

CS607-Artificial Intelligent FINAL TERM MCQS

Prepared by: JUNAID MALIK

AL-JUNAID TECH INSTITUTE



www.vulmshelp.com



Language Courses Training Available

I'm providing paid courses in different languages within 3 Months, Certificate will be awarded after completion.

- HTML
- CSS
- JAVASCRIPT
- BOOTSTRAPS
- JQUERY
- PHP MYSQL
- NODES.JS
- REACT JS

LMS Handling Services

LMS Activities Paid Task

Assignments 95% Results

Quizes 95% Results

GDB 95% Results

For CS619 Project Feel Free To Contact With Me

Ph# 0304-1659294
Email: junaidfzal08@gmail.com

AL-JUNAID INSTITUTE GROUP

ALL answers are verified if found any
mistake then Correct ACCORDINGLY

Question No: 1

Please choose one

Which one is NOT the feature of Robot?

- ► Reasoning, dealing with uncertainty
- ► Vision, learning
- ► Autonomy, physical Intelligence
- ► **None (Page 204)**

Question No: 2

Please choose one

Robotics have active contributions
from _____

- ► Biology
- ► Psychology
- ► Mathematics
- ► **All of the given (Page 204)**

Question No: 3

Please choose one

Robotics have active contributions from _____

- ► Biology
- ► Psychology
- ► Mathematics
- ► **All of the given (Page 204)**

Question No: 4

Please choose one

Which one is the advantage of Neural Network

- ► **Good for generalization (Page 187)**
- ► The power of ANNs lie in their parallel architecture
- ► Less defined rules to build a natural network

AL-JUNAID INSTITUTE GROUP

- ▶ Knowledge implicit

Question No: 5

Please choose one

A single layer perceptron cannot perform pattern classification on linearly separable patterns.

- ▶ True
- ▶ False (Page 186)

Question No: 7

Please choose one

The Entropy is 1 when the collection contains number of positive examples _____ to/than negative examples

- ▶ Equal (Page 177)
- ▶ Greater
- ▶ Less
- ▶ None of the given

Question No: 8

Please choose one

In all calculations involving Entropy we define _____ to be _____

- ▶ $0 \log 0, 0$ (Page 177)
- ▶ $0 \log 10, 1$
- ▶ $0 \log 0, 1$
- ▶ $1 \log 1, 1$

Question No: 9

Please choose one

If the true output of a concept $[c(x_i)]$ is 1 or 0 for an instance, then the output by our hypothesis $[h(x_i)]$ is 1 or 0 as well, respectively.

- ▶ True (Page 177)
- ▶ False

Question No: 10

please choose one

Machine learning typically follows _____ phases according to Finlay.

- ▶ 2
- ▶ 3 (Page 160)

AL-JUNAID INSTITUTE GROUP

- ▶ 4
- ▶ 5

Question No: 11

Please choose one

Which statement about learning is true:

- ▶ Learning is constructing or modifying representations of what is being experienced
- ▶ Learning denotes changes in a system that enables a system to do the same task more efficiently the next time.
- ▶ Learning is making useful changes in our minds.
- ▶ All of the given (Page 159)

Question No: 12

Please choose one

_____ is the process by which the fuzzy sets that represent the outputs of each rule are combined into a single fuzzy set.

- ▶ Aggregation (Page 157)
- ▶ Fuzzification
- ▶ Implication
- ▶ None of the given

Question No: 13

Please choose one

If there are multiple parts to the antecedent, apply fuzzy logic _____ and resolve the antecedent to a single number between 0 and 1.

- ▶ Operators (Page 153)
- ▶ Rules
- ▶ Conditions
- ▶ None of the given

Question No: 14

Please choose one

Usually a _____ graph is chosen to represent a fuzzy set.

- ▶ Triangular (Page 151)
- ▶ Circular
- ▶ Conical
- ▶ None of the given

AL-JUNAID INSTITUTE GROUP

Question No: 15

Please choose one

Reasoning in fuzzy logic is just a matter of generalizing the familiar _____ logic.

▶ Boolean (Page 147)

- ▶ Complex
- ▶ Coognitive
- ▶ Supervised

Question No: 16

Please choose one _____ is a subfield of _____.

▶ Computer vision, Artificial Intelligence (Page 203)

- ▶ Robotics, Artificial Intelligence
- ▶ Soft computing, Artificial Intelligence
- ▶ None of these

Question No: 17

Please choose one

Each neuron in the hidden layer is responsible for a different _____.

▶ Line (Page 186)

- ▶ Layer
- ▶ Phase
- ▶ None of these

Question No: 18

Please choose one

_____ is the process of formulating the mapping from a given input to an output using Fuzzy logic.

▶ FIS (Page 153)

- ▶ PIS
- ▶ Fuzzy logic
- ▶ None of these

Question No: 19

Please choose one

AL-JUNAID INSTITUTE GROUP

Fuzzy logic is a superset of _____ logic.

▶ conventional (Page 147)

- ▶ positive
- ▶ negative
- ▶ None of these

Question No: 20
Please choose one

We can get optimal solution given some parameters using Genetic Algorithm.

▶ True (Page 79)

▶ False

Question No: 21
Please choose one

_____ reasoning is based on forming, or inducing a „generalization“ from a limited set of observations.

- ▶ Deductive
- ▶ Abductive
- ▶ Analogical
- ▶ Inductive (Page 102)

Question No: 22
Please choose one

_____ is the process of deriving logical conclusions from given facts.

- ▶ Representation
- ▶ Execution
- ▶ Reasoning (Page 102)
- ▶ Planning

Question No: 23
Please choose one

Identify the correct step used to start design of an expert system.

