

POKHARA UNIVERSITY

Time-Bound Open Book Hybrid Examination

Level: Bachelor	Semester: Spring	Year : 2020
Programme: BCA		Full Marks : 70
Course: Management Information System		Pass Marks: 31.5
		Time : 2 hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group 'A'

Attempt all questions.

(5×10=50)

1. A business firm has different information systems to support different groups or levels of management. Critically evaluate the major information systems for management level with their contributions.
2. “Organizational competitiveness can be increased using information systems.” Justify this statement by outlining the major strategies.
3. Differentiate between data mining and data warehousing? Judge the importance of various data mining techniques.
4. In your opinion, what may be the possible negative consequences while using the artificial intelligence technologies like expert system, intelligent agents, virtual reality etc.? What could be done to minimize such effects?
5. Assume that you have been appointed as IT consultant for Pokhara University to guide and facilitate the design of a new online system for handling student registration, examination and other applications forms which have previously been handled entirely with paper-based process. Now explain how you can manage information by mentioning key aspects of information management.

OR

Why do contemporary information systems technology and the Internet pose challenges to the protection of individual privacy and intellectual property? Give your opinion with some suggestions to protect such things.

Group 'B'

Problem-solving/case studies

(1×20=20)

6. BART's information systems were no longer state-of-art, and they were starting to affect its ability to provide good service. Aging

homegrown financial and human resources systems could no longer provide information rapidly enough for making timely decisions, and they were too unreliable to support its 24/7 operations. BART upgraded both its hardware and software. It replaced old legacy mainframe applications with Oracle's PeopleSoft Enterprise applications running on HP integrity blade servers and the Oracle Enterprise Linux operating system. This configuration provides more flexibility and room to grow because BART is able to run the PeopleSoft software in conjunction with new applications it could not previously run.

BART wanted to create a high-availability IT infrastructure using grid computing where it could match computing and storage capacity more closely to actual demand. BRAT chose to run its applications on a cluster of servers using a grid architecture. Multiple operating environments share capacity and computing resources that can be provisioned, distributed, and redistributed as needed over the grid. In most data centers, a distinct server is deployed for each application, and each server typically uses only a fraction of its capacity. BRAT uses virtualization to run multiple applications on the same server, increasing server capacity utilization to 50 percent or higher. This means fewer servers can be used to accomplish the same amount of work. With blade servers, if BART needs more capacity, it can add another server to the main system.

Questions:

- a) Why is high availability of hardware and software resources required for organization and how it can be achieved?
- b) "Virtualization is a way to reduce investment on hardware and software." Do you agree with statement? Give your justification.