 2 (Set-A)

**Marks: 10**

**Time: 25 min**

Student ID: .....

Name: .....

**Instructions:** i) You can use pencil  
ii) No extra pages will be provided

**Questions:**

1. What is sampling? What are the steps of sampling design? [3]

2. **Kingston Hospital**, a reputed hospital wants to develop an online management system. A handsome amount of patients get the treatment and services of this hospital. In order to get the facilities of this hospital every patient needs to be a registered user. During registration the patient gets a unique PRN and a report catalog. Each patient can communicate with the referred doctor or he/she can fix an appointment with the desired doctor or specialist. Reports of the patients are automatically forwarded to the assigned doctors and the doctors always monitor the patient condition by visualizing the stream of patient data and advises the patient accordingly. Administrators has all the powers of the system thus he/she can update all the information and tracks all financial and technical aspects of the system.

Draw a **Context Level DFD** for **Kingston Hospital**. [7]

Department of Computer Science and Engineering  
**CSE 3223: Information System Design and Software Engineering**  
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**Marks: 10**

**Time: 25 min**

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Name: .....

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ii) No extra pages will be provided.

**Question:**

1. What are the steps of determining sample size? [3]

2. **Tong**, a renowned restaurant which is situated at Bashundhara, wants to install a system to record online orders for pizzas and pastas. When regular customers call Tong on the phone, their phone number goes automatically into the system. The phone number invokes the name, address, and last order date comes automatically on the screen. Once the order is taken, the total cost, including tax and delivery charge, is calculated. Then the order is given to the cook and a receipt is printed. Occasionally, special offer (coupons) is printed so the customer can get a discount. Drivers who make deliveries give customers a copy of the receipt and coupon (if any). Weekly totals are kept for comparison with last year's performance.

Draw a **Context Level DFD** for **Tong**. [7]