

FACULTY OF SCIENCE

Academy of Computer Science and Software Engineering

MODULE: IT Aspects of Knowledge Management

CODE: IT00227 / IT28x27

CAMPUS: APK

EXAM: JUNE 2021 SUPPLEMENTAL EXAMINATION

DATE: JULY 2021 SESSION: ASSESSOR MR JP Klut

INTERNAL MODERATOR

EXTERNAL MODERATOR: Prof B. Tait

DURATION: 2 HOURS MARKS: 100

NUMBER OF PAGES: 5, NUMBER OF QUESTIONS: 19

INSTRUCTIONS:

- 1. In person examination (where applicable):
 ANSWER ALL QUESTIONS AND HAND THIS QUESTION PAPER IN AS WELL
- 2. Online examination (where applicable):
 - a) This is a closed book test.
 - b) Follow the instructions for Section A and B.
 - c) Submit section A and B using the CAM app and submit it to the EVE practical portal, Exam 2021 SSA. Ensure your submission is readable.

1. SECTION A – CASE STUDY QUESTIONS

Question 1

According to Becerra-Fernandez & Sabherwal, Knowledge is generally found in reservoirs. What are the three general knowledge reservoirs and two specific reservoirs for each of the three general reservoirs? (10)

Question 2

There are 6 emerging KM practices that are shaping the KM processes and systems. Name and discuss the importance and influence of each one of them. (18)

Question 3

Most organizations are unclear of the impact that KM solutions can have on their business.

- 1. List the impact areas a KM solution will have on the organization and
- 2. Give 2 examples each for the 4 areas.

Use a diagram to illustrate the relationship between the impact areas. (14)

Question 4

Using a diagram, draw a high level System Architecture diagram for a Knowledge Application System (that can be based on the SOS Advisor system) that illustrate IT aspects of such a solution. Explain each component briefly. (8)

Question 5

There are several emerging technologies that have a fundamental impact on the KM systems landscape. The most promising ones seem to be Al and machine learning.

Describe how Al and Machine learning will impact KM systems and give examples from your research done during this semester on this topic. (12)

Question 6

There are various factors that influence KM. List the 7 steps for identifying appropriate KM solutions and briefly describe each step. (14)

Question 7

Describe a process for Data Mining in the Knowledge Discovery process. (12)

Subtotal: (88)

(end of section A, section B follows on the next page)

2. <u>SECTION B – MULTIPLE CHOICE QUESTIONS</u>

Q number	Question
1.	 Which of the following is true about knowledge? a. Knowledge helps produce information from data. b. Knowledge produces more valuable information from less valuable information. c. Knowledge helps facilitate action. d. All of the above. e. None of the above.
	Answer:
 3. 	Knowing the expected value of a 6-sided die roll (3.5) is an example of a. data b. information c. knowledge d. common sense e. gambler's fallacy Answer: Which of the following is not an objective view of knowledge? a. Knowledge as objects. b. Knowledge as access to information. c. Knowledge as capability. d. Knowledge as practice. e. None of the above.
4.	The procedure for filing for family emergency medical leave in the employee handbook of an organization is an example of what types of knowledge? a. Tacit and procedural. b. Explicit and specific. c. Explicit and declarative. d. Tacit and specific. e. Explicit and procedural. Answer:
5.	Which of the following knowledge classifications may be characterized as "know what" and "know how"? a. Declarative and procedural knowledge. b. Tacit and explicit knowledge. c. General and specific knowledge. d. Objective and subjective knowledge. e. Technical and contextual knowledge. Answer:

Q Question

number

- 6. Which of the following statements describes associational expertise?
 - a. Knowledge held as collective beliefs and actions of a group.
 - b. A skill learned through extensive practice.
 - c. Knowledge of relationships between observed events and causes.
 - d. Creative ingenuity based on theoretical knowledge of the domain.
 - e. Knowledge focused on multiple distinct areas of expertise.

Answer:	
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- 7. Which types of knowledge are represented by an HR manager's knowledge of factors to consider in motivating an employee to participate in the company's new knowledge sharing business culture?
 - a. Explicit and declarative.
 - b. Tacit and contextually specific.
 - c. Procedural and technically specific.
 - d. General and procedural.
 - e. Explicit and procedural.

Answer:	

- 8. What is the explicitness of a piece of knowledge?
 - a. The number of domain areas to which the knowledge refers.
 - b. The extent to which knowledge exists in an explicit form.
 - c. The level of action enabled by the knowledge.
 - d. The extent to which the knowledge can be taught to others.
 - e. The level to which knowledge can be acquired by individuals with specific knowledge.

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- 9. Which of the following are people knowledge reservoirs?
 - a. Individuals and their technology.
 - b. Individuals and knowledge repositories.
 - c. Individuals and groups.
 - d. Individuals and their practices.
 - e. Individuals and organizations.

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Answ	or.	
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- 10. A spreadsheet of weekly orders for specific products of an organization with trend lines added is an example of what type of knowledge reservoir?
 - a. Knowledge repositories.
 - b. Organizations.
 - c. Organizational networks.
 - d. Technologies.
 - e. Practices.

Answer:

Question Q number Chapter 3: Knowledge resources are relevant to the decision making of which of the 11. following? a. An individual. b. A corporation. c. A department within a firm. d. A and c. e. All of the above. Answer: ____ 12. "Get the most (out of knowledge resources)," reflects the impacts of KM on the _ of the individual or the organization. a. goal achievement b. motivations c. business strategies d. performance evaluation e. market value Answer: ____ (End of section B) Section B Total (12) Grand total (100) -- (end) -----