C-16-CM-505

6629

BOARD DIPLOMA EXAMINATIONS

DCME-FIFTH SEMESTER

SEPTEMBER/OCTOBER-2020

ADVANCES IN COMPUTER TECHNOLOGY

Time: 3 hours | Max. Marks: 80

PART – A **3 X 10 = 30**

Instructions: *1. Answer **all** questions.*
*2. Each question carries **Three** Marks.*
3. Answer should be brief and straight to the point and should not exceed Five simple sentences.

1. List the UML Relationships.
2. List ***any three*** purposes of Class Diagram?
3. What is an annotational thing? Draw the symbol for it.
4. List ***any three*** applications of BigData.
5. List the sources of BigData.
6. What is Telepresence?
7. List the different types of Machine Learning.
8. Write short notes on Clustering.
9. What are the responsibilities of Ethical Hackers?
10. Differentiate Information Security with Cyber Security.

[Cont..,

PART – B 5 X 10 = 50

***Instructions**:* *1. Answer any **Five** questions*
*2. Each question carries **TEN** Marks.*
3. Answer should be comprehensive and a criterion for valuation is the content but not the length of the answer.

11. Explain the following UML diagrams.

    (a) Sequence Diagram (b)Collaboration Diagram

12. What is the functionality of an actor in a use case diagram? Explain with an example.

13. Explain the risks in handling Big Data.

14. Explain the levels of immersion in Virtual Reality systems.

15. a. What is haptics? Write about haptics technology.

    b. List the advantages and disadvantages of virtual reality.

16. Explain in detail about Decision tree learning and Association rule learning.

17. Explain about operational threat environments.

18. Explain ***any five*** Ethical hacking tools.

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BOARD DIPLOMA EXAMINATION, (C–16)

NOVEMBER—2020

DCME—FIFTH SEMESTER EXAMINATION

ADVANCES IN COMPUTER TECHNOLOGY

Time : 3 hours] [*Total Marks* : 80

PART—A 3×10=30

Instructions **:** (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Write the uses of use case diagram.

2. Draw the symbols for the UML elements—*(a)* class, *(b)* node, *(c)* component, *(d)* package, *(e)* use case, *(f)* collaboration.

3. What is the purpose of class diagram?

4. Define big data analytics.

5. List various tools used in big data.

6. List the applications of virtual reality systems.

7. Define machine learning and list the types of machine learning approaches.

8. List any three applications of machine learning.

9. What is ethical hacking?

10. Write the objectives of cyber security.

PART—B

10×5=50

Instructions : (1) Answer *any* **five** questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

11. Explain interaction diagram with an example and write the procedure for drawing interaction diagram. 10

12. Explain the classification of UML diagrams in detail. 10

13. *(a)* Write the applications of big data. 5

(b) What are the risks of big data? 5

14. Write short notes on the following : 10

(a) Human Computer Interaction 5

(b) Haptics 5

15. Explain the evolution of virtual reality systems. 10

16. Explain association rule learning with an example. 10

17. Explain about various cyber security principles. 10

18. List and explain different categories of hackers. 10

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