Virtual University	CS607-ARTIFICIAL INTELLIGENTS (Solved Macq's) LECTURE FROM (23 to 45)	VU LMS HELP vulmshelp.com
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1. Soft-computing is naturally applied in machine learning applications
   - **True** **PG # 205**
   - **False**
2. Genetic algorithms have been employed in finding the optimal initial weights of neural networks.
   - **True** **PG # 205**
   - **False**
3. Which is/are clustering algorithm(s)
   - Self-organizing maps
   - k-means
   - Linear vector quantization
   - All of the given PG # 205
4. Any given learning problem is primarily composed of_____things
   - 4
   - 3 PG # 164
   - 1
   - 2
5. Fuzzy logic is a subset of conventional (Boolean) logic.
   - True
   - False PG # 147
6. A square is used to represent a Fuzzy set.
   - True
   - False PG # 151
7. Which one is not step involved in the planning phase of Linear model for expert systems
   - Feasibility assessment
   - Resource allocation
   - Task phasing and scheduling
   - None of the given PG # 129
8. ._____reasoning is used when the facts of the case are likely to change after some time
   - **Non-Monotonic** **PG # 103**
   - **Common-sense**
   - **Analogical**
   - **Abductive**
9. A statement in conjunctive normal form (CNF) consists of _____
   - Ors of ANDs
   - ANDs
   - ANDs of Ors. PG # 107
   - Ors
10. An expert system may take_____main roles, relative to the human expert.
    - **Two** **PG # 113**
    - **Three**
    - Four
    - Five
11. Backward chaining is an inference strategy that works backward from a_to a___.
    - **Hypothesis, Proof** **PG # 126**

- Proof, Hypothesis
- Hypothesis, Experiment
- Proof, Conclusion

12. Which one is the general stage of the expert system development life cycle:

- Feasibility study
- Rapid prototyping
- Alpha system (in-house verification)
- All of the given PG # 129

13. In CLIPS, the command to load file is:

- **CLIPS (load "filename.clp") PG # 137**
- CLIPS (load "filename")
- CLIPS ("filename.clp")
- CLIPS (open "filename.clp")

14. In Linear Model, a linear sequence of steps is applied repeatedly in an iterative fashion to develop the ExpertSystem.

- **True PG # 129**
- False

15. _____is the bottleneck in the construction of expert system.

- Planning
- **Knowledge acquisition PG # 130**
- Knowledge Design
- Code

16. Select the category that does NOT belong to Elicitation methods.

- Direct methods
- Indirect methods
- Informal discussions
- **Formal discussions PG # 131**

17. Inference networks encode the knowledge of rules and_____.

- Facts
- strategies PG # 132
- conditions
- none of the given

18. .A classical set is a container, which wholly includes or wholly excludes any given element.

- **True PG # 145**
- False

19. _____is the process by which the fuzzy sets that represent the outputs of each rule are combined into asingle fuzzy set.

- **Aggregation PG # 157**
- Fuzzification
- Implication
- None of the given

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

step, defuzzification.

- **True** **PG # 157**
- False

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

- **True** **PG # 160**
- False

22. Many machine learning systems are classifiers.

- **True** **PG # 161**
- False

23. Fuzzy inference systems (FIS) are associated with a number of names

- **True** **PG # 153**
- False

24. Hypothesis space uses the_____of the attributes.

- **Conjunctions (AND)** **PG # 168**
- Disjunctions (OR)
- Negation (NOR)
- None of the given

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

- **True** **PG # 173**
- False

26. The Candidate-Elimination algorithm represents the _____

- **Version Space** **PG # 173**
- Solution Space
- Elimination Space
- None of the given

27. The first step of FIND-S is to initialize h to the most specific hypothesis in_____:
h = < Ø , Ø >

- **H PG # 172**
- I
- J
- K

28. The Entropy is 1 when the collection contains number of positive examples_____to/than negativeexamples.

- **Equal** **PG # 177**
- **Greater**
- Less
- None of the given

29. Artificial Neural Networks is a new learning paradigm which takes its roots from _____inspired approachto learning.

- Chemistry
- Physics
- **Biology** **PG # 181**

- Mathematics

30. A single layer perceptron can not perform pattern classification on linearly separable patterns.

- True
- **False PG # 186**

31. Each neuron in the hidden layer is responsible for a different_____.

- Layer
- Neuron
- None of the given
- **Line PG # 186**

32. In ANNs, Training is the heart of learning, in which finding the best_____that covers most of theexamples is the objective.

