

**International Institute of Health Management Research (IIHMR)
NEW DELHI**

**Health care IT - Batch- 2019-21
Term Exams**

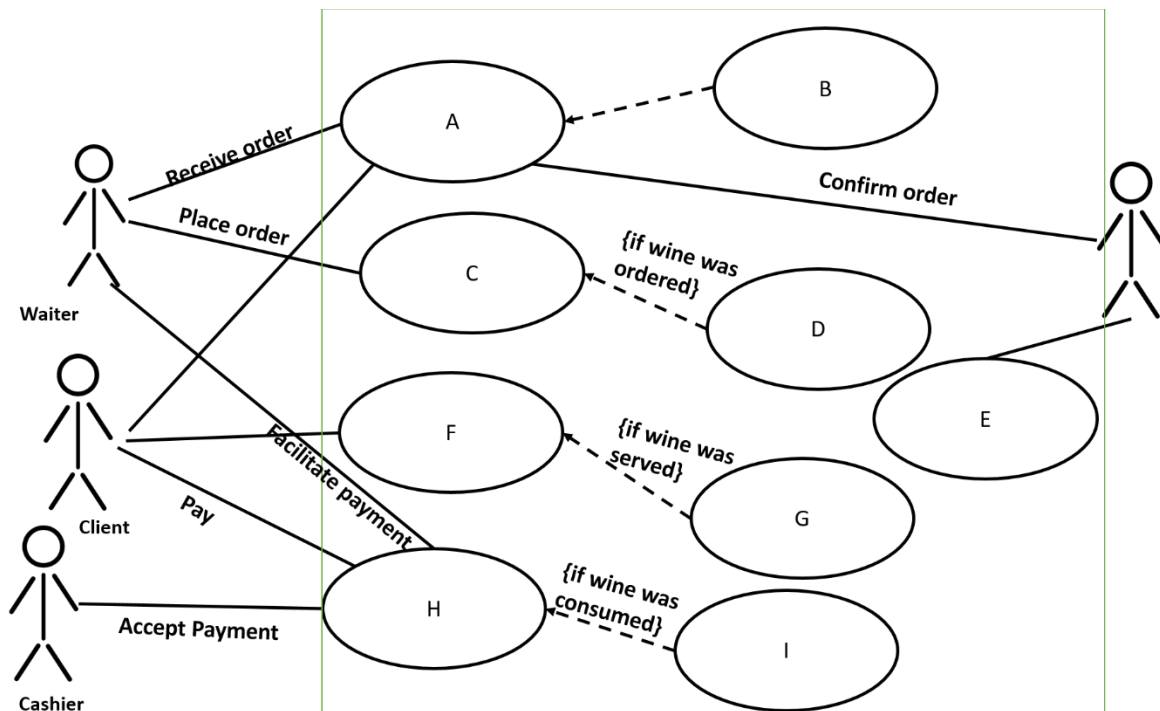
Time – 2 Hrs

Total marks: 70

HIT – 703 Requirements Management

Instructions to the candidate: question no's 2 and 3 are to be uploaded as scanned document. Scan the image each page if more than one) as a picture paste it in a word document, convert the word document into a PDF and upload.

1. The following scenario explains a situation where a client orders food in a restaurant. Actors are provided and the interactions are also highlighted. Provide appropriate names for the use cases based on the type of the relationships. (18 marks)



2. Mr Raj complains of chest pain at home. He is rushed to a 250 bedded hospital nearby. His vitals are checked by the duty nurse in ER and further checked by the emergency doctor and advised to take MRI scan. The doctor orders the scan to the radiology department. He is suspected of heart attack and is admitted in the ICU. His details are updated. He is monitored in the ICU by the nurse. The specialist visits him and orders for angioplasty. Stents are placed. He

is provided medication while he is in ICU and later shifted to general ward. Mr. Raj is discharged after 4 days with all discharge summaries included. At the start Mr. Raj had paid some advance towards billing. Now based on the intervention he has opted for insurance claim which the hospital has processed. Before leaving Mr Raj is counselled regarding his diet, physical activity etc. Draw a Use case diagram identifying the actors, use case and relationships. **(Marks 20) (To be uploaded)**

3. Management of Congestive Heart Failure often includes pharmacological interventions, fluid and nutritional restrictions, and recommendations for lifestyle modifications. A variety of multidisciplinary interventions targeted at improving patient outcomes have been demonstrated to be more effective in improving quality of life and reducing health care service utilization, and these are increasingly being delivered in the home. Major processes identified in home visits are scheduling the visit, confirming the visit, providing direct care to the patients, and coordinating care provided by other disciplines (e.g. dietary consultation, physical therapy, and social work). Considering these as activities that a nurse need to perform while visiting home of a patient and in collaborating with other stakeholders draw a sequence diagram (identifying actors separately) that starts from the time scheduling a visit until the nurse leaves the patient home. **(Marks 20) (To be uploaded)**

4. Naturally fit hospital specializes in mother and child care. The management is interested in developing an Internet-Based Monitoring System for providing continuum of care during the first weeks of a newborn's life after going home. The expectations are that such a tool would facilitate contact and information-sharing between parents and specialized nurses, thereby enhancing parents' confidence and their involvement in their baby's care. The objectives of the tools are 1) to provide open platform where all parents can find extensive high-quality information about baby care, breastfeeding and neonatal care; 2) registered parents can be monitored every week about the baby's conditions covering all the topics that are usually accessed during hospital visits and 3) doctors and neonatal nurses can monitor the parents for the child's health by evaluating them based on the responses entered and provide advice and comments about the newborn's care through the website.

Identify any 6 functional requirement for developing the above web based application. **(12 marks)**