Q. Code:792567

Reg. No. | | | | | | | | | | | | | |

B. E / B. TECH.DEGREE EXAMINATIONS, MAY 2024

Sixth Semester

OE18808 – AI FOR ANDROID

(Regulation 2018/2018A)

TIME: 3 HOURS **MAX. MARKS: 100**

Course outcomes	STATEMENT	RBT LEVEL
CO1	Identify appropriate AI methods to solve a given problem	**5**
CO2	Implement AI for game playing concepts	**4**
CO3	Recognize the basics of Android	**4**
CO4	Construct an application using Android	**4**
CO 5	Employ AI for developing projects in Android	**5**

PART- A(10x2=20Marks)

(Answer all Questions)

		CO	RBT LEVEL
1.	What are the disadvantages of Depth Limited Search?	**1**	**2**
2.	Define Artificial Intelligence.	**1**	**2**
3.	Differentiate between alpha cutoff and beta cutoff.	**2**	**4**
4.	Identify the techniques which are required to get the best optimal solution in game playing.	**2**	**4**
5.	Relate how Android Emulator used.	**3**	**3**
6.	Show the components of android application.	**3**	**2**
7.	Identify the purpose of "Intent" in android application. Write relevant examples.	**4**	**4**
8.	Write a code snippet to display a message within an Android activity.	**4**	**3**
9.	Identify two primary challenges currently encountered by recommender systems.	**5**	**4**
10.	Outline any two key technological innovations that have significantly enhanced the travel experience for users.	**5**	**4**

PART- B (5x 14=70Marks)

		Marks	CO	RBT LEVEL
11. (a)	Apply any AI technique to solve the below mentioned 8 Puzzle problem and discuss the problem techniques and characteristics	**(14)**	**1**	**4**

Initial State:

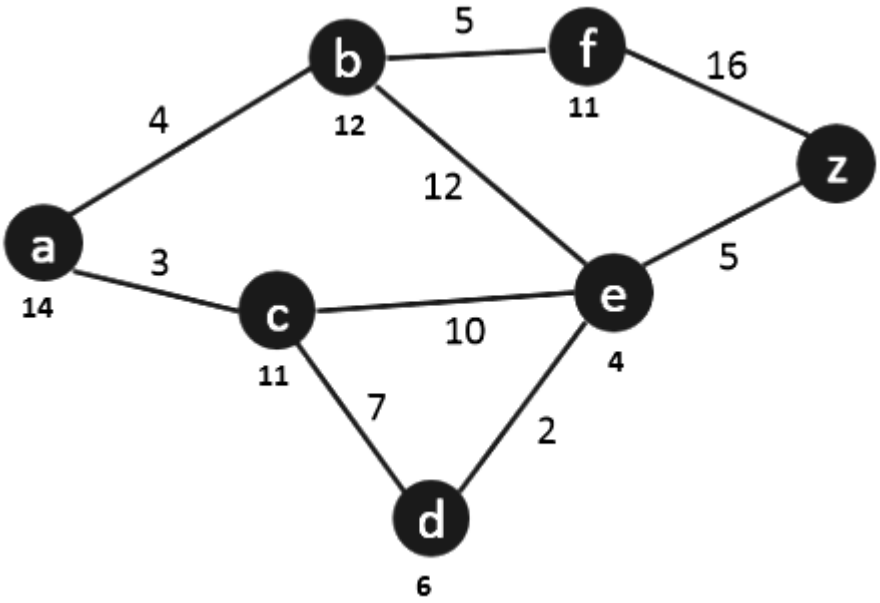
2	8	3
1	6	4
7		5

Goal State:

1	2	3
8		4
7	6	5

(OR)

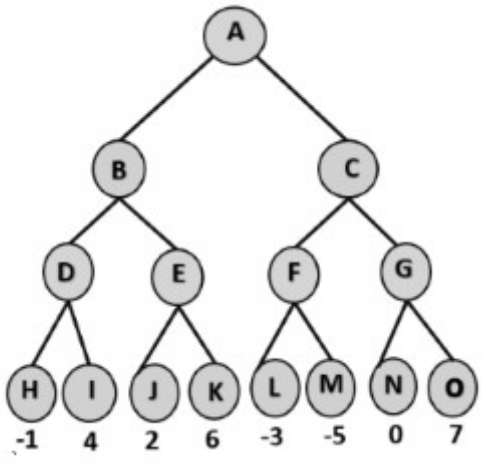
(b) Apply A* algorithm and identify the most cost effective path to reach from Initial State A to final state Z. **(14) 1 4**



12. (a) Illustrate the sequential procedures of Iterative Deepening Depth-First Search (IDDFS) and elaborate the algorithm using a tree example, also discuss the performance metrics involved. **(14) 2 3**

(OR)

(b) Consider the following game tree in which static scores are all from first player's point of view. Assuming the first player acts as the maximizing player, anticipate the optimal move to be selected. Write the suitable pseudo code for this decision-making process and Explain step by step procedure to identify the optimal move. **(14) 2 3**



13. (a)	Discuss in detail about the life cycle of an Android application, providing detailed insights into its various stages and transitions, with relevant examples.	**(14)**	**3**	**3**
	(OR)			
(b)	Describe the architecture of the Android operating system, detailing its key components and their interconnections. How does this architecture facilitate the development and execution of applications on Android devices?	**(14)**	**3**	**3**
14. (a)	Develop an Android application for sending and receiving broadcast messages.	**(14)**	**4**	**3**
	(OR)			
(b)	Develop an Android application for formatting the display of date and time.	**(14)**	**4**	**3**
15. (a)	Construct and analyze a case study outlining the development process and implementation considerations for a chatbot Android application.	**(14)**	**5**	**4**
	(OR)			
(b)	Construct and analyze a case study outlining the development and deployment of a recommender system within an Android application framework.	**(14)**	**5**	**4**

PART- C (1x 10=10Marks)

(Q.No.16 is compulsory)

		Marks	CO	RBT LEVEL
16.	Design a production system for sharing 2 litres of water to your friend using an empty 4-liter and 3-liter bottle. Outline the steps required to achieve this goal.	**(10)**	**2**	**5**