AL-JUNAID INSTITUTE GROUP

- ▶ Feasibility study (Page 129)
- ▶ Problem reorganization
- ▶ Scope study
- ▶ Rapid prototyping

Question No: 24
Please choose one

Any statement can be fuzzy

- ▶ True (Page 147)
- ▶ False

Question No: 25
Please choose one

If the antecedent is only partially true, then the output fuzzy set is truncated according to the _____ method

- ▶ Intrinsic
- ▶ Implication (Page 153)
- ▶ Boolean
- ▶ None of the given

Question No: 26
Please choose one

Choose the fields in which Fuzzy inference systems have been successfully applied:

- ▶ automatic control
- ▶ data classification
- ▶ decision analysis
- ▶ All of the given (Page 153)

Question No: 27
Please choose one

The degree of truth that we have been talking about is specifically driven

AL-JUNAID INSTITUTE GROUP

out by a function called the _____ function.

▶ Membership (Page 149)

▶ Ordinary

▶ Fuzzy

▶ Inline

Question No: 28

Please choose one

The tractable problems are further divided into structured and _____ problems

▶ Non-structured

▶ Complex (Page 166)

▶ Simple

Question # 28

Please Select One

Within an expert system, the _____ contains facts about a specific subject area and rules that express the reasoning procedures of an expert on the subject.

▶ Inference engine

▶ Knowledge engineer

▶ Knowledge base

▶ None of the given options

Question # 29

Please Select One

one Semantic networks are graphs, with nodes representing _____ and arcs representing _____ between objects.

▶ objects, relationships (Page 97)

▶ relationships, distance

▶ objects, distance

▶ distance, relationships

Question # 30

Please choose one

AL-JUNAID INSTITUTE GROUP

What is the correct order for solving a problem using GA I. Choose the best individuals from the population for crossover II. Choose initial population III. Evaluate the fitness of each individual

- ▶ I,II,III
- ▶ I,III,II
- ▶ II,I,III
- ▶ II,III,I (Page 84)

Question # 31
Please choose one

A statement in conjunctive normal form (CNF) consists of _____

- ▶ ANDs of Ors. (Page 107)
- ▶ ANDs
- ▶ Ors
- ▶ Ors of ANDs

Question # 32
Please choose one

In adversarial search there may occur such a scenario where two opponents also called _____ are searching for goal.

- ▶ Adversaries (Page 62)
- ▶ Friend
- ▶ Players
- ▶ Intruders

Question # 33
Please choose one

In GA, the random process is repeated until an individual with required _____ level is found. Select correct option:

- ▶ Higher
- ▶ Lower
- ▶ Fitness (Page 86)

AL-JUNAID INSTITUTE GROUP

► Logical

Question # 34

Please choose one

A function by which we can tell which board position is nearer to our goal is called

- Alternative function
- Recursive function
- Best function
- Fitness function (Page 83)

Question # 35

Please choose one

Mutation can be as simple as just flipping a bit at random or any number of bits

- True (Page 79)
- False

Question # 36

Please choose one

In Depth First Search the node with the largest value of height will be at the _____ priority to be picked.

- Minimum
- Maximum (Page 25)
- Zero
- Both Minimum and maximum

Question # 37

Please choose one

A proposition is the statement of a _____.

- Fact (Page 98)

AL-JUNAID INSTITUTE GROUP

- ▶ Equation
- ▶ Action
- ▶ Theorem

Question # 38

Please choose one

A drawback of FIND-S is that, it assumes the consistency within the training set.

- ▶ True (Page 173)
- ▶ False

Question # 39

Please choose one

Decision trees give us disjunctions of conjunctions, that is, they have the form: (A AND B) _____ (C AND D).

- ▶ OR (Page 176)
- ▶ AND
- ▶ XOR
- ▶ None of the given

Question # 40

Please choose one

Hypothesis space uses the _____ of the attributes.

- ▶ Conjunctions (AND) (Page 168)
- ▶ Disjunctions (OR)
- ▶ Negation (NOR)
- ▶ None of the given

Question # 41

Please choose one

Measure of the effectiveness of an attribute in classifying the training data is called.

- ▶ Information Gain (Page 177) ▶ Measure Gain
- ▶ Information Goal
- ▶ None of the given

AL-JUNAID INSTITUTE GROUP

Question # 42

Please choose one

The first step of FIND-S is to initialize h to the most specific hypothesis in _____
: $h = \langle \emptyset, \emptyset \rangle$

- ▶ H (Page 172)
- ▶ I
- ▶ J
- ▶ K

Question # 43

Please choose one

A concept is the representation of the _____ with respect to the given attributes.

- ▶ Solution
- ▶ Problem (Page 167)
- ▶ Knowledge
- ▶ None of the given

Quiz No.44

Please choose one

Outputs of learning are determined by the _____

- ▶ Application (Page 161)
- ▶ Validation
- ▶ Training
- ▶ None of the given

Question # 45

Please choose one

The Candidate-Elimination algorithm represents the _____

- ▶ Version space (Page 173)
- ▶ Solution space
- ▶ Elimination space
- ▶ None of the given

AL-JUNAID INSTITUTE GROUP

Question # 46

Please choose one

Inductive learning takes examples and generalizes rather than starting with _____ knowledge.

▶ Existing (Page 162)

- ▶ Inductive
- ▶ Deductive
- ▶ None of the given

Question # 47

Please choose one

The brain is a collection of about 100 _____ interconnected neurons.

