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VALUE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE01-Industrial Automation MARK SHEET

Sl. No	Register Number	Student Name	MARKS
1	19TE0551	NIRMAL GEORGE.A	96
2	19TE0552	BRANAN.D	88
3	19TE0553	SANJAIDHARAN.G	84
4	19TE0554	KEERTHIKA.N	92
5	19TE0555	KAVIMANI.M	92
6	19TE0556	MUTHUKUMARAN.V	92
7	19TE0557	RAKESH.M	96
8	19TE0558	VEDA.S	88
9	19TE0559	YUVARAJ.P	84
10	19TEL032	DINESHKAR.M	88

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Dr. S. SEENUVASAMURTHI, M.E., Ph.C.

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Sulthanpet Post,
Puducherry - 605 110





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	VALUE ADDED COURSES 2022-2023	
Depar	tment of Electrical and Electronics En 22EE01-Industrial automation	ngineering
		NAME:
		CLASS:
		DATE:
1 Which of the followin	g is not a common inputs device in a co	ntrol system?
1. Which of the followin		intor system:
a) Sensors	b) Actuators	
c) Timers	d) Speakers	
Answer: d) Speakers		
2. What type of control s process?	system uses a set of pre-programmed ins	tructions to control a
a) Sequential control	b) Programmable Logic Control	
c) Proportional control	d) Integral control	
Answer: b) Programmab	ole Logic Control	
3. Which type of control	is used to adjust the speed of a motor?	
a) On-off control	b) Servo control	
c) Proportional control	d) Integral control	

c) Proportion

Answer: b) Servo control

4. hat type of control system uses a model of the process being controlled to make decisions?

a) Model-based Control

c) Neura

b) Fuzzy control

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d) All of the above

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Answer: d) All of the above

5. What type of control systems of constant set point?	stem uses feedback to adjust the output in order to maintain a
a) Open-loop control	b) Closed-loop control
c) Hybrid control	d) None of the above
Answer: b) Closed-loop co	ontrol
6. Which component of a	control system compares the desired output to the actual output?
a) Sensor	b) Actuator
c) Control valve	d) Comparator
Answer: d) Comparator	
7. What type of control sy	stem adjusts the output based on the rate of change of the input?
a) Proportional control	b) Integral control
c) Derivative control	d) All of the above
Answer: c) Derivative con	itrol
8. What type of control sy	stem adjusts the output based on the accumulated error over time?
a) Proportional control	b) Integral control
c) Derivative control	d) All of the above
Answer: b) Integral contro	l
9. What type of control sy	estem is used to control the temperature of a furnace?
a) On-off control	b) Servo control
c) Proportional control	d) Integral control Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
Answer: c) Proportional c	ontrol Jechnology RAAK College of Engineering & Technology

& Technolog RAAK College of Engineering & Technology
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Answer Dulintegral-Derivative control

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10. What type of control system us variables remotely?	ses a computer to continuously monitor and adjust process
a) PLC control	b) DCS control
c) Remote SCADA control	d) Both a and b
Answer: c) Remote SCADA contr	rol
11. What type of control system is	s used to control a manufacturing process?
a) Batch control	b) Continuous control
c) Discrete control	d) Process control
Answer: d) Process control	
12. Which component of a contro	I system generates the output signal?
a) Sensor	b) Actuator
c) Controller	d) Valve
Answer: c) Controller	
13. What type of control system u	uses a combination of feedback and feedforward control?
a) Open-loop control	b) Closed-loop control
c) Hybrid control	d) None of the above
Answer: c) Hybrid control	
14. What type of control system a and the rate of change of the input	adjusts the output based on the accumulated error over time at?
a) Proportional control	b) Integral-Derivative control
c) Derivative control	d) All of the above

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15. What type of contro	l system uses a mathematical	model of the process to make decisions?
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a) Model-based control

b) Fuzzy control

c) Neural network control

d) All of the above

Answer: a) Model-based control

16. What type of control system uses a pre-programmed set of rules to make decisions?

a) Fuzzy control

b) Rule-based control

c) Neural network control

d) All of the above

Answer: b) Rule-based control

17. What type of control system is used to control the pressure of a process?

a) On-off control

b) Servo control

c) Proportional control

d) Integral control

Answer: c) Proportional control

18. What type of control system is used to control the movement of a robot?

a) Position control

b) Velocity control

c) Torque control

d) All of the above

Answer: d) All of the above

19. What is the primary goal of industrial automation?

a) To increase efficiency

b) To reduce costs

c) To improve safety

d) All of the above

Answer: d) All of the above

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20. What are the main components of an industrial automation system?

