

### Post Graduate Diploma in Management (Hospital & Health Management)

#### **PGDM – 2023-25 Batch**

# 2<sup>nd</sup> Year – 3<sup>rd</sup> Semester End Examination

Subject & Code : Healthcare Software Requirement Management-HIT 703 Reg. No.

Semester & Batch : III, 2023-25 Date: 09-10-2024

Time & Duration : 10:30 A.M.-01:30 P.M. (3 Hrs.) Max. Marks : 70

#### **Instructions:**

Budget your time as per the marks given for each question and write your answer accordingly.

• Don't write anything on the Question Paper except writing your Registration No.

Mobile Phones are not allowed even for computations.

# Part A: Q.1 to Q.10 all questions are compulsory (10 X 2 Marks = 20 Marks) One liner, MCQs, True/False

A mobile app named "Health Care" has been developed for Android® operating system due to heavy usage among all classes of the society. The main features of the app are stated below:

A user can get awareness about different diseases, their causes, symptoms and treatment. A description of simple remedies and precautions to avoid or manage the disease are also included.

A list of common medical terms / jargons has been included in the application. This feature will be beneficial for users, particularly medical students, to get instant knowledge about the term. Text to speech feature is also included for people who have trouble in reading text in cell phones.

User can read about several medicines, their uses and possible side-effects. Details about chemical composition and structure has been included to help medical students in their study.

Health news feed has been included in the app from renowned health care website and services globally.

Moreover, development of application for other mobile operating system like iOS® and Windows® Phone is also under consideration to increase the user base.

extend include Symptom Precautio ns UC6 UC2 Database UC7 Actor 1 UC3 UC10 UC4 UC8 Web Server UC5

UC9

The following arrows has been utilized to show the features.

Name the actors and use cases.

Actor 2

- 1. Actor 1 \_\_\_\_\_
- 2. Actor 2
- 3. UC2 \_\_\_\_\_
- 4. UC3 \_\_\_\_\_
- 5. UC4 \_\_\_\_\_
- 6. UC5
- 7. UC6 \_\_\_\_\_
- 8. UC7\_\_\_\_\_ and UC 8\_\_\_\_\_
- 9. UC9 \_\_\_\_\_
- 10. UC10\_\_\_\_\_

Part B: Q.11 to Q.15 attempt any four questions (4  $\times$  5 Marks = 20 Marks) Short Notes

Let's say you've noticed that the bounce rate is high for a landing page of your hospital website, and you're receiving customer feedback where users' express frustration at not being able to understand the information on the page.

- 11. What tools will you use for gathering requirements for the above.
- 12. Develop a user story from the perception of a diabetes patient for the above
- 13. Analyze and list any two functional requirements to modify the web page.
- 14. Develop a traceability matrix that will track from gathering requirement to test cases in the above case.
- 15. Who will be the stakeholders to gather requirements from?

## Part C: Q.16 to Q.19 attempt any three questions (3 X 10 Marks = 30 Marks) Long Notes

Cardiac rehabilitation (CR) is a medically supervised program that helps improve cardiovascular health after a heart attack, heart failure, angioplasty, or heart surgery. Cardiac rehabilitation consists of three phases.

- Phase I: Clinical Phase.
- Phase II: Outpatient Cardiac Rehab.
- Phase III: Post-cardiac Rehab

CR represents an important steppingstone for many cardiac patients into a more heart-healthy lifestyle to prevent premature death and improve quality of life years. However, CR is underutilized worldwide. Patients' Capability for participating in CR are influenced by their disease knowledge, awareness of the benefits of CR, information received, and interactions with healthcare professionals (HCP). The opportunity to attend CR is impacted by healthcare system factors such as referral processes and HCPs' awareness, as well as personal resources including logistical challenges and comorbidities. Patients' motivation to engage in CR is affected by emotions, factors such as gender, age, self-perception of fitness and control over the cardiac condition, as well as peer comparisons.

Mobila hospital is interested in developing software for cardiac rehabilitation. The software will provide all features necessary for a healthcare professional to provide CR to his/ her patient

Read the above case and answer the following

- 16. Draw an activity diagram explaining the flow of the software
- 17. Develop four user stories each targeting one type of stakeholder who will be using the software
- 18. Identify 5 functional requirements from two stakeholders' perspectives
- 19. Draw Use case Scenario diagram for CR session highlighting the activities. If any assumption is made regarding the actors kindly mention the same.