- ▶ Million
- ▶ Billion (Page 181)
- ▶ Trillion
- ▶ None of the given

Question # 48

Please choose one

Machine learning is a prerequisite for any mature program of artificial intelligence

▶ True (Page 160)

▶ False

Question # 49

Please choose one

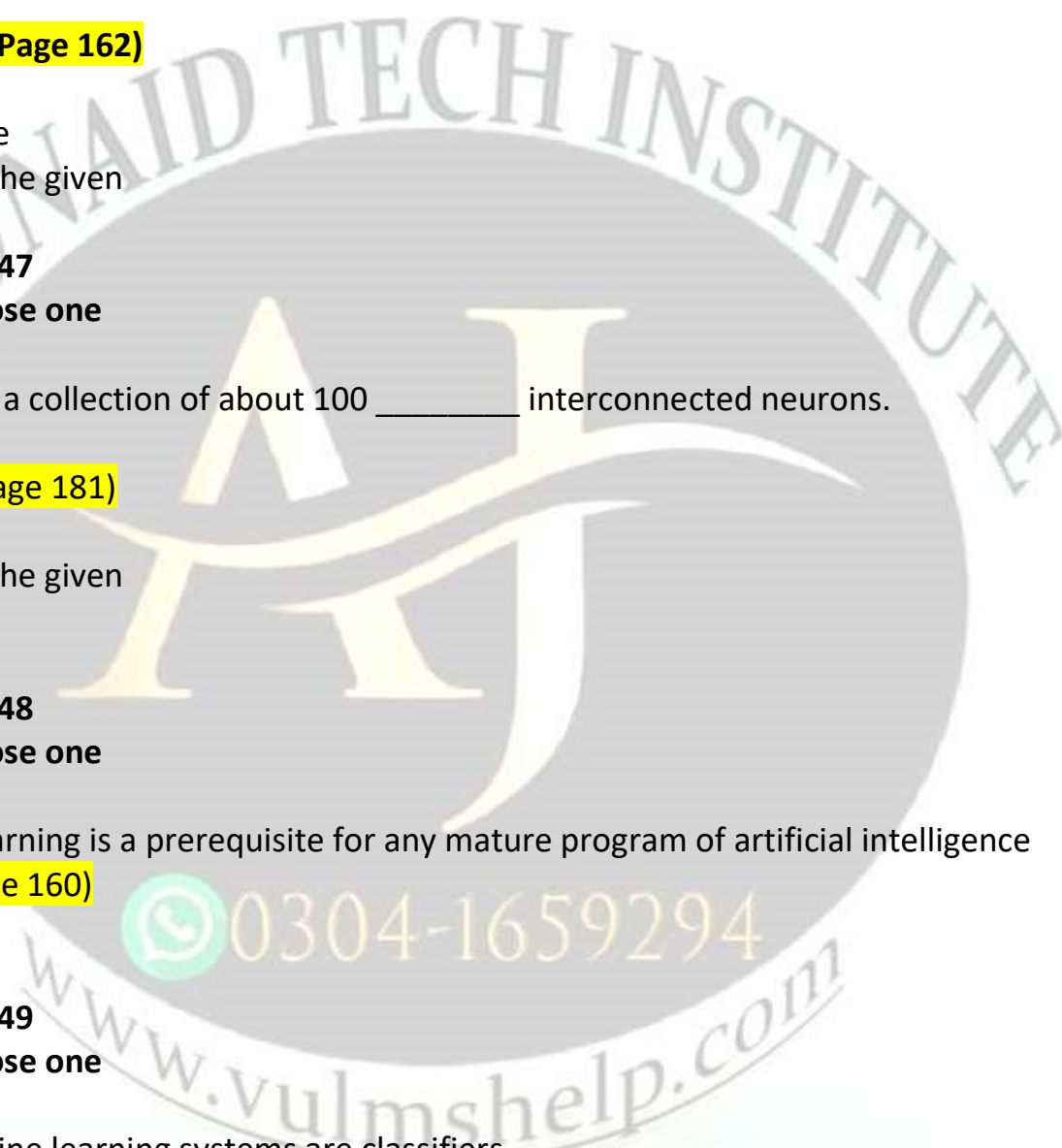
Many machine learning systems are classifiers

▶ True (Page 161)

▶ False

Question # 50

Please choose one



AL-JUNAID INSTITUTE GROUP

_____ stands for interactive dichotomizer

- ▶ ID (Page 177)
- ▶ IDC
- ▶ Int D
- ▶ None of the given

Question # 51

Please choose one

_____ learning works on existing facts and knowledge and deduces new knowledge from the old.

- ▶ Deductive (Page 162)
- ▶ Inductive
- ▶ Application
- ▶ None of the given

Question # 52

Please choose one _____ logic lets us define more realistically the true functions that define real world

- ▶ Fuzzy (Page 148)
- ▶ Classical
- ▶ Boolean
- ▶ None of the given

Question # 53

Please choose one

In theoretical computer science there are two main branches of problems:

- ▶ Tractable and intractable (Page 165)
- ▶ Intractable and induction ▶ Tractable and induction
- ▶ None of the given

Question # 54

Please choose one

AL-JUNAID INSTITUTE GROUP

Complex problems usually have well-defined steps

- ▶ True
- ▶ False (Page 165)

Question # 55

Please choose one

Entropy characterizes the purity/impurity of an arbitrary collection of examples

- ▶ True
- ▶ False (Page 177)

Question # 56

Please choose

one In ANNs, Training is the heart of learning, in which finding the best _____ that covers most of the examples is the objective.

- ▶ Hypothesis (Page 189)
- ▶ Neuron
- ▶ Agent
- ▶ Operator

Question # 57

Please choose one

Which one is NOT the phase of machine learning:

- ▶ Training
- ▶ Application
- ▶ Validation
- ▶ None of the given (Page 189)

Question # 58

Please choose one

AL-JUNAID INSTITUTE GROUP

A single perceptron simply draws a line, which is a hyper plan when data is _____ than 2 dimensional.