a) Sensors, actuators, and a control system

b) Robots, conveyors, and a control system

c) PLC, HMI and a control system

d) All of the above

Answer: c) PLC, HMI and a control system

21. What is the function of a SCADA system in industrial automation?

a) To monitor and control industrial processes in real-time

b) To collect and analyze data from industrial processes

c) To provide remote access to industrial processes

d) All of the above

Answer: d) All of the above

22. What is the function of a DCS in industrial automation?

a) To control industrial processes at a local level

b) To provide centralized monitoring and control of multiple industrial processes

c) To provide real-time data and control of industrial processes

d) All of the above

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Answer: d) All of the above

23. What is the function of an MES in industrial automation? S. SEENUYASAMURTHI, M.E., Ph.C. PRINCIPAL

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a) To manage and optimize production processes



- b) To track and trace products throughout the production process
- c) To collect and analyze data from production processes
- d) All of the above

Answer: d) All of the above

- 24. What is the function of a BMS in industrial automation?
- a) To manage and control building systems such as HVAC, lighting, and security
- b) To monitor and analyze energy consumption in buildings
- c) To provide remote access to building systems
- d) All of the above

Answer: d) All of the above

- 25. What is the function of a VFD in industrial automation?
- a) To control the speed of AC motors
- b) To control the torque of AC motors
- c) To control the power consumption of AC motors
- d) All of the above

Answer: d) All of the above

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NAME: VEPA.S

VALUE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE01-Industrial automation

CLASS: IV/EEE DATE: 20/08/2022 1. Which of the following is not a common inputs device in a control system? b) Actuators a) Sensors d Speakers c) Timers 2. What type of control system uses a set of pre-programmed instructions to control a process? الحر Programmable Logic Control a) Sequential control d) Integral control c) Proportional control 3. Which type of control is used to adjust the speed of a motor? b) Servo control a) On-off control d) Integral control c) Proportional control 4. What type of control system uses a model of the process being controlled to make decisions? b) Fuzzy control a) Model-based control All of the above c) Neural network control 5. What type of control system uses feedback to adjust the output in order to maintain a constant set point? b) Closed-loop control a) Open-loop control d) None of the above c) Hybrid control 6. Which component of a control system compares the desired output to the actual output? b) Actuator a) Sensor d) Comparator c) Control valve 7. What type of control system adjusts the output based on the rate of change of the input? b) Integral control a) Proportional control d) All of the above e Derivative control

Proportional control

c) Derivative control

What type of control system adjusts the output based on the accumplated on the accumulation of the PRINCIPAL

b) Integral control

d) All of the aboveRAAK College of Engineering & Technology No.1, Muthupillai Palayam Road

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9. What type of control system is	used to control the temperature of a fi	urnace?
a) On-off control	b) Servo control	A STATE OF THE PROPERTY OF THE PARTY OF THE
Proportional control	d) Integral control	
10. What type of control system u	ses a computer to continuously monit	tor and adjust process
variables remotely?		
a) PLC control	b) DCS control	75.000
of Remote SCADA control	d) Both a and b	
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c) Hybrid control	d) None of the above	
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and the rate of change of the inpu	t?	
a) Proportional control	b) Integral-Derivative co	ntrol
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c) Proportional control	d) Integral control	
	is used to control the movement of a r	obot?
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c) Torque control	All of the above	EENUVASAMURTHI, M.E., Ph.C.
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VALUE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE02-Artificial Neural Networks.

NAME: ARUN.P

CLASS: TH/EEE

DATE: 20/08/2022

1. Who was the inventor of the first neurocomputer?

a)Dr. John Hecht-Nielsen

by.Dr. Robert Hecht-Nielsen

c).Dr. Alex Hecht-Nielsen

d)Dr. Steve Hecht-Nielsen

2. A 3-input neuron is trained to output a zero when the input is 110 and a one when the input is 111. After generalization, the output will be zero when and only when the input is?

a) 000 or 110 or 011 or 101

b) 010 or 100 or 110 or 101

\$ 000 or 010 or 110 or 100

d) 100 or 111 or 101 or 001

3. What is perceptron?

aya single layer feed-forward neural network with pre-processing

- b) an auto-associative neural network
- c) a double layer auto-associative neural network
- d) a neural network that contains feedback
- 4. What is an auto-associative network?
- a) a neural network that contains no loops
- by a neural network that contains feedback
- c) a neural network that has only one loop
- d) a single layer feed-forward neural network with pre-processing

5. A 4-input neuron has weights 1, 2, 3 and 4. The transfer function is linear with the constant of proportionality being equal to 2. The inputs are 4, 10, 5 and 20 respectively. What will be the output?

at 238

b) 76

d) 123 c) 119

6. Which of the following is true?

(i) On average, neural networks have higher computational rates than conventional computers.

(ii) Neural networks learn by example.

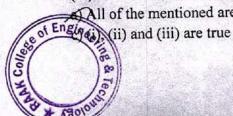
(iii) Neural networks mimic the way the human brain works. S. SEENUVASAMURTHI, M.E., Ph.C.

All of the mentioned are true

PRINCIPAL b) (ii) and (iii) are true RAAK College of Engineering & Technology

d) None of the mentioned No.1, Muthupillai Palayam Road,

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7. Which of the	following is	s true for neura	networks?

