



Machakos University

ISO 9001:2008 Certified

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

Supplementary

Bachelor of Science in Computer Science

Bachelor of Science in Information Technology

SCO 420/SIT 414

DECISION SUPPORT SYSTEMS

Date: /08/2018

Time: 2 HOURS

Instruction

Answer question **ONE** and **Any** other **Two** among the four selective questions

Question One (Compulsory)

- (a) Explain knowledge discovery process (10 Marks)
- (b) List and briefly describe Simon's four phases of decision making. (8 Marks)
- (c) Using a diagram, explain classification of decision structure (6 Marks)
- (d) Write advantages, limitations and applications of semantic web in DSS (6 Marks)

Question Two

- a) Explain steps for making decision (6 Marks)
- b) Describe the use of DSS in knowledge harvesting (8 Marks)
- c) Discuss the relationship between groupware tools and semantic web (6 Marks)

Question Three

- a) Briefly explain four main parts of DSSs (8 Marks)
- b) Explain any three optimization techniques in DSS (6 Marks)
- c) Explain any three characteristics of intelligent agents (6 Marks)

Question Four

- a) Discuss the following types of problems (6 Marks)

- (i) Structured
- (ii) Semi Structured
- (iii) Unstructured
- d) Describe any three Artificial Intelligent approaches in DSS (9 Marks)
- e) State the four DSS development strategies according to S.L. Alter's (4 Marks)
- f) Define virtual world (1 Mark)

Question Five

- a) Relate XML to knowledge management and to knowledge portals. (6 Marks)
- b) State six benefit of using DSS in decision making (6 Marks)
- c) Explain any four DSS models (8 Marks)