

**PURBANCHAL UNIVERSITY**

**2020**

M. Sc. in Information System Engineering /First Semester/*Final*

Time: 03:00 hrs.

Full Marks: 45 /Pass Marks: 22.5

**MIE114: Information Security** (*New Course*)

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Answer FIVE questions.**

**5×9=45**

1. Consider that you are a Chief Information Security Office of one of the commercial bank of Nepal. Suggest the security measures that you will put in place to safeguard the Information System assets of the bank. (Hint. Elaborate your answer in terms of CIA triad and People, Policy and Technology.)
2. List different types of application security threats and among them explain three of the most prevalent threats.
3. Differentiate between DES, 3DES, AES and RSA cryptographic algorithms.
4. What is a firewall? Compare different type of firewall with pros and cons of each type.
5. Why we need to conduct audit of an Information System? Discuss the steps of IS audit process.
6. What is BCP? Explain the difference between BCP and DRP.
7. Write a short note on any TWO: 2×4.5=9
  - (a) Wireless security threats
  - (b) Codes of Ethics
  - (c) RTO and RPO



**PURBANCHAL UNIVERSITY**

**2020**

M. Sc. in Information System Engineering /First Semester/*Final*

Time: 03:00 hrs.

Full Marks: 45 /Pass Marks: 22.5

**MIE114: Information Security** (*New Course*)

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Answer FIVE questions.**

**5×9=45**

1. Consider that you are a Chief Information Security Office of one of the commercial bank of Nepal. Suggest the security measures that you will put in place to safeguard the Information System assets of the bank. (Hint. Elaborate your answer in terms of CIA triad and People, Policy and Technology.)
2. List different types of application security threats and among them explain three of the most prevalent threats.
3. Differentiate between DES, 3DES, AES and RSA cryptographic algorithms.
4. What is a firewall? Compare different type of firewall with pros and cons of each type.
5. Why we need to conduct audit of an Information System? Discuss the steps of IS audit process.
6. What is BCP? Explain the difference between BCP and DRP.
7. Write a short note on any TWO: 2×4.5=9
  - (a) Wireless security threats
  - (b) Codes of Ethics
  - (c) RTO and RPO