- (i) The training time depends on the size of the network.
- (ii) Neural networks can be simulated on a conventional computer.
- (iii) Artificial neurons are identical in operation to biological ones.
- a) All of the mentioned
- b) (ii) is true
- e) (i) and (ii) are true
- d) None of the mentioned

8. What are the advantages of neural networks over conventional computers?

- (i) They have the ability to learn by example
- (ii) They are more fault tolerant
- (iii) They are more suited for real time operation due to their high 'computational' rates
- a) (i) and (ii) are true
- b) (i) and (iii) are true

c) Only (i)

a) All of the mentioned

9. Which of the following is true?

Single layer associative neural networks do not have the ability to:

- (i) perform pattern recognition
- (ii) find the parity of a picture
- (iii)determine whether two or more shapes in a picture are connected or not
- a) (ii) and (iii) are true
- b) (ii) is true
- c) All of the mentioned
- d) None of the mentioned

10. Which is true for neural networks?

- a) It has set of nodes and connections
- b) Each node computes it's weighted input
- c) Node could be in excited state or non-excited state d) All of the mentioned

11. What is Neuro software?

- a) A software used to analyze neurons
- b) It is powerful and easy neural network
- c) Designed to aid experts in real world
- d) It is software used by Neurosurgeon

12. Why is the XOR problem exceptionally interesting to neural network researchers?

- a) Because it can be expressed in a way that allows you to use a neural network
- b) Because it is complex binary operation that cannot be solved using neural networks
- c) Because it can be solved by a single layer perceptron
- d) Because it is the simplest linearly inseparable problem that exists.

13. What is back propagation?

- a) It is another name given to the curvy function in the perceptron
- b) It is the transmission of error back through the network to adjust the inputs

It is the transmission of error back through the network to allow weights to be adjusted so

that the network can learn

d) None of the mentioned

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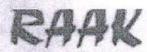
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	하게 보이지는 경기에 있다면 이 선생님들은 전문을 해보면 바다를 하면 없는데 사람이 모든 것이다면 되었다면 하는데 없는데 없는데 되었다면 하는데 없는데 없는데 없는데 없는데 없는데 없는데 없는데 없는데 없는데 없
14. Why are linearly separable pr	oblems of interest of neural network researchers?
a) Because they are the only class	s of problem that network can solve successfully
b) Because they are the only clas	s of problem that Perceptron can solve successfully
c) Because they are the only matl	nematical functions that are continue
d) Because they are the only mat	hematical functions you can draw
15. Which of the following is not	the promise of artificial neural network?
a) It can explain result	b) It can survive the failure of some nodes
c) It has inherent parallelism	d) It can handle noise
16. Neural Networks are complex	with many parameters.
a) Linear Functions	b) Nonlinear Functions
c) Discrete Functions	d) Exponential Functions
	weighted inputs it receives, and if it exceeds a certain value,
it outputs a 1, otherwise it just ou	5.5kg (C.) . [1] 4.7kg (C.) [1] 1.7kg (C.) [1]
a) True	b) False
c) Sometimes – it can also output	t intermediate values as well d) Can't say
weighted inputs it receives, and i outputs a 0"?	tion in the following statement "A perceptron adds up all the f it exceeds a certain value, it outputs a 1, otherwise it just ide function
	ron function
e) Logistic function d) refeepe	ion function
because each perceptron can part combine their results. a) True – this works always, and	can actually solve the XOR problem satisfactorily: this is ition off a linear part of the space itself, and they can then these multiple perceptrons learn to classify even complex
problems b) False – perceptrons are mathe	matically incapable of solving linearly inseparable functions,
no matter what you do	
	but are unable to learn to do it – they have to be explicitly
hand-coded	
d) False – just having a single pe	receptron is enough
20. The network that involves ba	ckward links from output to the input and hidden layers is
a) Self organizing maps	b) Perceptrons
e) Recurrent neural network	d) Multi layered perceptron
College	application of NN (Neural Network)? PRINCIPAL
21. Which of the following is an	Technolog
a) Sales Orceasting	No 1 Muthupillai Palayam Road,
c) Risk management	Sulfhannet rosu
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22. How many terms are required for building a bayes model?

a) 1

b) 2

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d) 4

23. What is needed to make probabilistic systems feasible in the world?

a) Reliability

b) Crucial robustness

c) Feasibility

d) None of the mentioned

24. Where does the bayes rule can be used?

a) Solving queries

b) Increasing complexity

c) Decreasing complexity

-d) Answering probabilistic query

25. What does the bayesian network provides?

a) Complete description of the domain

b) Partial description of the domain

c) Complete description of the problem

d) None of the mentioned



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Certificate of Completion

2022-2023

This is to certify that Mr/MsARYM: P........ARYM: P.......

Year....... Department... RER..... has successfully Completed the Value added course.