- **Hypothesis PG # 189**
- Neuron
- Agent
- Operator

33. Action is a_____used to change states.

- **Predicate PG # 198**
- Function
- Operator
- None of the given

34. Clustering is a form of_____learning.

- Supervised
- **Unsupervised PG # 205**
- Guided
- Unguided

35. Clustering is a form of unsupervised learning.

- **True PG#205**
- False

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

- **True PG#167**
- False

45. Which one is not step involved in the planning phase of Linear model for expert systems

- Feasibility assessment
- Resource allocation
- Task phasing and scheduling
- **None of the given PG#129**

46. Breadth-First Search checks all paths of a given length before moving on to any longer paths.

- **True**
- False

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

- Ors of ANDs
- ANDs
- **ANDs of Ors. PG # 107**
- Ors

48. The goal of an Assisting Expert is to aid an expert in a routine tasks to increase
- Planning
- Execution
- **Productivity PG # 114**
- Correctness

49. Which one is the general stage of the expert system development life cycle:
- Feasibility study
- Rapid prototyping
- Alpha system (in-house verification)
- **All of the given PG # 129**

50. The Linear model of software development has been successfully used in developing systems.
- **Expert PG # 129**
- Software
- Design
- Logical

51. The main phases of the linear sequence are:
- Knowledge acquisition and analysis
- Knowledge design
- Code
- **All of the given PG # 129**

52. The Defrule construct is used to_____rules.
- define
- **add PG # 135**
- declare
- none of the given

53. The goal of knowledge analysis is to analyze and structure the___gained during the knowledgeacquisition phase.
- **Knowledge PG # 131**
- facts
- rules
- conclusions

54. Inference networks encode the knowledge of rules and_____.
- facts
- **strategies PG # 132**
- conditions
- none of the given

55. Fuzzy sets, unlike_____sets, do not restrict themselves to something lying

wholly in either set A or inset not-A.

- **Classical PG # 146**
- Physical
- Universal
- None of the given

56. Reasoning in fuzzy logic is just a matter of generalizing the familiar_____ logic.

- **Boolean PG # 147**
- Complex
- Coagnitive
- Supervised

57. _____logic lets us define more realistically the true functions that define real world scenarios.

- **Fuzzy PG # 148**
- Classical
- Boolean
- None of the given

58. The degree of truth that we have been talking about is specifically driven out by a function called the_____function.

- **Membership PG # 149**
- Ordinary
- Fuzzy
- Inline

59. Usually a_____graph is chosen to represent a fuzzy set.

- **Triangular PG # 151**
- Circular
- Conical
- None of the given

60. In Fuzzy Rules there are two parts to the antecedent, and they have a/an operator in between them.

- AND
- **OR PG # 153**
- NOT
- None of the given

61. If the antecedent is only partially true, then the output fuzzy set is truncated according to the_____method.

- Intrinsic
- **Implication PG # 153**
- Boolean
- None of the given

62. The role of tester is often called the critic.

- **True PG # 160**

- False

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

- **Existing PG # 162**
- Inductive
- Deductive
- None of the given

64. The tractable problems are further divided into structured and_____problems

- Non-structured
- **Complex PG # 166**
- Simple
- None of the given

65. Hypothesis space uses the_____of the attributes.

- **Conjunctions (AND) PG # 168**
- Disjunctions (OR)
- Negation (NOR)
- None of the given

66. FIND-S finds the maximally specific hypothesis possible within the_____.

- **Version space PG # 172**
- Solution space
- Hypothesis space
- None of the given

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

- **True PG # 177 NOT SURE**
- False

73.A single Perceptron simply draws a line, which is a hyper plane when the data is_____than 2 dimensional.

- **More PG # 184**
- Less
- Equal
- None of the given

74. In ANNs, Training is the heart of learning, in which finding the best that covers most of theexamples is the objective.

- **Hypothesis PG # 189**
- Neuron
- Agent

75. OperatorIn planning phase, each state is represented in predicate logic.

- **True PG # 197**
- False

76.Action is a_____used to change states.

