Reg. No.									

MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

II SEMESTER MCA

END SEMESTER EXAMINATIONS, APRIL 2019

SUBJECT: MANAGEMENT INFORMATION SYSTEM [MCA 5005]

REVISED CREDIT SYSTEM
(29/04/2019)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:
- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A	Consider the following table look out for any repeating groups, eliminate transitive dependencies if any and convert the table into 3NF. (course-code, course-name, credits, course-prerequisites, stud-code, stud-name, stud-address, alias-name, pet-name, mob-no,dept-name,dept-address,dept-size,dept-hod).	5
1B.	Mention the three main components of a DSS? Explain each type of component giving examples.	3
1C.	Justify and showcase the cases wherein a transaction processing system can also work as a management information system.	2
2A.	What sort of an information system would you think would help a company like Cyber-OM overtake Juniper Networks in becoming the best computer networking company? Justify your thought.	5
2B.	What is a GDSS and how does it facilitate group decision making? What is the role of a facilitator in a GDSS?	3
2C.	'DSS are especially useful for semi-structured problems'. Comment on this statement giving examples.	2
3A.	What is an Executive Information system? Explain the main differences between an executive information system and decision support system.	5
3B.	Discuss the main characteristics of an expert system with a sharp focus on the main objectives of both decision support systems and expert systems.	3
3C.	How does decision support systems allow managers to perform goal-seeking?	2

4A.	ISAM is used to store master file records with record keys as shown below where each track has a capacity to store a maximum of 6 records. First of all do rearrange the records as per sequential nature of ISAM also an overflow area is available but with no records currently. Track address Records 60008 1712 1717 1724 1726 ------ ------- 64011 1642 1664 1650 1669 1658 ------- 63009 1270 1282 1292 1296 ------ ------- i) Show the contents of the initial index for the above master file. ii) Process the following transactions in the order that they are given and show the final status of the index and master records. ADD 1640,ADD 1667,DELETE 1669,CHANGE 1296 to 1298	**5**
4B.	Outline different types of general-purpose application software and explain each of them in brief.	**3**
4C.	Name and list out the five functions of a decision support system.	**2**
5A.	Discuss the advantages and disadvantages of network model with an appropriate application case study of a network model.	**5**
5B.	List out the constraints in developing an MIS and also the limitations of MIS.	**3**
5C.	Identify and explain any three characteristics of a decision support system.	**2**