- ▶ More (Page 184)
- ▶ Less
- ▶ Equal
- ▶ None of the given

Question # 59

Please choose one

the input of aggregation is the list of truncated output functions returned by the _____ process for each rule.

- ▶ truncation
- ▶ implication (Page 184)
- ▶ Aggregation
- ▶ None of the given

Question # 60

Please choose one

Identify the sets in which Member function is used.

- ▶ Crisp set
- ▶ Classical set
- ▶ Fuzzy set (Page 149)
- ▶ None of the above

Question # 61

Please choose one

Identify the statement which best defines fuzzy sets.

- ▶ Fuzzy sets, unlike classical sets, restrict themselves to something lying wholly in either set A or in set not-A.
- ▶ Fuzzy sets, like classical sets, restrict themselves to something lying wholly in either set A or in set A.
- ▶ Fuzzy sets, unlike classical sets, do not restrict themselves to something lying wholly in either set A or in set not-A. (Page 146)
- ▶ Fuzzy sets, like classical sets, do not restrict themselves to

AL-JUNAID INSTITUTE GROUP

Question no 62

Please choose one

In Fuzzy Inputs we resolve all fuzzy statements in the antecedent to a degree of membership between 0 and _____

▶ 1 (Page 152)

▶ 2

▶ 3

▶ 4

Question # 63

Please choose one

The Multilayer Perceptrons are the most basic artificial neural _____

▶ Network (Page 186)

▶ System

▶ Interface

▶ None of these

Question # 64

Please choose one

Another expert system named _____ was developed by Digital Equipment Corporation, as a computer configuration assistant.

▶ R1/XCON (Page 112)

▶ MYCIN

▶ Dendral

▶ R3/XCON

Question # 65

Please choose one

AL-JUNAID INSTITUTE GROUP

Which one is not the application area of expert system?

- ▶ Diagnosis
- ▶ Prescription
- ▶ Interpretation
- ▶ None (Page 114)

Question # 66

Please choose one

An expert system is different from conventional programs in the sense that program control and knowledge are _____.

- ▶ Separate (Page 121)
- ▶ Defined
- ▶ Together
- ▶ Common

Question # 67

Please choose one

Which one of the following is involved in an ES development project:

- ▶ The domain expert
- ▶ The knowledge engineer
- ▶ The end user
- ▶ All of the given (Page 122)

Question # 68

Please choose one

“A computer program designed to model the problem solving ability of a human expert” is known as ---

- ▶ Expert system (Page 111)
- ▶ Intelligent System
- ▶ Echo System
- ▶ Energy System

AL-JUNAID INSTITUTE GROUP

Question # 69

Please choose one

An expert system may replace the expert or assist the expert

- ▶ True (Page 113)
- ▶ False

Question # 70

Please choose one

A ----- is „A person who posses the skill and knowledge to solve a specific problem in a manner superior to others“

- ▶ The domain expert (Page 122)
- ▶ The knowledge engineer
- ▶ The end user
- ▶ All of the given

Question # 71

Please choose one

Conventional programming focuses on _____, while ES programming focuses on _____

- ▶ Solution, Problem (Page 122)
- ▶ Problem, Solution
- ▶ Problem, Expert
- ▶ Solution, Expert

Question # 72

Please choose one

In backward chaining terminology, the hypothesis to prove is called the _____.

- ▶ Proof
- ▶ Goal (Page 126)
- ▶ Plan
- ▶ None of the given

Question # 73

Please choose one

AL-JUNAID INSTITUTE GROUP

Genetic algorithm uses evolutionary techniques, based on function optimization and artificial intelligence, to develop a solution.

▶ True [click here for detail](#)

▶ False

Question # 74

Please choose one

An AI system has a _____ component that allows the system to get information from its environment.

▶ Planning

▶ Perception (Page 89)

▶ Learning

▶ Execution

Question # 75

Please choose one

In the worst case of semantic network, we may need to traverse the entire network and then discover that the requested info _____.

▶ Does not exist (Page 97)

▶ Exists

▶ Is incorrect

▶ Is correct

Question # 76

Please choose one

An AI system must form a meaningful and useful _____ of the internal information.

▶ Representation (Page 89)

▶ Execution

▶ Learning

▶ Planning

Question # 77

Please choose one

AL-JUNAID INSTITUTE GROUP

Breadth-first search is a good idea when you are confident that the branching factor is _____

- ▶ Extremely small
- ▶ Small (Artificial Intelligence,
- ▶ Medium
- ▶ Large

Question # 78

Please choose one

Progressive deepening guarantees to find the solution at a minimum depth like

- ▶ DFS
- ▶ BFS (Page 37)
- ▶ None

Question # 79

Please choose one

In Adversarial search the goals of the adversaries are usually _____ to each other

- ▶ Contrary (Page 62)
- ▶ Same
- ▶ None

Question # 80

Please choose one

Which Cycle does the following figure show?

- ▶ AI Cycle (Page 89)
- ▶ Design Cycle
- ▶ SDLC
- ▶ None

Question # 81

Please choose one



AL-JUNAID INSTITUTE GROUP

To infer new information from semantic networks, we can ask questions from nodes.

▶ True (Page 97)

▶ False

Question 82

Please choose one

Semantic networks are computationally expensive at _____

▶ Run time (Page 97)

▶ Compile Time

▶ Start Time

▶ End Time

Question # 83

Please choose one

“The branch of computer science that is concerned with the automation of intelligent behavior” this definition is from:

▶ Luger and Stubblefield (Page 8)

▶ Winston

▶ Schalkoff

▶ Bellman

Question # 84

Please choose one

Searching is a formal mechanism to explore

▶ Alternatives (Page 21)

▶ Recursive

▶ Best

▶ Fitness

Question # 85

Please choose one

AL-JUNAID INSTITUTE GROUP

In Artificial Intelligence GA stands for Genetic Algorithms

▶ True (Page 77) ▶ False

Question # 86

Please choose one

----- is based on forming, or inducing a „generalization“ from a limited set of observations

▶ Inductive reasoning (Page 102)

▶ Deductive reasoning

▶ Analogical reasoning

▶ Common-sense reasoning

Question # 87

Please choose one

Hill Climbing is basically a ----- with a measure of quality that is assigned to each node in the tree.