- **Predicate PG # 198**
- Function

- Operator
- None of the given

77. Which one is NOT the application area of Computer Vision?

- Tracking an object through an image sequence
- Object Extraction from a video sequence
- Automated Navigation of a robot or a vehicle
- **None of the given PG # 203**

78. Naturally, there is no supervision of classification in_____algorithms for their learning or clustering.

- **Clustering PG # 205**
- Binary
- Planning
- Searching

79. Which one is NOT the feature of Robot:

- Reasoning, Dealing with uncertainty
- Vision, Learning
- Autonomy, Physical Intelligence
- **None of the given PG # 204**

80. Intelligence is the ability to;

- Think /learn plan /schedule
- Recognize / remember
- Problem solving
- **All of the above**

81. Computer vision encompasses topic(s) from

- Image Processing
- Machine learning
- **All of the given PG # 203**
- Pattern recognition

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

- **Tractable and intractable PG # 165**
- Intractable and induction
- Tractable and induction
- None of the given

83. In theoretical computer science there are_____main branches of problems

- 1
- **2 PG # 165 Tractable and Intractable**
- 3
- 4

84. There are_____phases in machine learning.

- 1
- 2
  - 3 PG # 160 1. Training, 2. Validation, 3. Application

- 4

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

(A AND B)_____(C ANDD).

- **OR PG # 176**
- AND
- XOR
- None of the given

86. Decision trees give us conjunctions of disjunctions.

- True
- **False PG # 176**

87. The input for the defuzzification process is a fuzzy set (the aggregate output fuzz set) and the output is a doublenumber.

- True
- **False PG # 157**

88. Which one is not step involved in the planning phase of Linear model expert systems

- Feasibility assessment
- Resource allocation
- Task phasing and scheduling
- **None of the given PG # 129**

89. The goal of knowledge analysis is to analyze and structure the knowledge gained during the planning phase.

- True
- False Page # 131

90. _is an expert system which was developed at Stanford to aid physicians in diagnosing and treating patients with a particular blood disease

- **MYCIN Page # 112**
- DENDRAL
- R1/XCON
- R3/XCON

91. Another expert system named_____was developed by Digital Equipment Corporation, as acomputer configuration assistant.

- **R1/XCON Page # 112**

- MYCIN
- DENDRAL
- R3/XCON

92. The goal of an Assisting Expert is to aid an expert in a routine tasks to increase __.

- Planning
- Execution
- **Productivity PG # 114**
- Correctness

93. Which one is the general stage of the expert system development life cycle:

- Feasibility study
- Rapid prototyping
- Alpha system (in-house verification)
- **All of the given PG # 129**

94. Select the category that does NOT belong to Elicitation methods.

- Direct methods
- Indirect methods
- Informal discussions
- **Formal discussions PG # 131**

95. A classical set is a container, which wholly includes or wholly excludes any given element.

- **TRUE PG # 145**
- **FALSE**

96. It was Aristotle who came up with the „Law of the Excluded Middle".

- **True PG # 145**
- **False**

97. It was_____who came up with the „Law of the Excluded Middle".

- **Aristotle PG # 145**
- **Newton**
- Einstein
- None of the given

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

- **Boolean PG # 147**
- Complex
- Coagnitive
- Supervised

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

- **Operators PG # 153**
- Rules
- Conditions
- None of the given

100. Outputs of learning are determined by the _____

- **Application PG # 161**
- Validation
- Training
- None of the given

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

- **True PG # 161**
- False
- Ambiguous
- None of the given

102._____learning works on existing facts and knowledge and deduces new knowledge fromthe old.

- **Deductive PG # 162**
- Inductive
- Application
- None of the given

103. A concept is the representation of the_____with respect to the given attributes.

- Solution

- **Problem PG # 167**

- Knowledge

- None of the given

104.
Hypothesis space uses the_____of the attributes.

- **Conjunctions (AND) PG # 168**

- Disjunctions (OR)

- Negation (NOR)

- None of the given

115. In all calculations involving Entropy we define_____to be _____

- **0 log 0, 0 PG # 177**

- 0 log 10, 1

- 0 log 0, 1
- 1 log 1, 1

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

- **Information Gain PG # 177**
- Measure Gain
- Information Goal
- None of the given

117. The soma and the enclosed nucleus in neuron play a significant role in the processing of incomingand outgoing data.

- True
- **False PG # 181**

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

- True
- **False PG # 186**

120. In planning phase, each state is represented in predicate logic.

- **True PG # 197**
- False

121. Action is a_____used to change states.

- **Predicate PG # 198**
- Function
- Operator
- None of the given

122.___is a subfield of__.

