## PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

#### **BSc DEGREE EXAMINATION MAY 2017**

 $I4--1 T(s)3^-$ 

(Sixth Semester)

#### Branch- INFORMATION TECHNOLOGY

#### **INFORMATION SYSTEM SECURITY**

Time: Three Hours. Maximum: 75 Marks

# **SECTIONS (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks  $(10 \times 2 = 20)$ 

1 What is a stream cipher?

- What are confusion & diffusion? •
- What is a man-in-the-middle attack?
- 4 What are meant by coupling & cohesion?
- 5 What is a sensitive data? Give example.
- What is "partitioning" under separation method of multilevel security proposal?
- What do you mean by port scan?
- 8 What are the issues need to be addressed by a security plan?
- 9 What do you mean by reverse engineering?
- What are the provisions of the DMCA (Digital Millennium copyright Act)?

## SECTION - B (25 Marks^

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks  $(5 \times 5 = 25)$ 

11 a Discuss about the basic components of computer security.

OR

- b Write about on-time pad with a simple example.
- 12 a Briefly explain about the types of malicious code.

OR

- b Explain about the "Fence Register" and "Base-bound register" method of \* memory protection.
- 13 a Discuss about monitors who maintain the structural integrity of the database.

OR

- b Explain the indirect attacks on sensitive data.
- 14 a Describe about the end-to-end encryption as a network security control.

OR

- b Discuss about the physical security in security administration.
- 15 a Write about employment contracts. .

OR

b Discuss on "Information and the Law".

### **SECTION - C (30 Marks'!**

Answer any **THREE** Questions \*

**ALL** Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- Describe about the hash algorithms.
- What are the file protection mechanism under operating system security? Explain them.
- Discuss about the proposals for multilevel security in database.
- Discuss about IPSec security with required pictures.
- 20 Discuss about the ethical issues in computer security.