2920/202A COMPUTER APPLICATIONS II (THEORY)

Paper 1

November 2018 Time: 2 hours



## THE KENYA NATIONAL EXAMINATIONS COUNCIL

## DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

## MODULE II

COMPUTER APPLICATIONS II (THEORY)

Paper 1

## INSTRUCTIONS TO CANDIDATES OTES. CO. Ke

This paper consists of SIX questions

Answer any FOUR of the following SIX questions in the answer booklet provided.

All questions carry equal marks.

Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1	(a)	State	the meaning of each of the	e following terms as used in Artificial Into	elligence:	
		(i)	environment;			
		(ii)	forward chaining;			
	5	(iii)	heuristics;	4		
		(iv)	knowledge engineering;			
		(v)	percepts.		(5 marks)	
	(b)		ain a reason why each of the mation:	he following entities may require account	ing	
		(i)	investors;			
		(ii)	lenders;			
		(iii)	creditors.		(6 marks)	
	(c) .	Disti		and a spline as used in Computer Aided I	Design (CAD) (4 marks)	
2	(a)	Explain the effect of enabling annotative properties to a drawing in a CAD program. (2 marks				
	(b)		whether each of the follow	wing items is recorded on the debit or crea	dit side of the (3 marks)	
	(c)		returns, Discount receiv	riage outwards, Sales, Manufacturing Exp		
	(d)	Programmers at Gilko are faced with technological challenges of integrating natural language processing in their proposed internet search engine system. Explain three challenges that they may be experiencing. (6 marks)				
3	(a)	Outline five advantages of using double entry system in accounting procedures.				
	(b)		ne a way in which each of onment:	the following intelligent agents perceive	(5 marks) their	
		(i)	a human agent;			
		(ii)	a robotic agent;			
		(iii)	a software agent.		(3 marks)	

- (c) Outline one role of each of the following personnel in GIS applications.
  - Database managers;
  - (ii) Remote sensing analysts;
  - (iii) Spatial analysts;
  - (vi) Land surveyors.

(4 marks)

- (d) Paul intends to raise capital from potential investors to expand his business. State three financial statements that these investors may require in order to assess the viability of the business. (3 marks)
- 4 (a) Explain the use of Artificial Intelligence in each of the following areas:
  - (i) banking:
  - (ii) call centres.

(4 marks)

(b) \* State two golden rules of accounting in respect to debit and credit.

(2 marks)

(c) Table 1 shows the financial status of three companies Wisko, Xeroy and Yoken as at 31st July 2017. Determine the values of W, X and Y. (3 marks)

	Assets	Liabilities	Capital
Wisko	20,100	15,900	W
Xeroy	41,000	X	22,000
Yoken	Y	140,000	100,000

(d) Sketch the front, side and plan elevation in first angle projection for the solid block shown in Figure 1 in the direction indicated. (6 marks)

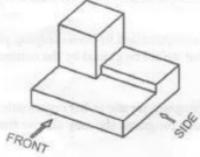


Figure 1

 State the meaning of the term Geographic Information System. (1 mark) Explain the function of each of the following tools as used in GIS. (2 marks) (ii) GPS: (I) (II) Digital cameras. Differentiate between simple reflex agents and utility based agents as used in artificial (b) (4 marks) intelligence. The following are transactions which took place at Junkali wholesalers in the month of (c) January 2018. Date Transactions 1 January 2018 Deposited Ksh. 700,000 into a bank account. 7 January 2018 Paid rent for Ksh.80,000 by cheque. Bought goods for Ksh.70,000 from Kliptop on credit. 6 January 2018 Sold goods worth Ksh.30,000 to Mata Retailers on credit . 10 January 2018 (8 marks) Record the above transactions in a ledger accounts of Juakali wholesalers. Explain each of the following terms as used in Artificial Intelligence: (a) Artificial Neural Networks; (4 marks) Expert Systems. Explain a reason why business use each of the following records in financial (b) accounting: (i) Petty cash; (4 marks) (ii) Sales journal. XYZ company has been advised to computerised its book-keeping and accounting (c) procedures. Outline four benefits that would be gained by the company from heeding the advice. (4 marks) Wendi intends to purchase a CAD program for use in her organisation to design drawings and objects. State three such programs she may choose from. (3 marks)

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