- **Computer vision, Artificial Intelligence PG # 203**
- Robotics, Artificial Intelligence
- Soft computing, Artificial Intelligence
- None of these

123.___deals with procedures that extract useful information from static pictures and sequence of images.

- **Computer vision PG # 203**
- Neural networks
- Predicate logic
- None of the given

124.Which of the combinations is possible to solve real world problems?

- Genetic fuzzy
- Neuro –Fuzzy systems
- Neuro –Genetic systems
- **All of the given PG # 205**

125.Genetic Algorithm applied on_____problems?

- Real
- All
- Selected
- None

123.Answering the Sequence Problem (1, 3, 5, 11 , ?) need

- **Intelligence**
- None of the given
- Sorting
- Searching

124.__reasoning is an informal form of reasoning that uses rules gained through experience orwhat we call rules-of-thumb

- Inductive
- Deductive
- Abductive
- **Common-sense**

125.A_____is "A person who possess the skill and knowledge to solve a specific problem in amanner superior to others"

- **The domain expert Page # 122**
- The knowledge engineer
- The end user
- All of the given

126.Best-first search always moves_____from the node that seems closest to the goal node.

- Backward
- Left
- Right
- **Forward**

127.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 PG # 122**

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

- Proof
- **Goal PG # 126**
- Plan
- None of the given

129.___chaining is more focused and tries to avoid exploring unnecessary paths ofreasoning.

- Forward
- **Backward PG # 128**
- Both forward and backward
- None of the given

130.Assisting an expert is the most commonly found role of an Expert System.

- False
- **True PG # 114**

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

- automatic control
- data classification
- decision analysis
- **All of the given PG # 153**

132.Mamdani's method was among the first_____built using fuzzy set theory.

- **control systems PG # 153**
- expert system
- decision analysis system
- none of the given

133.which one is NOT the phase of machine learning:

- Training
- Application
- Validation
- **None of the given PG # 160**

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134.__is the process of formulating the mapping from a given input to an output using Fuzzylogic.

- **FIS PG # 153**
- FOS
- FIZ
- None of these

135.Machine learning typically follows__phases according to Finlay.

- Two
- **Three PG # 160**
- Four
- Five

136.In context of tree, an arrow from one node to other is called :

- Root
- **Edge**
- Ancestor
- Descendant

137.Robotics have active contributions form_____

- Biology
- Psychology
- Mathematics
- **All of the given page # 204**

138.Identify the step involved in planning phase.

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

139.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 +)

140.During__stage knowledge engineer works with the domain expert to acquire, organize and analyse the domain knowledge.

- System Design
- Feasibility Study
- System Planning

- Knowledge acquisition page # 129, 130

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

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

142. the correct command is load a CLIPS file is:

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

143. In CLIPS,___command is used to remove facts.

- facts
- retract page # 134
- erase
- delete

144. 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

145. 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

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

- FACT
- CLEAR
- DEBUG
- WATCH page # 135

147. Knowledge elicitation methods may be classified into:

- Direct and indirect methods page #130,131
- Hierarchal and non hierarchal methods
- Data driven and application driven methods
- Direct and hierarchal

148. 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

149.Identify the sequence wise main phases of Linear model used in 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

150.In context of CLIPS, "agenda" is the list of _

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

151._____encode the knowledge of rules and strategies.

- ES model
- ES requirements
- Knowledge base
- Inference networks page # 132

152.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

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

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

154.Knowledge acquisition techniques may not include:

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

155.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.

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

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

157.Identify the correct statement to list facts numbers 1 through 10

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

158.Reasoning in fuzzy logic is just a matter of generalizing the familiar_____logic.

