EXAMINATION PAPER

FACULTY	:	**COMPUTER SCIENCE AND MULTIMEDIA**
COURSE	:	**BACHELOR OF COMPUTER SCIENCE (HONS) (NETWORK TECHNOLOGY AND CYBERSECURITY) (BCS)**
YEAR/ SEMESTER	:	**FIRST YEAR / SEMESTER ONE**
MODULE TITLE	:	**INTERNET FUNDAMENTAL AND APPLICATIONS**
CODE	:	**IFA – 115**
DATE	:	**APRIL 13, 2018, FRIDAY**
TIME ALLOWED	:	**3 HOURS**
START	:	**1:00 PM** **FINISH** **: 4:00 PM**

Instruction to candidates

1. This question paper has THREE (3) Sections.

2. Answer **ALL** questions in Section A, MCQ.

3. Answer **5** questions in Section B, MSAQ.

4. Answer **2** questions in Section C, MEQ.

5. No scripts or answer sheets are to be taken out of the Examination Hall.

6. For Section A, answer in the OMR form provided.

Do not open this question paper until instructed

Multiple Choice Questions (30*1=30)

1. **The IETF standards documents are called:**
   a. RFC
   b. RCF
   c. ID
   d. None of the above

2. **The Internet began with the development of:**
   a. Usenet
   b. Arpanet
   c. Ethernet
   d. Intranet

3. **A global network made up of thousands of privately owned computers and networks is called the:**
   a. world wide web
   b. internet
   c. specialized search engine
   d. internet2

4. **Internet works on the basis of:**
   a. packet switching
   b. circuit switching
   c. both (a) and (b)
   d. either (a) and (b)

5. **Application layer is implemented in_____.**
   a. end system
   b. nic
   c. ethernet
   d. none of the above

6. Which media does not come under the guided media?
   a. Optical Fibres
   b. Coaxial Cable
   c. Microwave
   d. Twisted Pair

7. The Internet model consists of _____ layers.
   a. three
   b. six
   c. five
   d. seven

8. Which one of the following protocol is not used in internet?
   a. HTTP
   b. DHCP
   c. DNS
   d. None of the above

9. Which protocol assigns IP address to the client connected in the internet?
   a. DHCP
   b. IP
   c. RPC
   d. DNS

10. In the OSI model, as a data packet moves from the lower to the upper layers, headers are _____.
   a. added
   b. removed
   c. rearranged
   d. none of the above

11. The process to delivery of the entire message is the responsibility of the _____ layer.
   a. network
   b. transport
   c. application
   d. data link

12. **In the OSI model, as a data packet moves from the lower to the upper layers, headers are_____.**
     a. added
     b. removed
     c. rearranged
     d. modified

13. **What is the main function of the transport layer?**
     a. Node-to-node delivery
     b. Process-to-process delivery
     c. Synchronization
     d. Updating and maintenance of routing tables

14. **The _____ layer changes bits into electromagnetic signals.**
     a. physical
     b. data link
     c. transport
     d. network

15. **TCP/IP model was developed _____ the OSI model.**
     a. prior to
     b. after
     c. simultaneous to
     d. none of the above

16. **In a(n) _____ cipher, the same key is used by both the sender and receiver.**
     a. message digest
     b. symmetric-key
     c. asymmetric-key
     d. either (a) or (b)

17. **Digital signature cannot provide _____ for the message.**
     a. integrity
     b. confidentiality
     c. no repudiation
     d. authentication

18. SSL provides:
   a. message integrity
   b. confidentiality
   c. compression
   d. all of the above

19. The expansion of SSL is:
   a. Socket Secure Layer
   b. Secure Safe Learning
   c. Secure Surfing Layer
   d. Secure Socket Layer

20. Transmission data rate is decided by_____.
   a. network layer
   b. physical layer
   c. data link layer
   d. transport layer

21. In Electronic cash payment_____.
   a. debit card payment system is used
   b. a customer buys several electronic coins which are digitally signed by coin issuing bank
   c. a credit card payment system is used
   d. RSA cryptography is used in the transactions

22. _____ is a subject-oriented, integrated, time-variant, nonvolatile collection or data in support of management decisions.
   a. Data Mining
   b. Data Warehousing
   c. Document Mining
   d. Text Mining

23. A/An _____ system is market-oriented and is used for data analysis by knowledge workers, including managers, executives, and analysts.
    a. OLAP
    b. OLTP
    c. text mining
    d. both of the above

24. _____ is an essential process where intelligent methods are applied to extract data patterns.
    a. Data warehousing
    b. Data mining
    c. Text mining
    d. Data selection

25. Which one of the following is not a way to get a computer virus?
    a. Through e-mail attachments
    b. By typing on keyboard
    c. Through pen drives
    d. By downloading files

26. Which of these is not a search engine?
    a. Excite
    b. Internet Explorer
    c. AltaVista
    d. Yahoo

27. The process of copying a file from a distant server to your local computer is called:
    a. chatting
    b. uploading
    c. server loading
    d. downloading

28. **Which one of the following is a URL?**
    a. simran@gmail.com
    b. wyy.fiitjee.com
    c. com.yahoo.www
    d. www.abcnepal.com

29. **Moving from one webpage to another on the internet is called:**
    a. downloading
    b. surfing the net
    c. hacking
    d. uploading

30. **Wireless transmission can be done via:**
    a. radio waves
    b. microwaves
    c. infrared
    d. all of the above

SECTION B
Short Answer Questions
Attempt any five (5) questions out of eight (8) questions   (5*6=30)

1. Define Internet and Intranet. How Internet is different from Intranet? (2+4)

2. State and explain the features of Email.

3. Define DNS. Explain name server with its categories.(1+5)

4. State and explain how HTTP request and response.

5. Explain in detail about OSI model.

6. State and explain FTP with diagram.

7. Briefly describe the different connection types of internet with examples.

8. Define DSL Connection. Explain several version of DSL technique available today. (2+4)

SECTION C
Long Answer Questions
Attempt any two (2) questions out of three (3) questions (2*20=40)

1.
   a. Explain the evolution and adaptation of Internet.   (6)
   b. Describe static and dynamic websites.   (3+3)
   c. Define E-Commerce. Briefly explain the features of ecommerce.   (2+6)

2.
   a. Elucidate Website Designing with the labeled diagram. Explain the Web Designing Tools.   (6+6)
   b. State and explain the Web Development Process with some common features that every web development tool exhibits.   (8)

3. Explain the Security and Privacy on Internet with its merits. Discuss the Physical Security and Logical Security with the example of each. (10+5+5)

***BEST OF LUCK**