SET-1

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is Artificial Intelligence	**2**	**1**	C324.1	Remember
b.	What is Agent and agent program.	**2**	**1**	C324.1	Remember
c.	What are the properties of task environment	**2**	**1**	C324.1	Understand
d.	Define forward & backward chaining	**2**	**2**	C324.2	Remember
e.	Define A* search	**2**	**2**	C324.2	Analyze
2.	Explain constraint satisfaction problem	**10**	**1**	C324.1	Understand
3.a.	Explain breadth first search uniform search strategy	**5**	**1**	C324.1	Understand
b.	Explain Depth first search uniform search strategy	**5**	**1**	C324.1	Understand
4.	Illustrate the use of first order logic for simple representations	**10**	**2**	C324.2	Understand
5.	What is propositional Logic? How knowledge is represented by Propositional Logic	**10**	**2**	C324.2	Understand

SET-1

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is Artificial Intelligence	**2**	**1**	C324.1	Remember
b.	What is Agent and agent program.	**2**	**1**	C324.1	Remember
c.	What are the properties of task environment	**2**	**1**	C324.1	Understand
d.	Define forward & backward chaining	**2**	**2**	C324.2	Remember
e.	Define A* search	**2**	**2**	C324.2	Analyze
2.	Explain constraint satisfaction problem	**10**	**1**	C324.	Understand

SET-2

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

				1	
3.a.	Explain breadth first search uniform search strategy	**5**	**1**	C324.1	Understand
b.	Explain Depth first search uniform search strategy	**5**	**1**	C324.1	Understand
4.	Illustrate the use of first order logic for simple representations	**10**	**2**	C324.2	Understand
5.	What is propositional Logic? How knowledge is represented by Propositional Logic	**10**	**2**	C324.2	Understand

SET-3

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	Define the word Balancing Factor	**2**	**1**	C324.1	Remember
b.	What is heuristic search technique?	**2**	**1**	C324.1	Remember
c.	List the application areas of Artificial Intelligence	**2**	**1**	C324.1	Understand
d.	Give the statements on Wumpus World	**2**	**2**	C324.2	Remember
e.	Define first order Logic with an example	**2**	**2**	C324.2	Analyze
2.	Explain Kinds of agent programs	**10**	**1**	C324.1	Understand
3.	Explain problem formulation	**10**	**1**	C324.1	Understand
4.	Explain simple forward chaining algorithm with an example	**10**	**2**	C324.2	Understand
5.	Explain Inference rules for quantifiers	**10**	**2**	C324.2	Understand

SET-2

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	Define the word Balancing Factor	**2**	**1**	C324.1	Remember
b.	What is heuristic search technique?	**2**	**1**	C324.1	Remember
c.	List the application areas of Artificial Intelligence	**2**	**1**	C324.1	Understand
d.	Give the statements on Wumpus World	**2**	**2**	C324.2	Remember
e.	Define first order Logic with an example	**2**	**2**	C324.2	Analyze
2.	Explain Kinds of agent programs	**10**	**1**	C324.1	Understand
3.	Explain problem formulation	**10**	**1**	C324.1	Understand
4.	Explain simple forward chaining algorithm with an example	**10**	**2**	C324.2	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

5.	Explain Inference rules for quantifiers	**10**	**2**	C324.2	Understand

SET-5

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What are the properties of task environment	**2**	**1**	C324.1	Remember
b.	What is Artificial Intelligence	**2**	**1**	C324.1	Remember
c.	What is Agent and agent program.	**2**	**1**	C324.1	Understand
d.	Define A* search	**2**	**2**	C324.2	Remember
e.	Define forward & backward chaining	**2**	**2**	C324.2	Analyze
2.a	Explain breadth first search uniform search strategy	**5**	**1**	C324.1	Understand
b.	Explain Depth first search uniform search strategy	**5**	**1**	C324.1	Understand
3.	Explain constraint satisfaction problem	**10**	**1**	C324.1	Understand
4.	What is propositional Logic? How knowledge is represented by Propositional Logic	**10**	**2**	C324.2	Understand
5.	Illustrate the use of first order logic for simple representations	**10**	**2**	C324.2	Understand

SET-3

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What are the properties of task environment	**2**	**1**	C324.1	Remember
b.	What is Artificial Intelligence	**2**	**1**	C324.1	Remember
c.	What is Agent and agent program.	**2**	**1**	C324.1	Understand
d.	Define A* search	**2**	**2**	C324.2	Remember
e.	Define forward & backward chaining	**2**	**2**	C324.2	Analyze
2.a	Explain breadth first search uniform search strategy	**5**	**1**	C324.	Understand