▶ Depth First Search (Page 39)

▶ Breadth First Search

▶ Best First Search

▶ Beam Search

Question # 88

Please choose one

----- are closely coupled components; each is intrinsically tied to the other.

i-Knowledge representation ii-Reasoning iii-Planning iv-Execution

▶ ii & iii

▶ ii & iii

▶ iii & iv

▶ i & ii (Page 89)

Question # 89

Please choose one

AL-JUNAID INSTITUTE GROUP

Which one of the problem is more subtle, and consequently, is more frustrating:

- ▶ Foothill problem
- ▶ Plateau
- ▶ Ridge (Artificial Intelligence, 3/E)
- ▶ Box

Question #90

Please choose one

Most of the solution spaces for problems can be represented in a _____

- ▶ Graph (Page 21)
- ▶ Table
- ▶ Demo

Question #91

Please choose one

By getting grips on _____ that deal with searching techniques in graphs and trees, problem solving can be performed in an efficient manner.

- ▶ Pseudocode
- ▶ Algorithms (Page 21)
- ▶ Charts
- ▶ Graphs

Question # 92

Please choose one

Every graph can be converted into a tree.

- ▶ True (Page 22)
- ▶ False

Question # 93

Please choose one

AL-JUNAID INSTITUTE GROUP

In Breadth First Search the node with the largest value of height will be at the _____ priority to be picked. ▶ Maximum (Page 28)

- ▶ Minimum
- ▶ None of the given

Question # 94

Please choose one

The foothill problem occurs whenever there are _____ peaks.

- ▶ High
- ▶ Secondary (Artificial Intelligence, 3/E)
- ▶ Primary
- ▶ Deep

Question # 95

Please choose one

The Plateau problem comes up when there is a mostly flat area _____ the peaks.

- ▶ Separating (Artificial Intelligence, 3/E)
- ▶ Joining
- ▶ Over
- ▶ None of the given

Question # 96

Please choose one

The paths found by best-first search are likely to be _____ than those found with other methods.

- ▶ None of the given
- ▶ Shorter (Artificial Intelligence, 3/E)
- ▶ Longer

Question #97

Please choose one

AL-JUNAID INSTITUTE GROUP

In Basic Genetic Algorithm the term mutation refers to a small random _____.

- ▶ Number
- ▶ Change (Page 77)
- ▶ Operator
- ▶ Operand

Question # 98

Please choose one

Which of the following two components are closely coupled and each is intrinsically tied to the other. i. Knowledge representation ii. Reasoning iii. Execution iv. Planning

- ▶ i & iii
- ▶ ii & iii
- ▶ iii & iv
- ▶ i & ii (Page 89)

Question # 99

Please choose one

Some essential components of problem solving are Problem statement, _____, solution space and Operators

- ▶ Complex State
- ▶ Initial State
- ▶ Intermediate State
- ▶ Goal State (Page 17)

Question 100

Please choose one

The traveling inside a solution space requires something called as _____

- ▶ Operands
- ▶ Inner solution
- ▶ Space solution
- ▶ Operators (Page 18)

Question # 101

Please choose one

AL-JUNAID INSTITUTE GROUP

Genetic Algorithms is a search method in which multiple search paths are followed in

- ▶ Series
- ▶ Parallel (Page 77)
- ▶ None of the give
- ▶ Sequential

Question # 102
Please choose one

Which of the following disciplines provides us with the theories of structure and meaning of language

- ▶ Linguistic (Page 9)
- ▶ Philosophy
- ▶ Biology
- ▶ Psychology

Question #103
choose one In

optimal path searches we try to find the _____ solution

- ▶ Least
- ▶ Worst
- ▶ Least but not worst
- ▶ Best (Page 24)

Question # 104
Please choose one

From discipline _____ we have information about the network structure of a human brain and all the theories on functionalities of different human organs.

- ▶ Mathematics
- ▶ Biology (Page 9)
- ▶ Computer Science
- ▶ Psychology

AL-JUNAID INSTITUTE GROUP

Question # 105

Please choose one

Hit and trial is classical approach to solve the _____ problem easily

- ▶ Trivial (Page 15)
- ▶ Medium

Question # 106

Please choose one

Intelligence id the characteristics of:

- ▶ Living things (Page 4)
- ▶ All things
- ▶ None of them
- ▶ All of them

Question # 107

Please choose one

Intelligence is the ability to

- ▶ Think / learn/Plan/ Schedule (Page 5)
- ▶ Recognize / Remember
- ▶ Problem Solving
- ▶ All of the Above

Question #108

choose one

Ability to tackle ambiguous and fuzzy problems demonstrate

- ▶ Intelligence (Page 6)
- ▶ Non intelligence behavior
- ▶ All of the given
- ▶ None of the given

AL-JUNAID INSTITUTE GROUP

Question # 109

Please choose one

Can we precisely define Artificial Intelligence?