- Complex
- Supervised
- Coagnitive
- **Boolean page # 147**

159.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

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

(slot name
(type STRING
)) (slot
age(type
NUMBER))

- Attributes of a fact
- Rule definition
- **CLIPS page # 134**
- Rule

160.In CLIPS,____command erases contents of working memory

- (retract)
- (remove)
- (erase)
- **(clear) page # 136**

161. 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

- (deftamplate 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")) **Page # 135**
- (deftamplate Ali (slot attribute)(slot value))
  (defrule Alichance (Ali (attribute "IELTS score")(value "6")) (Ali (attribute "CGPA")value "3.7"))
- (deftamplate Ali (slot attribute)(slot value))
  (defrule Alichance (Ali (attribute "IELTS score")(value "6")) (Ali (attribute "CGPA")value "3.7"))

162. Identify correct statement
for the given rule IF
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

- (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"))
- 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")

163.In CLIPs the defrule construct is used to add

- rules Page # 135
- agenda
- facts
- principles

164. 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

164.identify the sets on which Membership Function is used

- Crisp set
- Classical set
- **Fuzzy set**
- None of Given

165. Fuzzy___ system have multidisciplinary nature.

- Intelligent
- Set
- Logic
- Interface

166.For computing more complicated functions we use ANN, which stand for?

- Artificial Next Network
- Artificial Neural Network
- Acid Neural Network
- Artificial Neuron Network

167.In unsupervised search a,_____represents some specific underlying pattern in the Data.

- Cluster
- Chunks

- Fragments
- Segments

168. Identify the correct definition of linear model given below.
- An arbitrary set of steps is applied repeatedly is an iterative fashion to develop the software models.
- A linear sequence of steps is applied repeatedly is an iterative fashion to develop the Expert System
- A Non-linear sequence of steps is applied repeatedly is an iterative fashion to develop the Expert System
- A Non sequence of steps is applied repeatedly is an iterative fashion to develop the Expert System

169. In ANNs, MSE is known as:
- Mean Sequential Error
- Medium Squared Error
- Most Sequential Error
- Most Spherical Error

170. Usually a____graph is chosen to represent a fuzzy set.
- Circular
- Conical
- Triangle
- Bar

171. Learning denotes changes in a system that enables a system to do the same task more-------the next time.
- Efficiency
- Conveniently
- Effectively
- With Reliability

172._____ Learning does not work an existing facts.
- Deductive
- Exclusive
- Inductive
- Intelligent

173. 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
- Knowledge implicit

174. If the true output of a concept [c(xi)] is 1 or 0 for an instance, then the output by ourhypothesis [h(xi)] is 1 or 0 as well, respectively.
- True (Page 177)
- False

175. 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 moreefficiently the next time.
- Learning is making useful changes in our minds.
- All of the given (Page 159)

176.

Please choose one_____is a subfield of_____.

- Computer vision, Artificial Intelligence (Page 203)
- Robotics, Artificial Intelligence
- Soft computing, Artificial Intelligence
- None of these

177.

Fuzzy logic is a superset of_____logic.

- conventional (Page 147)
- positive
- negative
- None of these

178.Any statement can be fuzzy

- True (Page 147)
- False

179.

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

180.

The brain is a collection of about 100_____interconnected neurons.

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

181._____stands for interactive dichotomize

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

182.Complex problems usually have well-defined steps

- True
- False (Page 165)

183.the input of aggrigation is the list of truncated output functions returned by the _____process for each rule.

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

184.Identify the sets in which Member function is used.

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

185.Identify the statement which best defines fuzzy sets.

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

186.In Fuzzy Inputs we resolve all fuzzy statements in the antecedent to adegree of membership between 0 and_.

- 1 (Page 152)
- 2
- 3
- 4

187.The Multilayer Perceptron's are the most basic artificial neural_____

- Network (Page 186)
- System
- Interface
- None of these

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

- Rule window Google
- Facts window
- Focus window
- Agenda window

189.Which of the following is correct CLIPS command to display the product of two numbers "5" and"3"?

- (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))

190.Clips command for multiplying two numbers 3 and 4 is

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

191.Identify which statement defines classical sets in best way

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

192.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**

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

- Truncation
- **Implication PG # 157**
- Aggregation
- None of the given

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

- **Fuzzy logic PG # 1**
- Boolean logic
- Classical Logic
- Parametric logic

194.Knowledge elicitation method may be classified into:

- Direct and Indirect Methods Page # 130,131
- Hierarchical and No Hierarchical method
- Data Driven and Application Driven Methods
- None of Given option

195.

In fuzzy set and membership function, the input is always a_____value.

- Crisp Numerical NOT SURE
- Fixed
- Amounts
- Interval Based

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196.

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

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

197.The Role of Taster is often called the_____role.

- **Critical**
- **Real**
- **Soft**
- **Sophisticated**