SET-6

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

				1	
b.	Explain Depth first search uniform search strategy	**5**	**1**	C324.1	Understand
3.	Explain constraint satisfaction problem	**10**	**1**	C324.1	Understand
4.	What is propositional Logic? How knowledge is represented by Propositional Logic	**10**	**2**	C324.2	Understand
5.	Illustrate the use of first order logic for simple representations	**10**	**2**	C324.2	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is heuristic search technique?	**2**	**1**	C324.1	Remember
b.	List the application areas of Artificial Intelligence	**2**	**1**	C324.1	Remember
c.	Define the word Balancing Factor	**2**	**1**	C324.1	Understand
d.	Define first order Logic with an example	**2**	**2**	C324.2	Remember
e.	Give the statements on Wumpus World	**2**	**2**	C324.2	Analyze
2.	Explain problem formulation	**10**	**1**	C324.1	Understand
3.	Explain Kinds of agent programs	**10**	**1**	C324.1	Understand
4.	Explain Inference rules for quantifiers	**10**	**2**	C324.2	Understand
5.	Explain simple forward chaining algorithm with an example	**10**	**2**	C324.2	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is heuristic search technique?	**2**	**1**	C324.1	Remember
b.	List the application areas of Artificial Intelligence	**2**	**1**	C324.1	Remember
c.	Define the word Balancing Factor	**2**	**1**	C324.1	Understand
d.	Define first order Logic with an example	**2**	**2**	C324.2	Remember
e.	Give the statements on Wumpus World	**2**	**2**	C324.2	Analyze
2.	Explain problem formulation	**10**	**1**	C324.1	Understand
3.	Explain Kinds of agent programs	**10**	**1**	C324.1	Understand
4.	Explain Inference rules for quantifiers	**10**	**2**	C324.2	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) FIRST Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

5.	Explain simple forward chaining algorithm with an example	**10**	**2**	C324.2	Understand

SET-1

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is a planning graph?	**2**	**3**	C324.4	Remember
b.	Define Bayes rule.	**2**	**4**	C324.5	Remember
c.	What is Bayesian network?	**2**	**4**	C324.5	Understand
d.	Define supervised & unsupervised Learning?	**2**	**5**	C324.6	Remember
e.	Define decision tree?	**2**	**5**	C324.6	Analyze
2.	Demonstrate planning with state space search approaches with suitable examples.	**10**	**3**	C324.4	Understand
3.a.	Explain axioms of probability?	**5**	**4**	C324.5	Understand
b.	What is uncertain knowledge? How knowledge is acting under uncertainity?	**5**	**4**	C324.5	Understand
4.	Explain EM algorithm?	**10**	**5**	C324.6	Understand
5.	Explain inductive learning	**10**	**5**	C324.6	Understand

SET-1

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: **30M**

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is a planning graph?	**2**	**3**	C324.1	Remember
b.	Define Bayes rule.	**2**	**4**	C324.1	Remember
c.	What is Bayesian network?	**2**	**4**	C324.1	Understand
d.	Define supervised & unsupervised Learning?	**2**	**5**	C324.2	Remember
e.	Define decision tree?	**2**	**5**	C324.	Analyze

SET-2

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

				2	
2.	Demonstrate planning with state space search approaches with suitable examples.	**10**	**3**	C324.1	Understand
3.a.	Explain axioms of probability?	**5**	**4**	C324.1	Understand
b.	What is uncertain knowledge? How knowledge is acting under uncertainity?	**5**	**4**	C324.1	Understand
4.	Explain EM algorithm?	**10**	**5**	C324.2	Understand

5.	Explain inductive learning	**10**	**5**	C324.	Understand

SET-3

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL
Department of Computer Science & Engineering
B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021
ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	**Unit**	**CO**	**Cognitive Level**
1.a.	Define backward state space search	**2**	**3**	C324.4	Remember
b.	Define the semantics of belief networks	**2**	**4**	C324.5	Remember
c.	Write 7 axioms of probability?	**2**	**4**	C324.5	Understand
d.	Define neural network and artificial neural network.	**2**	**5**	C324.6	Remember
e.	Differentiate ADP approach & TD approach	**2**	**5**	C324.6	Analyze
2.	Explain graph plan algorithm	**10**	**3**	C324.4	Understand
3.	What is HMM? Explain simplified matrix algorithm?	**10**	**4**	C324.5	Understand
4.	What are the basic inference tasks to solve for setting up the structure of a genetic temporal model? Discuss	**10**	**4**	C324.5	Understand
5.	Explain Reinforcement learning?	**10**	**5**	C324.6	Understand

