

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION DECEMBER 2019  
(First Semester)

Branch - INFORMATION TECHNOLOGY

**FUNDAMENTALS OF INFORMATION TECHNOLOGY**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 1 = 10)

- 1 The part of the computer that execute program instructions is known as \_\_\_\_ .  
(i) memory (ii) control unit  
(iii) CPU (iv) ALU
- 2 Physical memory of the computer s called as \_\_\_\_ .  
(i) RAM ' (ii) ROM  
(iii) cache memory (iv) PROM
- 3 \_\_\_\_ consists of low level programs that interact with the computers at basic level.  
(i) system software (ii) application software  
(iii) compiler . (iv) hardware
- 4 \_\_\_\_ is a computer network that spans a relatively large geographical area.  
(i) LAN (ii) WAN  
(iii) MAN (iv) Topology
- 5 Group of two or more networks is called \_\_\_\_ .  
(i) internet (ii) intranet  
(iii) web browser (iv) networks
- 6 \_\_\_\_ is a software that brings harm to a computer.  
(i) Ransomware (ii) Malware  
(iii) Hybrid attack (iv) Application Software
- 7 \_\_\_\_ is the computer-to-computer exchange of business documents in a standard format.  
(i) EDI (ii) E-Commerce  
(iii) Trading (iv) Pishing
- 8 \_\_\_\_ is a space based satellite navigation system.  
(i) infrared communication (ii) GPS  
(iii) internet (iv) network
- 9 \_\_\_\_ is the simulation of human intelligence processes by machines.  
(i) NLP (ii) Neural Networks  
(iii) AI (iv) Knowledge system
- 10 \_\_\_\_ is a form of many-valued logic in which the truth values of variables may be any real number between 0 and 1.  
(i) AI (ii) Fuzzy Logic  
(iii) Expert System (iv) NLP

**Cont..**

**SECTION - B (25 Marks)**

Answer **ALL** questions

' **ALL** questions carry **EQUAL** Marks ( 5 x 5 = 25)

- 11 a Explain briefly about the generations of Computers.  
OR  
b Discuss about the communication among various units in computer architecture.
- 12 a State the categories of software in detail.  
OR  
b Classify the network topologies with an example.
- 13 a Bring out the types of Internet Connections.  
OR  
b Describe Electronic-mail in brief.
- 14 a Explain the role of information technology in education, medicine and publication.  
OR  
b Describe electronic data interchange in detail.
- 15 a Bring out the uses of Natural Language Processing (NLP).  
OR  
b Narrate the domain areas of artificial intelligence.

**SECTION -C (40 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks ( 5 x 8 = 40)

- 16 a Discuss about CPU process in detail.  
OR  
b Describe about Output devices.
- 17 a Elucidate the relationship between the hardware and software and explain briefly about some software terminologies.  
OR  
b Explain about Client/Server network and peer to peer network with a neat diagram.
- 18 a Explain about the Internet Software and its application.  
OR  
b Discuss about malicious programs in detail.
- 19 a Highlight the need for information, prerequisites of information and technology in brief note.  
OR  
b Discuss about Electronic commerce in Information Technology .
- 20 a Classify some searching techniques in AI.  
OR  
b Summarise the characteristics of expert system and explain some applications.