

**VPM's**  
**DR VN BRIMS, Thane**  
**Programme: MMS (2016-18)**  
**First Semester Examination December 2016**

<b>Subject</b>	<b>Information Technology for Management</b>		
<b>Roll No.</b>		<b>Marks</b>	<b>60 Marks</b>
<b>Total No. of Questions</b>	<b>7</b>	<b>Duration</b>	<b>3 Hours</b>
<b>Total No. of printed pages</b>	<b>2</b>	<b>Date</b>	<b>23.12.2016</b>

**Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.**

**Q1) 20 Marks (Compulsory)**

Read the following case carefully.

**Hospital Management System**

**Aim:**

XYZ hospital is a multi-specialty hospital that includes a number of departments, rooms, doctors, nurses, compounders, and other staff working in the hospital. Patients having different kinds of ailments come to the hospital and get checkup done from the concerned doctors. If required they are admitted in the hospital and discharged after treatment.

The aim of this case study is to design and develop a database for the hospital to maintain the records of various departments, rooms, and doctors in the hospital. It also maintains records of the regular patients, patients admitted in the hospital, the check-up of patients done by the doctors, the patients that have been operated, and patients discharged from the hospital.

**Description:**

In hospital, there are many departments like Orthopedic, Pathology, Emergency, Dental, Gynecology, Anesthetics, I.C.U., Blood Bank, Operation Theater, Laboratory, M.R.I., Neurology, Cardiology, Cancer Department, Corpse, etc. There is an OPD where patients come and get a card (that is, entry card of the patient) for check up from the concerned doctor. After making entry in the card, they go to the concerned doctor's room and the doctor checks up their ailments. According to the ailments, the doctor either prescribes medicine or admits the patient in the concerned department. The patient may choose either private or general room according to his/her need. But before getting admission in the hospital, the patient has to fulfill certain formalities of the hospital like room charges, etc. After the treatment is completed, the doctor discharges the patient. Before discharging from the hospital, the patient again has to complete certain formalities of the hospital like balance charges, test charges, operation charges (if any), blood charges, doctors' charges, etc.

Next we talk about the doctors of the hospital. There are two types of the doctors in the hospital, namely, regular doctors and call on doctors. Regular doctors are those doctors who come to the hospital daily. Calls on doctors are those doctors who are called by the hospital if the concerned doctor is not available.

Based on the above case, solve the following questions:

1. List down all possible entities and relations between them for the above database, write small (2 lines) description for each relation.
2. Draw one complete E-R diagram for the above Hospital Management System, with all attributes, relationships, etc.

**Attempt Any FOUR from the Remaining SIX Questions**

**Q2) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) Explain the evolution of I.T. in brief.
- b) Explain the use of I.T. in at least two sectors (like finance, marketing, or any other) with relevant examples.
- c) What is the biggest impact of I.T. on business? Explain with example.

**Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) A PC manufacturer wants to launch a computer in the market. What are the things he needs to think from buyer's perspective?
- b) What are the different types of computer networks? Explain in brief.
- c) What is WLAN? Explain with relevant example.

**Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What do you mean by a Network Topology? Explain Tree and Hybrid Topology.
- b) What are the advantages and threats to a computer network?
- c) Explain Dial-up and Lease-line connections.

**Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What is a database? Why do you need a database? Explain with an example.
- b) Explain DBMS and its basic architecture.
- c) Consider a case of a college, where every year 120 students take admission. During their admission process, all the details of students are required. Is spreadsheet capable of handling this task or do I need a database? Why?

**Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What is a Data Warehouse and what are its benefits? Draw its architecture.
- b) What is Business Intelligence? What is its use?
- c) What is difference between e-business and e-commerce? Explain with example.

**Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) Explain types of e-commerce, with example for each.
- b) Write a note on e-commerce industry in India.
- c) Write a note on Artificial Intelligence.