Q.17 Discuss various components of Natural Language Processing.

Q.18 What are the laws for AI in India?

Q.19 Discuss the historical background of artificial intelligence?

Q.20 What is biological neural network in the human brain?

Q.21 How Machine Learning helps in improving Artificial Intelligence? Give an Example.

Q.22 Define Computer Vision. White various applications of Computer Vision.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Define Artificial Intelligence. Explain various security relevant properties of Artificial Intelligence with example

Q.24 What do you mean by Artificial Neural Network? Explain various types of Artificial Neural Network.

Q.25 Write short notes on the following (Any two)

(i) Supervised and Reinforcement Learning

(ii) Artificial Neurons

(iii) Applications of AI in Banking Sector

2nd Sem. / Artificial Intelligence & Machine Learning

Subject : Fundamentals of Artificial Intelligence

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The application/Applications of Artificial Intelligence is/are

a) Expert Systems b) Gaming

c) Vision Systems d) All of the above

Q.2 Which of the following is a component of Artificial Intelligence?

a) Training b) Learning

c) Designing d) Puzzling

Q.3 The fundamental unit of artificial neural network is

a) Brain b) Nucleus

c) Neuron d) Axon

Q.4 Which of the following is/are Limitations of deep learning?

a) Data labeling

b) Obtain huge training datasets

c) Both A and B

d) None of the above

Q.5 What is the field of Natural Language Processing (NLP)?

a) Computer Science

b) Artificial Intelligence

c) Both (a) and (b)

d) None of the mentioned

Q.6 Who is known as the inventor of Artificial Intelligence?

a) Charles Babbage   b) John McCarthy

c) Alan Turing   d) Andrew Ng

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory.   (6x1=6)

Q.7 Expand ANN_____.

Q.8 NLP is concerned with the interactions between computers and human (natural) languages. **(T/F)**

Q.9 Define Artificial Intelligence.

Q.10 Define Supervised Learning.

Q.11 If a machine can change its course of action based on the external environment on its own, the machine is called Intelligent Machine. **(T/F)**

Q.12 A computer program with AI cannot answer the generic questions it is meant to solve. **(T/F)**

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions.   (8x4=32)

Q.13 Differentiate between Human intelligence and Machine Intelligence (at least four Differences).

Q.14 Briefly discuss six challenges in implementing AI in various fields.

Q.15 Discuss various applications of Artificial Neural Networks.

Q.16 Explain four types of learning in Machine Learning.