SET-2

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL
Department of Computer Science & Engineering
B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021
ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	**Unit**	**CO**	**Cognitive Level**
1.a.	Define backward state space search	**2**	**3**	C324.4	Remember
b.	Define the semantics of belief networks	**2**	**4**	C324.5	Remember
c.	Write 7 axioms of probability?	**2**	**4**	C324.5	Understand
d.	Define neural network and artificial neural network.	**2**	**5**	C324.6	Remember
e.	Differentiate ADP approach & TD approach	**2**	**5**	C324.6	Analyze
2.	Explain graph plan algorithm	**10**	**3**	C324.4	Understand
3.	What is HMM? Explain simplified matrix algorithm?	**10**	**4**	C324.5	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

4.	What are the basic inference tasks to solve for setting up the structure of a genetic temporal model? Discuss	**10**	**4**	C324.5	Understand
5.	Explain Reinforcement learning?	**10**	**5**	C324.6	Understand

SET-5

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is Bayesian network?	**2**	**4**	C324.5	Understand
b.	What is a planning graph?	**2**	**3**	C324.4	Remember
c.	Define Bayes rule.	**2**	**4**	C324.5	Remember
d.	Define decision tree?	**2**	**5**	C324.6	Analyze
e.	Define supervised & unsupervised Learning?	**2**	**5**	C324.6	Remember
2.a.	Explain axioms of probability?	**5**	**4**	C324.5	Understand
b.	What is uncertain knowledge? How knowledge is acting under uncertainity?	**5**	**4**	C324.5	Understand
3.	Demonstrate planning with state space search approaches with suitable examples.	**10**	**3**	C324.4	Understand
4.	Explain inductive learning	**10**	**5**	C324.6	Understand
5.	Explain EM algorithm?	**10**	**5**	C324.6	Understand

SET-3

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	What is Bayesian network?	**2**	**4**	C324.5	Understand
b.	What is a planning graph?	**2**	**3**	C324.4	Remember
c.	Define Bayes rule.	**2**	**4**	C324.5	Remember
d.	Define decision tree?	**2**	**5**	C324.6	Analyze
e.	Define supervised & unsupervised Learning?	**2**	**5**	C324.6	Remember
2.a.	Explain axioms of probability?	**5**	**4**	C324.	Understand

SET-6

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

				5	
b.	What is uncertain knowledge? How knowledge is acting under uncertainity?	**5**	**4**	C324.5	Understand
3.	Demonstrate planning with state space search approaches with suitable examples.	**10**	**3**	C324.4	Understand
4.	Explain inductive learning	**10**	**5**	C324.6	Understand
5.	Explain EM algorithm?	**10**	**5**	C324.6	Understand

SET-7

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

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ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	Define backward state space search	**2**	**3**	C324.4	Remember
b.	Write 7 axioms of probability?	**2**	**4**	C324.5	Understand
c.	Define the semantics of belief networks	**2**	**4**	C324.5	Remember
d.	Differentiate ADP approach & TD approach	**2**	**5**	C324.6	Analyze
e.	Define neural network and artificial neural network.	**2**	**5**	C324.6	Remember
2.	What is HMM? Explain simplified matrix algorithm?	**10**	**4**	C324.5	Understand
3.	Explain graph plan algorithm	**10**	**3**	C324.4	Understand
4.	Explain Reinforcement learning?	**10**	**5**	C324.6	Understand
5.	What are the basic inference tasks to solve for setting up the structure of a genetic temporal model? Discuss	**10**	**4**	C324.5	Understand

SET-4

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

		Marks	Unit	CO	Cognitive Level
1.a.	Define backward state space search	**2**	**3**	C324.4	Remember
b.	Write 7 axioms of probability?	**2**	**4**	C324.5	Understand
c.	Define the semantics of belief networks	**2**	**4**	C324.5	Remember
d.	Differentiate ADP approach & TD approach	**2**	**5**	C324.6	Analyze
e.	Define neural network and artificial neural network.	**2**	**5**	C324.6	Remember
2.	What is HMM? Explain simplified matrix algorithm?	**10**	**4**	C324.5	Understand
3.	Explain graph plan algorithm	**10**	**3**	C324.4	Understand

SET-8

Code : 15A05606 **R15**

RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN: KURNOOL

Department of Computer Science & Engineering

B.Tech III Year – II SEM (R15) SECOND Mid – term Examinations, AUGUST, 2021

ARTIFICIAL INTELLIGENCE

Time: 90 minutes **Max. Marks**: 30

Answer Q1 completely. Answer any 1 question from Q2 , Q3 & Q4, Q5

4.	Explain Reinforcement learning?	**10**	**5**	C324.6	Understand
5.	What are the basic inference tasks to solve for setting up the structure of a genetic temporal model? Discuss	**10**	**4**	C324.5	Understand