- ▶ Yes We Can
- ▶ No we cannot (Page 14)

Question # 110

Please choose one

The traveling inside solution space requires something called

- ▶ Problem Statement
- ▶ Operands
- ▶ Operators (Page 18)
- ▶ Solution Space

Question # 111

Please choose one

In DFS node with the largest value of height will be at Priority

- ▶ Maximum (Page 25)
- ▶ Minimum
- ▶ Zero
- ▶ Least

Question # 112

Please choose one

Try to catch out own thoughts as they go by is

- ▶ Introspection (Page 28)
- ▶ Psychology
- ▶ Both of above
- ▶ None of the above

Question # 113

Please choose one

AL-JUNAID INSTITUTE GROUP

Classical way of problem solving

- ▶ GA
- ▶ Generate and Test (Page 15)

Question # 114
please choose one

Procedures that search the solution space in an uninformed manner are usually costly with respect to _____.

- ▶ Time
- ▶ Space
- ▶ Time and space both
- ▶ All of the given (Page 37)

Question # 115
Please choose one

Answering the Sequence Problem need

- ▶ Intelligence (Page 15)
- ▶ Ability to make plan
- ▶ Ability to schedule
- ▶ None of the given

Question # 116
Please choose one

IF A THEN B This can be considered to have a similar logical meaning as the following:

- ▶ A \rightarrow B (Page 99)
- ▶ A \leftrightarrow B
- ▶ A \leftarrow B
- ▶ None of the given

Question # 117
Please choose one

AL-JUNAID INSTITUTE GROUP

In the statement "IF A THEN B", B is called

- ▶ Antecedent
- ▶ Consequent (Page 95)

Question # 118

Please choose one

In general, the antecedent of a rule compares an object with a possible value, using an operator.

- ▶ True click here for detail
- ▶ False

Question # 119

Please choose one

Which of the following is a valid example which represents a suitable antecedent in a rule?

- ▶ IF $x > 3$
- ▶ IF name is "Bob"
- ▶ IF weather is cold
- ▶ All of the given options

Question # 120

Please choose one

From discipline of _____ we have the tools and techniques to investigate the human mind and ways to represent the resulting theories

- ▶ Computer Science
- ▶ Biology
- ▶ Mathematics
- ▶ Psychology (Page 9)

Question # 121

Please choose one

AL-JUNAID INSTITUTE GROUP

Intelligence is the characteristic of

▶ Living being (Page 4)

- ▶ All things
- ▶ None of them
- ▶ All of them

Question # 122

Please choose one

_____ AI actually tries to recreate the functions of the inside of the brain as opposed to simply emulating behavior ▶ Weak

▶ Strong (Page 8)

- ▶ Weak and Strong
- ▶ None of the given

Question # 123

Please choose one

_____ AI treats the brain as a black box and just emulates its functionality.

▶ Weak (Page 8)

- ▶ Strong
- ▶ Weak and Strong
- ▶ None of the given

Question # 124

Please choose one

Aggregation only occurs once for each output variable, just after the fifth and final step, defuzzification.

▶ True (Page 157)

▶ False

Question # 125

Inductive learning takes examples and generalizes rather than starting with _____ knowledge.

- Existing
 - Inductive
 - Deductive
 - None of the given

AL-JUNAID INSTITUTE GROUP

Question # 126

In theoretical computer science there are two main branches of problems:

Select correct option:

Tractable and Intractable

Intractable and Induction

Tractable and Induction

None of the given

Question # 127

Which one is NOT the phase of machine learning:

Select correct option:

- a. Validation
- b. Training
- c. Application
- d. none of given

Question # 128

Decision trees give us disjunctions of conjunctions, that is, they have the form:

(A AND B) _____ (C AND D).

OR

AND

NAND

None

Question # 130

A concept is the representation of the _____ with respect to the given attributes.

Select correct option:

Solution

Problem

Knowledge

None of the given

Question # 131

_____ learning works on existing facts and knowledge and deduces new knowledge from the old.

Deductive

Inductive

Application

None

Question # 132

AL-JUNAID INSTITUTE GROUP

The Entropy is 1 when the collection contains number of positive examples _____ to/than negative examples.

Equal

Greater

Less

None of the given

Question # 133

Artificial Neural Networks is a new learning paradigm which takes its roots from _____

inspired approach to learning.

- ♣ Chemistry
- ♣ Physics
- ♣ **Biology**
- ♣ Mathematics

Question # 134

Fuzzy inference systems (FIS) have multidisciplinary nature.

- ♣ True
- ♣ False

Question # 135

In ANNs, MSE is known as

- ♣ Most Squared Error
- ♣ **Mean Squared Error**
- ♣ Medium Squared Error
- ♣ None of the given

Question # 136

Inductive learning is based on the knowledge that if something happens a lot it is likely to

be generally _____

- ♣ **True**
- ♣ False
- ♣ Ambiguous
- ♣ None of the given

Question # 137

The input of the aggregation process is the list of truncated output functions returned by

the _____ process for each rule.

- ♣ Truncation
- ♣ **Implication**
- ♣ Aggregation
- ♣ None of the given

Question # 138

Aggregation only occurs once for each output variable, just after the fifth and final step,

defuzzification.

- ♣ **True**
- ♣ False

AL-JUNAID INSTITUTE GROUP

Question # 139

Decision trees give us disjunctions of conjunctions, that is, they have the form: (A AND B)

_____ (C AND D).

♣ OR

♣ AND

♣ XOR

♣ None of the given

Question # 140

Identify the step involved in planning phase.

- Coding
- **Resource allocation** page 129
- Knowledge acquisition from expert
- Identify concrete knowledge elements

Question # 141

Which of the following command is correct for adding numbers in CLIPS?

- CLIPS> (3 + 4)
- **CLIPS> (+ 3 4)** page 133
- CLIPS> (3 4 +)
- CLIOS> (+ 3 4 +)

Question # 142

During__stage knowledge engineer works with the domain expert to acquire, organize andanalyse the domain knowledge.

- System Design
- Feasibility Study
- System Planning
- **Knowledge acquisition** page 129, 130

Question # 143

Which of the following command is used to see the added facts in CLIPS?

