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   What is artificial Intelligence?

a)   Artificial Intelligence is a field that aims to make humans more intelligent

b)   Artificial Intelligence is a field that aims to improve the security

c)   Artificial Intelligence is a field that aims to develop intelligent machines

d)   Artificial Intelligence is a field that aims to mine the data

Q.2   Which of the following is the branch of Artificial Intelligence?

a)   Machine Learning

Q.18   Give four characteristics of Artificial Neural Network.

Q.19   What is computer Vision? Give various applications of Computer Vision.

Q.20   What are activation functions in Artificial Neural Network?

Q.21   What are Ethical and Society related implications in Artificial Intelligence?

Q.22   Give various applications of Deep Learning.

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 Natural Language Processing? Explain various components and challenges of Natural Language Processing.

Q.25   Write short notes on the following:

i)   Supervised and Reinforcement Learning

ii)   Artificial Neurons

b) Cyber forensics

c) Full-Stack Developer

d) Network Design

Q.3 Which of the following is a component of Artificial Intelligence?

a) Training   b) Learning

c) Designing   d) Puzzling

Q.4 Which of the following is the common language for Artificial Intelligence?

a) C++   b) Java

c) Python   d) None of the above

Q.5 In case a machine is a capable of changing its course of action based on the external environment without any external help then the machine is called _____.

a) Special Machine   b) Mobile Machine

c) Intelligent Machine   d) None of the above

Q.6 _____ is not an application of AI.

a) Database Management System

b) Digital Assistants

c) Natural language processing

d) Computer Vision

SECTION-B

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

Q.7 Name two types of Intelligence.

Q.8 Name two challenges that may occur in AI.

Q.9 Write full form of ANN

Q.10 Give two applications of Computer Vision.

Q.11 Define Logic Based Learning.

Q.12 Expand DL_____.

SECTION-C

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

Q.13 Give at least four differences between Deep Learning and Machine Learning.

Q.14 Give four applications of Artificial Intelligence with examples.

Q.15 Define Machine Learning. How does it help in Artificial Intelligence.

Q.16 What are the various components of Natural Language Processing?

Q.17 Differentiate between Human Learning and Machine Learning.