COURSE TITLE: ARTHEIGH. NEURAL...NETTWORK.....

SCORE: "16.....





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Certificate of Completion

2022-2023

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Year...... Department... R. R. R. has successfully Completed the Value added course.

COURSE TITLE: TANDUSTRIAL AUTOMATION

COURSE DURATION: ...3./8/122....../4./..8/22......







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VALVE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE02-Artificial Neural Networks MARK SHEET

Sl. No	Register Number	Student Name	MARKS
1	20TE0251	ARUN.S	88
2	20TE0252	KANMANI.K	84
3	20TE0253	NALLARASAN.E	96
4	20TE0254	PRITHEESH KUMAR.R	84
5	20TE0255	VENKATESAN.S	92
6	20TEL095	ARUN.P	96
7	20TEL097	GOKUL.C	84
8	20TEL098	MARIYAPPAN.S	92
9	20TEL099	MOHAMED AASHIK.M	88
10	20TEL100	PUVIARASU.M	84

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VALUE ADDED COURSES

2022-2023

Department of Electrical and Electronics Engineering 22EE02-Artificial Neural Networks.

NAME:

CLASS:

DATE:

1. Who was the inventor of the first neuro computer?

A.Dr. John Hecht-Nielsen

B.Dr. Robert Hecht-Nielsen

C.Dr. Alex Hecht-Nielsen

D.Dr. Steve Hecht-Nielsen

Ans: B

2. A 3-input neuron is trained to output a zero when the input is 110 and a one when the input is 111. After generalization, the output will be zero when and only when the input is?

a) 000 or 110 or 011 or 101

b) 010 or 100 or 110 or 101

c) 000 or 010 or 110 or 100

d) 100 or 111 or 101 or 001

Answer: c

3. What is perceptron?

a) a single layer feed-forward neural network with pre-processing

b) an auto-associative neural network

c) a double layer auto-associative neural network

d) a neural network that contains feedback

Answer: a

4. What is an auto-conjustive network?

a) a neural network that sontains no loops

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- b) a neural network that contains feedback
- c) a neural network that has only one loop
- d) a single layer feed-forward neural network with pre-processing

Answer: b

- 5. A 4-input neuron has weights 1, 2, 3 and 4. The transfer function is linear with the constant of proportionality being equal to 2. The inputs are 4, 10, 5 and 20 respectively. What will be the output?
- a) 238 b) 76
- c) 119 d) 123

Answer: a

- 6. Which of the following is true?
- (i) On average, neural networks have higher computational rates than conventional computers.
- (ii) Neural networks learn by example.
- (iii) Neural networks mimic the way the human brain works.
- a) All of the mentioned are true
- b) (ii) and (iii) are true
- c) (i), (ii) and (iii) are true
- d) None of the mentioned

Answer: a

- 7. Which of the following is true for neural networks?
- (i) The training time depends on the size of the network.
- (ii) Neural networks can be simulated on a conventional computer.
- (iii) Artificial neurons are identical in operation to biological ones.
- a) All of the mentioned
- b) (ii) is true
- c) (i) and (ii) are true
- d) None of the mentioned

Answer: c

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Answer: b

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Puducherry - 67

3. What are the advantages of	of neural networks over conventional computers?
i) They have the ability to le	earn by example
ii) They are more fault toler	rant
iii)They are more suited for	real time operation due to their high 'computational' rates
a) (i) and (ii) are true	b) (i) and (iii) are true
c) Only (i)	d) All of the mentioned
Answer: d	
9. Which of the following is	true?
Single layer associative neur	ral networks do not have the ability to:
(i) perform pattern recogniti	on
(ii) find the parity of a pictur	re
(iii)determine whether two	or more shapes in a picture are connected or not
a) (ii) and (iii) are true	b) (ii) is true
c) All of the mentioned	d) None of the mentioned
Answer: a	
10. Which is true for neural	networks?
a) It has set of nodes and co	nnections b) Each node computes it's weighted input
c) Node could be in excited	state or non-excited state d) All of the mentioned
Answer: d	
11. What is Neuro software	?
a) A software used to analyz	ze neurons b) It is powerful and easy neural network
c) Designed to aid experts in	n real worldd) It is software used by Neurosurgeon

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- 12. Why is the XOR problem exceptionally interesting to neural network researchers?
- a) Because it can be expressed in a way that allows you to use a neural network
- b) Because it is complex binary operation that cannot be solved using neural networks
- c) Because it can be solved by a single layer perceptron
- d) Because it is the simplest linearly inseparable problem that exists.