- **(facts)** page 134
- (fact)
- Fact
- Deftemplate

Question # 144

the correct command is load a CLIPS file is:

- (read "filename.clp")
- (loadfile "filename.clp")
- **(load "filename.clp")** page 137
- (readfile "filename.clp")

Question # 145

In CLIPS,_____command is used to remove facts.

AL-JUNAID INSTITUTE GROUP

- facts
- **retract** page 134
- erase
- delete

Question # 146

The goal of _____ is to analyse and structure the knowledge gained during the knowledge acquisition phase.

- Knowledge structure
- Knowledge design
- **Knowledge analysis** page 131
- ES design
-

Question # 147

In context of ES development, which of the following will be part of planning phase?

- Identify concrete knowledge elements
- **Feasibility assessment** page 129
- Coding
- Knowledge acquisition from expert

Question # 148

In CLIPS, the _____ command is used for debugging programs.

- FACT
- CLEAR
- DEBUG
- **WATCH** page 135

Question # 149

Knowledge elicitation methods may be classified into:

- **Direct and indirect methods** page 130,131
- Hierarchical and non hierarchical methods
- Data driven and application driven methods
- Direct and hierarchical

Question # 150

CLIPS stands for:

- C# Language Integrated Production System
- COBOL Language Integrated Production System
- C++ Linguist Integrated Production System
- **C Language Integrated Production System** page 133

Question # 151

- **Identify the sequence wise main phases of Linear model used in**

AL-JUNAID INSTITUTE GROUP

developing expert system

- 1)Planning 2)Knowledge acquisition and analysis 3)Knowledge design 4)System evaluation 5)Code 6)Knowledge verification
- 1)Planning 2)Knowledge acquisition and analysis 3)Knowledge design 4) Code 5)Knowledge verification 6) System evaluation page 129
- 1)Planning 2)Knowledge acquisition and analysis 3)Knowledge design 4) Code 5) System evaluation 6) Knowledge verification
- 1)Planning 2)Knowledge acquisition and analysis 3)System evaluation 4) Knowledge design 5)Code 6)Knowledge verification

Question # 152

In context of CLIPS , “agenda” is the list of _____

- **Activated rules** page 136
- Activated relations
- Activated deftemplates
- Deactivated rules

Question # 153

_____ encode the knowledge of rules and strategies.

- ES model
- ES requirements
- Knowledge base

- **Inference networks** page 132

Question # 154

Which of the following is one of the general stages of ESDLC?

- Spiral model
- Design coding
- Linear model
- **Beta system (tested by users)** page 129

Question # 155

Identify the correct step used to start design of an expert system.

- Scope study
- Rapid prototyping
- **Feasibility study** page 129
- Problem reorganization

Question # 156

Knowledge acquisition techniques may not include:

- Interviews
- On-site observation
- Electronic brainstorming
- **Surveys** page 130

AL-JUNAID INSTITUTE GROUP

Question # 157

Identify the correct definition of linear model given below.

- A non linear sequence of steps is applied repeatedly in an iterative fashion to develop the expert systems.
- A non sequential set of steps is applied repeatedly in an iterative fashion to develop the expert systems.
- **A linear sequence of steps is applied repeatedly in an iterative fashion to develop the expert systems. page 129**
- A arbitrary set of steps is applied repeatedly in an iterative fashion to develop the software models.

Question # 158

If more than one domain experts have to be consulted for knowledge acquisition, than its better touse:

- Surveys
- Electronic brainstorming
- Interviews
- **Blackboard system page 130**

Question # 159

Identify the correct statement to list facts numbers 1 through 10

- clips> (facts 10)
- **clips> (facts 1 10) pg#134**
- clips> (facts 1)
- clips> (facts 1 to 10)

Question # 160

Reasoning in fuzzy logic is just a matter of generalizing the familiar _____ logic.

- Complex
- Supervised
- Coognitive
- **Boolean pg#147**

Question # 161

Problem faced during knowledge acquisition may not include

- Expert may provide incomplete knowledge
- **Expert provide exact and accurate knowledge page 131**
- Expert may not provide relevant information
- Expert may provide inconsistent or incorrect knowledge

Question # 162

Identify that for which purpose statement given below is used(deftemplate Person

(slot name (type STRING))

(slot age(type NUMBER))

- Attributes of a fact

AL-JUNAID INSTITUTE GROUP

- Rule definition
- CLIPS pg#134
- Rule

Question # 163

In CLIPS, _____ command erases contents of working memory

- (retract)
- (remove)
- (erase)
- (clear) pg#136

Question # 164

Identify the correct statement for the given rule

IF

IELTS score of ali is 6 and

CGPA score of Ali is 3.7 and

GRE score of ali is 66

Then

He is eligible to take admission in any of the university abroad

- (deftemplate Ali (slot attribute)(slot value))
(defrule Alichance (Ali (attribute "IELTS score")(value "6"))
(Ali (attribute "CGPA")value "3.7"))
- (defrule Alichance (Ali (attribute "IELTS score")(value "6"))
(Ali (attribute "CGPA")value "3.7"))
(Ali (attribute "GRE")value "66"))
- (deftemplate Ali (slot attribute)(slot value))
(defrule Alichance (Ali (attribute "IELTS score")(value "6"))
(Ali (attribute "CGPA")value "3.7"))
- (deftemplate Ali (slot attribute)(slot value))
(defrule Alichance (Ali (attribute "IELTS score")(value "6"))
(Ali (attribute "CGPA")value "3.7"))

