**PSG COLLEGE OF ARTS & SCIENCE**
(AUTONOMOUS)

**BSc DEGREE EXAMINATION MAY 2018**
(Sixth Semester)

Branch- **LNFORMATIONTECHNOLOGY**

**INFORMATION SYSTEM SECURITY**

Time : Three Hours Maximum : 75 Marks

**SECTION-A (20 Marks!**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 2 = 20)

1 What is a block cipher?
2 What is the difference between a block cipher and a stream cipher?
3 What do you meant by a trap door?
4 What is biometric authentication?
5 What are the 3 means of providing database integrity?
6 Define inferences.
7 Which factors make the network vulnerable?
8 What is a firewall?
9 Differentiate copy-right and patent.
10 What are all the actions taken as a result of software failure?

**SECTION - B (25 Marks!**

Answer **ALL** Questions

ALL Questions Cany EQUAL Marks (5 x 5 = 25)

11 a Describe the categories of passive and active security attacks.

OR

b Explain the Caesar cipher & brute force attack on that cipher method.

12 a Explain the following non-malicious program errors:
(a) Buffer overflows (b) incomplete medication
(c) Time-of-check to time-of-use errors.

OR

b Explain the control of access to general objects.

13 a Discuss about the two-phase update with example.

OR

b Discuss the types of disclosures under sensitive data of database.

14 a Describe about the link encryption as a network security control.

OR

b Discuss the steps of risk analysis.

15 a Compare and contrast on “ownership of a patent”, “ownership of a copyright” and “work for hire”.

OR

b What are the reasons for it is being considered that computer crime is hard to prosecute?

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Discuss in detail about the digital signatures.
17 Explain the controls against program threats.
18 Explain about different ways of inference being done on databases with examples.
19 Explain about firewalls with neat diagram.
20 Explain the rights of employees and employers and ethical issues in computer security.

**7.-Z-Z** END