Answer: d

- 13. What is back propagation?
- a) It is another name given to the curvy function in the perceptron
- b) It is the transmission of error back through the network to adjust the inputs
- c) It is the transmission of error back through the network to allow weights to be adjusted so that the network can learn
- d) None of the mentioned

Answer: c

- 14. Why are linearly separable problems of interest of neural network researchers?
- a) Because they are the only class of problem that network can solve successfully
- b) Because they are the only class of problem that Perceptron can solve successfully
- c) Because they are the only mathematical functions that are continue
- d) Because they are the only mathematical functions you can draw

Answer: b

- 15. Which of the following is not the promise of artificial neural network?
- a) It can explain result
- c) It has inherent parallelism

b) It can survive the failure of some nodes

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16. Neural Networks are complex	with many parameters.
a) Linear Functions	b) Nonlinear Functions
c) Discrete Functions	d) Exponential Functions
Answer: a	
17. A perceptron adds up all the weighted it outputs a 1, otherwise it just outputs a 0	d inputs it receives, and if it exceeds a certain value,
a) True	b) False
c) Sometimes – it can also output interme	ediate values as well d) Can't say
Answer: a	
	ne following statement "A perceptron adds up all the eds a certain value, it outputs a 1, otherwise it just
a) Step function b) Heaviside function	tion
c) Logistic function d) Perceptron func	etion
Answer: b	
	ally solve the XOR problem satisfactorily: this is fa linear part of the space itself, and they can then
a) True – this works always, and these m problems	ultiple perceptrons learn to classify even complex
b) False – perceptrons are mathematicall no matter what you do	y incapable of solving linearly inseparable functions,
c) True – perceptrons can do this but are hand-coded	unable to learn to do it – they have to be explicitly
d) False – just having a single perceptror	Dr. S. SEENUVASAMURTHI, M.E., Ph.C.,
Answer: c	PRINCIPAL

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called	es backward links from output to the input and hidden layers is
a) Self organizing maps	b) Perceptrons
c) Recurrent neural network	d) Multi layered perceptron
Answer: c	
21. Which of the following	is an application of NN (Neural Network)?
a) Sales forecasting	b) Data validation
c) Risk management	d) All of the mentioned
Answer: d	
22. How many terms are re-	quired for building a bayes model?
a) 1 b) 2	
c) 3 d) 4	
Answer: c	
23. What is needed to make	e probabilistic systems feasible in the world?
a) Reliability	b) Crucial robustness
c) Feasibility	d) None of the mentioned
Answer: b	
24. Where does the bayes r	ule can be used?
a) Solving queries	b) Increasing complexity
c) Decreasing complexity	d) Answering probabilistic query
Answer: d	Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
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gineering 8	No.1, Muthupillai Palayam Road, Sulthanpet Post

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25. What does the bayesian network provides?

a) Complete description of the domain

b) Partial description of the domain

c) Complete description of the problem

d) None of the mentioned

Answer: a



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VALUE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE02-Artificial Neural Networks.

NAME: ARUN.P

CLASS: IM/EEE

DATE: 20/08/2022

1. Who was the inventor of the first neurocomputer?

a)Dr. John Hecht-Nielsen

_by.Dr. Robert Hecht-Nielsen

c).Dr. Alex Hecht-Nielsen

d)Dr. Steve Hecht-Nielsen

2. A 3-input neuron is trained to output a zero when the input is 110 and a one when the input is 111. After generalization, the output will be zero when and only when the input is?

a) 000 or 110 or 011 or 101

b) 010 or 100 or 110 or 101

\$ 000 or 010 or 110 or 100

d) 100 or 111 or 101 or 001

3. What is perceptron?

a) a single layer feed-forward neural network with pre-processing

- b) an auto-associative neural network
- c) a double layer auto-associative neural network
- d) a neural network that contains feedback

4. What is an auto-associative network?

- a) a neural network that contains no loops
- b) a neural network that contains feedback
- c) a neural network that has only one loop
- d) a single layer feed-forward neural network with pre-processing

5. A 4-input neuron has weights 1, 2, 3 and 4. The transfer function is linear with the constant of proportionality being equal to 2. The inputs are 4, 10, 5 and 20 respectively. What will be the output?

ar 238 b) 76

c) 119 d) 123

6. Which of the following is true?

(i) On average, neural networks have higher computational rates than conventional computers.

(ii) Neural networks learn by example.

(iii) Neural networks mimic the way the human brain works.