Page 135

Question # 165

Identify correct statement for the given rule

The aptitude level of ungraduated student is low and

The English level of ungraduated student is dull Then

he is not eligible to go abroad for higher studies

- (deftemplate to UnderGradstudent (slot attribute)(slot values))
(defrule StudentStatus (UnderGradStudent(attribute "aptitudelevel")(value "low"))
(UnderGradStudent(attribute "English understanding level")(value "dull"))

=>

AL-JUNAID INSTITUTE GROUP

(Printout “ he is not eligible to go abroad for higher studies”))

• deftamplate to UnderGradstudent (slot attribute)(slot values)

(defrule StudentStatus (UnderGradStudent(attribute “aptitudelevel”)(value”low”))

(UnderGradStudent(attribute “English understanding level”)(value “dull”))

<=>

(Printout “ he is not eligible to go abroad for higher studies”))

• (defrule StudentStatus (UnderGradStudent(attribute “aptitudelevel”)(value”low”))

(UnderGradStudent(attribute “English understanding level”)(value “dull”))

=>

(Printout “ he is not eligible to go abroad for higher studies”))

Page 135

• deftamplate to UnderGradstudent (slot attribute)(slot values)

(defrule StudentStatus (UnderGradStudent(attribute “aptitudelevel”)(value”low”))

(UnderGradStudent(attribute “English understanding level”)(value “dull”))

=>

(Printout “ he is not eligible to go abroad for higher studies”))

Question # 166

In CLIPs the defrule construct is used to add

• **rules** Page 135

• agenda

• facts

• principles

Question # 167

In the context of ES development which of the following will be part of planning phase

• knowledge acquisition from expert

• identify concrete knowledge element

• **feasibility assessment** Page 129

• coding

Question # 168

Which of the following window is not present in CLIPS tool?

• **Rule window** Google

• Facts window

• Focus window

• Agenda window

Question # 169

Which of the following is correct CLIPS command to display the product of two numbers “5” and “3”?

AL-JUNAID INSTITUTE GROUP

- (Printout t "Product of two number is " (* 5 3)) Google

- (Printout t "Product of two number is " (x 5 3))
- (Printout t "Product of two number is " (5 x 3))
- (Printout t "Product of two number is " (5 * 3))

Question # 170

Clips command for multiplying two numbers 3 and 4 is

- CLIPS> *(3 4)
- CLIPS> (3 4*)
- CLIPS> (3 * 4)
- **CLIPS> (* 3 4) Google**

Question # 171

Identify which statement defines classical sets in best way

- A classical set is a container, which wholly includes but not wholly excludes any given element
- A classical set is a container, which does not wholly include or wholly exclude any given element
- A classical set is a container, which sometimes wholly includes or wholly excludes any given element
- **A classical set is a container, which wholly includes or wholly excludes any given element PG # 145**

Question # 172

-----encode the knowledge of rules and strategies.

- **Inference networks PG # 132**
- ES requirements
- ES Model
- None of the given options

Question # 173

identify the sets on which Membership Function is used

- Crisp set
- Classical set
- **Fuzzy set PG # 149**
- None of the above

Question # 174

If the antecedent is only partially true, then the output fuzzy set is truncated encoding according to the----- method

AL-JUNAID INSTITUTE GROUP

- Intrinsic
- **Implication**
- Boolean
- None of the given

PG # 153

Question # 175

Madman's method was among the first -----built using fuzzy set theory

- **Control System**
- Expert System
- Decision analysis System
- None of the given

PG # 153

Question # 176

Which of the following is one of the general stages of ESDLC?

- Spiral Model
- Linear Model
- **Beta System (tested by user)**
- Design coding

PG # 129

Question # 179

Problems faced during knowledge acquisition may include:

- Expert may not provide relevant information
- Expert may provide incomplete knowledge
- Expert may provide inconsistent or incorrect knowledge
- **All of the given options**

PG # 131

Question # 179

The input of the aggregation process is the list of truncated output functions returned by the-----
--Process for each rule.

- Truncation
- **Implication**
- Aggregation
- None of the given

PG # 157

Question # 180

The " concept of partial truth " can best be handled by:

- **Fuzzy logic**

PG # 147

AL-JUNAID INSTITUTE GROUP

- Boolean logic
- Classical Logic
- Parametric logic

Question # 181

Knowledge elicitation method may be classified into:

- **Direct and indirect methods** PG # 130 & 131
- Hierarchical and no hierarchical methods
- Data Driven and application driven methods
- None of the given options

Question # 181

In fuzzy set and membership function, the input is always a _____ value.

- **Crisp Numerical**
- Fixed
- Amounts
- Interval Based

Question # 182

_____ is the process of formulating the mapping from a given input to an output fuzzy logic.

- ▶ FOS
- ▶ **FIS**
- ▶ NONE
- ▶ FIZ

Question # 183

The degree of truth is specially driven out by a function called the _____ function.

- ▶ Ordinary
- ▶ Membership
- ▶ **Boolean**
- ▶ Inline

Question # 184

In theoretical computer science there are two main branches of problem

- ▶ Intractable and induction
- ▶ Tractable and Induction
- ▶ None of given
- ▶ **Tractable and Intractable**

Question # 185

In all calculation involving Entropy we define _____ to be _____

AL-JUNAID INSTITUTE GROUP

- ▶ 1 log 1,1
- ▶ 0 log 10,1
- ▶ 0 log 0,0
- ▶ 0 log 0,1

Question # 186

The role of Tester is often called the ___ role.

- ▶ Critical
- ▶ Real
- ▶ Soft
- ▶ Sophisticated

Question # 187

Learning denote changes in a system that enables a system to do the same task more ___ the next time.

- ▶ Effectively
- ▶ Efficiently
- ▶ With Reliability
- ▶ Conveniently

Question # 188

Machine Learning typically follows ___ phase according to Finlay.

- ▶ Two
- ▶ Three
- ▶ Four
- ▶ Five