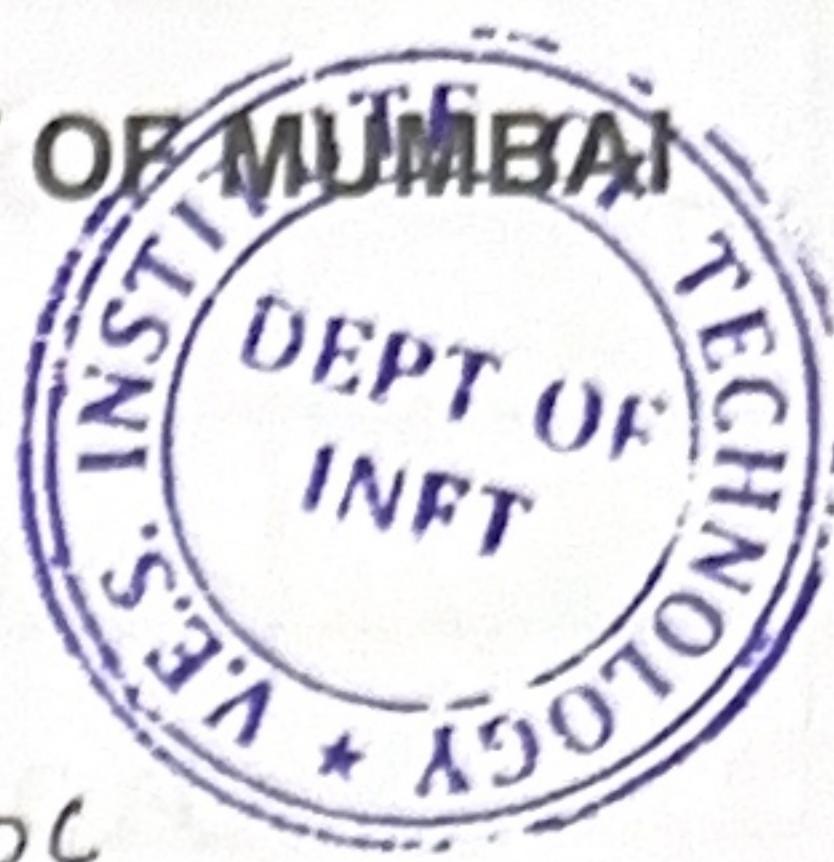




VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY

AN AUTONOMOUS INSTITUTE AFFILIATED TO UNIVERSITY OF MUMBAI



Mid Term Test

Examination : Winter / Summer _____

Year: 2025 Semester: VII Branch: INFT Division: D20C

Name of the Student: Shweta wadhwa Roll No. 58

Subject: 10E Date: 9/1/25

Name & Signature of the Supervisor: Vidya P. De

Question No. 1						Q. No. 2		Q. No. 3		Total Marks (Out of 20)	Signature of Examiner
a	b	c	d	e	f	a	b	a	b	18/20	<i>Debjani 16/9/25</i>
✓ -	✓ -	✓ -	✓ -	✓ -	✓ -	✓ -	-	✓ -	✓ -	18/20	

Q1)

a) DRFIN works same as ADC which is automatic data collection.

In automatic data collection the data is collected through wired medium with very less or no human contact.

③ RFID works same as ADC just wirelessly with the help of radio frequency.

④ The radio frequency waves helps to reader the information hidden in the tag.

⑤ The radio waves emit request. It is then the request is given to the tags. After this they process it and pass it to the RFID reader. The RFID reader processes the information required and send it back as response.

Basically the reader gets the requested data.

⑥ RFID has various types of tags based on energy namely active tags, passive tags, semi-active tags and also semi-passive tags.

⑦ Box

⑦ Basically, when it's on toll the reader reads the tag (fast-tag) from that it gets the information it needs so the radio waves

⑧ Application of DHT

① DHT can be used in for smart farming to check the moisture of the soil and the temperature.

② DHT is also used in smart cities for detecting the rain precipitation from and temperature.

c) The need of edge, fog and cloud level computing was for following reasons-

① Low latency -

As the sensor senses then sometimes it needs quick action such as in case of a vehicle ahead, it needs to press brakes so if we depend on cloud level computing, it will take lot of time to process hence the latency increases. So edge, fog, cloud levels are important where edge level also processes immediately and take suitable actions.

② Bandwidth -

If every perception sensed is sent to cloud then bandwidth was wasted. Some processing can also be done at the lower levels so as to ~~sense~~ not waste bandwidth. Sensors generate huge amount of data and if every data is sent then bandwidth would be wasted.

③ Reliability

It takes reach and sometimes the in turn

④ Real-time

We need we are use.

⑤ Support &

From the

the pattern accordingly

f) There are in IoT

⑥ Request -

client

① The client

② The sends the data

③ The data sends

④ database the back

⑤ Then the client