All of the mentioned are true

c) (i), (ii) and (iii) are true

b) (ii) and (iii) are true

d) None of the mentioned

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	An i5O 9001:2015 Certified Institution				
7. Which of the following is	true for neural networks?				
(i) The training time depends	(i) The training time depends on the size of the network.				
(ii) Neural networks can be s	imulated on a conventional computer.				
	entical in operation to biological ones.				
a) All of the mentioned	b) (ii) is true				
(ii) and (ii) are true	d) None of the mentioned				
, , , , , , , , , , , , , , , ,	a) I tolle of the inclinationed				
8. What are the advantages of	neural networks over conventional computers?				
(i) They have the ability to le	arn by example				
(ii) They are more fault tolera					
The second secon	real time operation due to their high 'computational' rates				
a) (i) and (ii) are true	b) (i) and (iii) are true				
c) Only (i)	All of the mentioned				
	an of the mentioned				
9. Which of the following is t	rue?				
	I networks do not have the ability to:				
(i) perform pattern recognition	n				
(ii) find the parity of a picture					
	more shapes in a picture are connected or not				
a) (ii) and (iii) are true	b) (ii) is true				
c) All of the mentioned	d) None of the mentioned				
o) in or the memoried	d) None of the mentioned				
10. Which is true for neural ne	etworks?				
a) It has set of nodes and conr					
	ate or non-excited state d) All of the mentioned				
-, - · · · · · · · · · · · · · · · · · ·	are of non exerced state (2) And of the mentioned				
11. What is Neuro software?					
a) A software used to analyze	neurons by It is powerful and easy neural network				
c) Designed to aid experts in r					
o, a segment so and emperior in a	a) it is software used by incurosurgeon				
12. Why is the XOR problem	exceptionally interesting to neural network researchers?				
	l in a way that allows you to use a neural network				
	y operation that cannot be solved using neural networks				
c) Because it can be solved by					
	nearly inseparable problem that exists.				
a) because it is the simplest if	hearry inseparable problem that exists.				
13. What is back propagation?					
	the curvy function in the perceptron				
	or back through the network to adjust the inputs				
of it is the transmission of erro	or back through the network to allow weights to be adjusted so				
that the network confident	Todak unough the network to anowweights to be adjusted so				
d) None of the mentioned	Dr. S. SEENUVASAMURTHI, M.E. Ph.E.				
d) None of the thentioned 1 Tech	Francoring & Technology				
allos (echine	No.1, Muthupillai Palayam Road				
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14. Why are linearly separable prob	lems of interest of neural network researchers?
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b) Because they are the only class of	f problem that Perceptron can solve successfully
c) Because they are the only mathen	natical functions that are continue
d) Because they are the only mathen	natical functions you can draw
	autour ranotions you can draw
15. Which of the following is not the	e promise of artificial neural network?
a) It can explain result	b) It can survive the failure of some nodes
c) It has inherent parallelism	d) It can handle noise
	a) it can market noise
16. Neural Networks are complex	with many parameters.
a) Linear Functions	b) Nonlinear Functions
c) Discrete Functions	d) Exponential Functions
	a) Exponential 1 unctions
17. A perceptron adds up all the weigh	ghted inputs it receives, and if it exceeds a certain value,
it outputs a 1, otherwise it just output	ts a 0.
a) True	b) False
c) Sometimes - it can also output into	ermediate values as well d) Can't say
	can t say
weighted inputs it receives, and if it e outputs a 0"? a) Step function b) Heaviside finction c) Logistic function d) Perceptron	
because each perceptron can partition combine their results.	off a linear part of the space itself, and they can then
a) True - this works always, and these	e multiple perceptrons learn to classify even complex
problems	to classify even complex
b) False – perceptrons are mathematic	cally incapable of solving linearly inseparable functions,
no matter what you do	sale in solving intentity inseparable functions,
True - perceptrons can do this but a	are unable to learn to do it - they have to be explicitly
hand-coded	and the to do it — they have to be explicitly
d) False - just having a single percept	ron is enough
20. The network that involves backwa	ard links from output to the input and hidden layers is
called	and mader layers is
a) Self organizing maps b) F	Perceptrons
	W TOWE AS E Phil
21. Which of the following is an appli-	Cation of NN (Neural Network) College of Engineering & Technology No.1, Muthupillai Palayam Road, No.1 of the mentioned No.1 of the mentioned No.1 of the mentioned
A 200	





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22. How many	terms are	required	for	building a	baves	model?
			100000000000000000000000000000000000000	W	04,00	mudel:

a) 1

b) 2

c)3

d) 4

23. What is needed to make probabilistic systems feasible in the world?

a) Reliability

b) Crucial robustness

c) Feasibility

d) None of the mentioned

24. Where does the bayes rule can be used?

a) Solving queries

b) Increasing complexity

c) Decreasing complexity

Answering probabilistic query

25. What does the bayesian network provides?

a) Complete description of the domain

b) Partial description of the domain

c) Complete description of the problem

d) None of the mentioned



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Certificate of Completion

2022-2023

This is to certify that Mr/MsARIONS.R.

Year....... Department... References successfully Completed the Value added course.

COURSE TITLE: .. ARTIELGAL...NEURAL....NET.WORK.....

COURSE DURATION: ...9.4.8/22...42.1.8/.22......



