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**BOARD DIPLOMA EXAMINATION, (C-14)****MARCH/APRIL-2019****DCME – SIXTH SEMESTER EXAMINATION****CRYPTOGRAPHY AND NET WORK SECURITY**

Time:3hours

Max.Marks:80M

**PART-A**

10x3=30

**Instructions:** 1) Answer **all** questions Each question carries **3** marks  
 2) Answer should be brief and straight to the point and shall not exceed five simple sentences.

- 1) What is the need of Network Security?
- 2) Define a) Cryptanalysis      b)Cryptology.
- 3) What is Brute force attack?
- 4) Define Transposion cipher.
- 5) What is the cipher for CRYPTOGRAPHY using Caesar cipher?  
 Take  $n=3$  (where 'n' is the three places forward in alphabet).
- 6) List any three Message authentication requirements.
- 7) Differentiate between Hash function and Cryptographic Hash function?
- 8) Define Virus and write the full form of VIRUS.
- 9) Write about E - mail virus.
- 10) List any three basic conditions that must fulfill to claim a copyright.

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## PART - B

10x5=50

**Instructions:** 1) Answer any **five** questions Each question carries **10** marks  
2) Answer should be comprehensive and the criterion for valuation is the content but not length of the Answer.

- 11) a) Write about the categories of Security services. 6M  
b) Explain the terms confidentiality and integrity w.r.t data . 4M
- 12) a) Explain the model for Network security with diagram.  
b) What would be the transformation of a message "HAPPY BIRTH DAY TO YOU "using Rail fence technique?
- 13) Explain the concept of Hill cipher with suitable example.
- 14) Explain about  
a) Mono alphabetic cipher b) Poly alphabetic cipher.
- 15) Explain Message Authentication requirements.
- 16) a) List the Digital signature requirements.  
b) List the applications of Cryptographic Hash functions.
- 17) Explain the procedure how a Worm propagates.
- 18) Explain the classification of computer crime based on the role that the computer plays in the criminal activity.

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