Dr. S. SEENUVASAMURTHI, M.E., PK. (1) VVVV PRINCIPAL DISTRICT PRINCIPAL RAAK College of Engineering & Teth Men CIPAL No.1, Muthupillar Palayam Road,

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VALUE ADDED COURSES 2022-2023

Department of Electrical and Electronics Engineering 22EE03- Wind and Solar Electrical Systems

MARK SHEET

SI. No	Register Number	Student Name	MARKS
1	21TE0091	AGILAN .M	92
2 .	21TE0093	BALAMURUGAN.R	92
3	21TE0094	DHINESH.V	92
4	21TE0095	JAGADEESH .S	96
5	21TE0097	PRASANTH.R	88
6	21TE0098	RAGUL .S	84
7	21TE0099	SAKTHIVEL.S	88
8	21TE0100	SANTHOSH.R	96
9	21TE0101	SELVAM.R	92
10	21TE0102	SURESH KUMAR.R	92
11	21TEL052	KALAIMANI.M	92
12	21TEL053	NANDHAN.P	96
13	21TEL054	SABAPATHY.N	88
14	21TEL055	VENUGOPAL.A	84
15	21TEL056	YUVARAJ.R	88

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VALUE ADDED COURSES

2022-2023

Department of Electrical and Electronics Engineering 22EE03- Wind and Solar Electrical Systems

NAME:

CLASS:

DATE:

- 1. Which of the following is renewable energy resource?
- (a) Solar
- Wind (b)
- (c) Geothermal
- (d) All of above

Answer: Option (d)

- Which country generates all their electricity using renewable energy? 2.
- (a) Iceland
- (b) England
- (c) USA
- (d) China

Answer: Option (a)

- 3. Which of the area can often displaces conventional fuel by renwable energy?
- (a) Space heating
- (b) Transportation
- (c) Electricity generation

(d) All of above

Answer: Option (¢

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4.	In which region winds are stronger and constant?
(a)	Deserts
(b)	Offshore
(c)	Low altitudes sites
(d)	All of above
Ansv	ver: Option (b)
5.	Photovoltaic cell converts solar energy into
(a)	Heat energy
(b)	Electric energy
(c)	Mechanical energy
(d)	Chemical energy
Ansv	ver: Option (b)
6.	Which country meets more than 40% of its electricity demand from wind energy?
(a)	Denmark
(b)	Portugal
(c)	Ireland
(d)	Spain
Ansv	ver: Option (a)
7. into a	Concentrated solar power (CSP) systems use to focus a large area of sunlight a small beam.
(a)	Lenses
(b)	Mirrors
(c)	Trackers
(d)	All of above Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
Ansv	All of above ver: Option (d) Dr. S. SEENUVASAMURTHI, M.E., Ph.C. PRINCIPAL RAAK College of Engineering & Technology

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8.	What is a disadvantage of renewable energy?
(a)	High pollution
(b)	Region specific availability
(c)	High running cost
(d)	Unreliable supply
Answ	ver: Option (d)
9. electr	A Solar cell is an electrical device that converts the energy of light directly into ricity by the
(a)	Photovoltaic effect
(b)	Chemical effect
(c)	Atmospheric effect
(d)	Physical effect
Answ	ver: Option (a)
10. India	Which is the largest amount of installed grid interactive renewable power capacity in?
(a)	Wind power
(b)	Solar power
(c)	Biomass power
(d)	Small Hydro power
Answ	ver: Option (a)
11.	The world's first 100% solar powered airport is located at
(a)	Cochin, Kerala
(b)	Bengaluru, Karnataka
(c)	Chennai, Tamil Nadu
(d)	Mumbai, Maharashtra
Answ	PRINCIPAL RAAK College of Familian

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- 12. Where is the largest wind farm located in India?
- (a) Jaisalmer wind farm, Rajasthan
- (b) Muppandal wind farm, Tamil Nadu
- (c) Vaspet wind farm, Maharashtra
- (d) Chakala wind farm, Maharashtra

Answer: Option (b)

- 13. Where does India stand on solar energy production?
- (a) First
- (b) Second
- (c) Third
- (d) Fifth

Answer: Option (c)

- 14. India's position in the Global Wind Energy Council (GWEC) is
- (a) First
- (b) Second
- (c) Third
- (d) Fourth

Answer: Option (d)

- 15. What does heating and cooling of the atmosphere generates?
- (a) Conduction currents
- (b) Radiation currents
- (c) Convection currents
- (d) All of above

Answer: Option (c)



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- 16. What is the estimated wind energy available over the earth surface?
- (a) $2.9 \times 120 \text{ MW}$
- (b) $1.6 \times 107 \,\text{MW}$
- (c) 1 MW
- (d) 5 MW

Answer: Option (b)

- 17. How much is the estimated wind power India hold?
- (a) 10,000 MW
- (b) 20,000 MW
- (c) 40,000 MW
- (d) 50,000 MW

Answer: Option (b)

- 18. What is the main source of wind?
- (a) Uneven land
- (b) Sun
- (c) Vegetation
- (d) Seasons

Answer: Option (b)

- 19. Earlier wind power plants were created by
- (a) Egypt
- (b) Germany
- (c) Iran
- (d) Japan

Answer: Option (c)



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- 20. When the land near the earth's equator is heated
- (a) All the oceans gets heated up
- (b) Small wind currents are formed
- (c) Large winds are formed
- (d) Tides are raised

Answer: Option (c)

- 21. What does heating and cooling of the atmosphere generates?
- (a) Conduction currents
- (b) Radiation currents
- (c) Convection currents
- (d) All of above

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- (c) Iran
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VALUE ADDED COURSES

2022-2023

Department of Electrical and Electronics Engineering

22EE03- WindandSolarElectricalSystems

NAME: SELVAM. R CLASS: IV / EEE DATE: 20/08/2022

		DI
1.	Which of the following is renewable energy resource?	

- (a) Solar
- (b) Wind
- (c) Geothermal
- (d) Tidal

25) 25) 25/

- 2. Which country generates all their electricity using renewable energy?
- (a) Iceland
- (b) England
- (c) USA
- (d) China
- 3. Which of the area can often displaces conventional fuel by renwable energy?
- (a) Space heating
- (b) Transportation
- (c) Electricity generation
- (d) All of above
- 4. In which region winds are stronger and constant?
- (a) Deserts
- 46) Offshore
- (c) Low altitudes sites
- (d) All of above
- 5. Photovoltaic cell converts solar energy into
- (a) Heat energy
- (b) 7 Electric energy
- (c) Mechanical energy
- (d) Chemical energy

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Which country meets more than 40% of its electricity demand from Wind energy?

Denmark

Portugal

(d) Spain

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7.	Concentrated solar power (CSP) systems use _	to focus a large area of sunlight
into a	small beam.	
(a)	Lenses	
(b)	Mirrors	
(c)	Trackers	
(d)	All of above	
8.	What is a disadvantage of renewable energy?	
(a)	High pollution	All the second
(b)	Region specific availability	
(c)	High running cost	
(d)	Unreliable supply	
9.	A Solar cell is an electrical device that converts	the energy of light directly into
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(18)	Photovoltaic effect	
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(c)	Atmospheric effect	
(d)	Physical effect	
10.	Which is the largest amount of installed grid int	eractive renewable power capacity in
India?		
(a) _	Wind power	
(b)	Solar power	
(c)	Biomass power	Λ
(d)	Small Hydro power	
11.	The world's first 100% solar powered airport is	s located at
(a)	Cochin, Kerala	
(b)	Bengaluru, Karnataka	
(c)	Chennai, Tamil Nadu	
(d)	Mumbai, Maharashtra	
12.	Where is the largest wind farm located in India?	
(a)	Jaisalmer wind farm, Rajasthan	
Coll	Muppandal wind farm, Tamil Nadu	
(c)	Vaspet wind farm, Maharashtra	
(d)	Chakala wind farm, Maharashtra	Alm)
13.	Where does India stand on solar energy product	ion Pr. S. SEENUVASAMURTHI , M.E., Ph.C
Colleg	e-dist	RAAK College of Engineering & Technolog
(b)	Second	No.1, Muthupillai Palayam Road,
fe)	Third	Sulthanpet Post,
(d)	Fifth: //	Puducherry - 605 110



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14.	India's position in the Global Wir	nd Energy Council (GWEC) is
(a)	First	
(b)	Second	
(c)	Third	
(d)	Fourth	
15.	What does heating and cooling of	the atmosphere generates?
(a)	Conduction currents	
(b)	Radiation currents	
10)	Convection currents	
(d)	All of above	
16.	What is the estimated wind energy	available over the earth surface?
(a)	2.9 × 120 MW	
(b)	1.6 × 107 MW	
(c)	1 MW	
(d)	5 MW	
17.	How much is the estimated wind p	ower India hold?
(a)	10,000 MW	
(b)	20,000 MW	
(c)	40,000 MW	
(d)	50,000 MW	
18.	What is the main source of wind?	
(a)	Uneven land	
(b)1	Sun	
(c)	Vegetation	
(d)	Seasons	
19.	Earlier wind power plants were cre	eated by
(a)	Egypt	
(b)	Germany	
(0)	Iran	
(d)	Japan	
20.	When the land near the earth's equ	ator is heated
(a)	All the oceans gets heated up	
(b)	Small wind currents are formed	
(c)	Large winds are formed	Dr. S. SEENUVAS

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21. What does heating and cooling of the atmosphere generates? (a) Conduction currents (b) Radiation currents Convection currents (0) All of above (d) 22. What is the estimated wind energy available over the earth surface? 2.9 × 120 MW (a) 1.6 × 107 MW about (c) 1 MW (d) 5 MW 23. How much is the estimated wind power India hold? 10,000 MW (a) 265 20,000 MW 40,000 MW (c) 50,000 MW (d) 24. What is the main source of wind? (a) Uneven land Sun COT Vegetation (c) (d) Seasons 25. Earlier wind power plants were created by (a) Egypt



Germany

Iran

Japan

(b)

(e)

(d)

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SCORE......92......

COURSE DURATION: ...9.4.8.422...tp.....14.48.4.22......



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