**Time: 3 hours**                                                                                                 **Max. Marks: 80**

=======================================================================

INSTRUCTIONS

(1) Question 1 is compulsory.

(2) Attempt any **three** from the remaining questions.

(3) Draw neat diagrams wherever necessary.

| **Q1** | | **5 marks each** |
|---|---|---|
| a) | Explain Security Services and mechanisms to implement it. | |
| b) | Compare HMAC and CMAC | |
| c) | Explain different NAC enforcement methods | |
| d) | Explain SSH protocol stack in brief | |

| **Q2** | | **10 marks each** |
|---|---|---|
| a) | Explain Playfair cipher with example | |
| b) | Describe different Block Cipher modes | |

| **Q3** | | **10 marks each** |
|---|---|---|
| a) | State firewall design principles and its types with advantages. | |
| b) | Describe different types of protocol offered by SSL. | |

| **Q4** | | **10 marks each** |
|---|---|---|
| a) | What is Network access control? Discuss the elements present in this context. | |
| b) | Explain Kerberos Protocol in detail. | |

| **Q5** | | **10 marks each** |
|---|---|---|
| a) | Explain the working of IPsec in its different mode. | |
| b) | What is Network Management Security? Explain SNMP V3. | |

| **Q6** | | **10 marks each** |
|---|---|---|
| a) | Explain IDS and its types in detail. | |
| b) | Define Malware. Explain at least five types with example. | |

_____

AAB022FD9AF25A01BCD0041F1619A413

**TIME:03 HRS**                                                                                    **MAX MARKS:80**

N.B.    1. Question No 1 is compulsory.
          2. Solve any **three** questions out of remaining five questions.
          3. Assume suitable data if necessary.
          4. Figures to right indicate marks.


Q. 1. Solve any **four** out of five.                                                             **(4*5=20)**
          a. Describe a Woman Entrepreneur and state the steps government should take to
              encourage women entrepreneurs?
          b. List different methods of acquisition.
          c. Write about Scientific management. Explain Taylor's four principles of scientific
              management.
          d. Write a note on Supply Chain Management
          e. Compare: Manager Vs Entrepreneur

Q. 2.
          a) Describe Entrepreneurial motivation and explain different ways an entrepreneur
          can motivate his employees.                                                             **(10)**
          b) Write a detailed report on factors to be considered when starting a new business.   **(10)**


Q. 3.
          a) List different factors that can result in failure of a new venture.                 **(10)**
          b) State and explain with examples indicating the features of a good business plan.    **(10)**


Q. 4.
          a) Define E-commerce and explain different types of E-commerce.                         **(10)**
          b) Explain with example the following statement: E-commerce can result in
          globalization of the business activity.                                                **(10)**


Q. 5.
          a) Define an ERP.  List the different features an ERP should have for an
          educational institute software.                                                        **(10)**
          b) Discuss the core and extended components of ERP system.                              **(10)**


Q. 6.
          a) Enlist and explain the different sources of Finance for enterprises.                 **(10)**
          b) Explain procurement and E-Procurement and describe the
          components of e-Procurement.                                                            **(10)**

------------------------------------

**(3 Hours)**

**(Total Marks: 80)**

**N.B.:** 1. Question No.1 is compulsory.

2. Answer any three out of remaining questions.

3. Assume suitable data if necessary.

4. Figures to the right indicate full marks.

**Q1.**   a) i) How to declared variables in ES6?                                                    **(5)**
ii) Differentiate between ES5 and ES6.                                              **(5)**
b) Explain React component life cycle.                                              **(10)**

**Q2.**   a) Explain Flux architecture in detail.                                              **(10)**

b) Explain Promises in ES6 with an example.                                    **(10)**

**Q3.**   a) Explain File System of NodeJs in detail.                                    **(10)**

b) Write a stepwise process to create an APP using ReactJS to print "Hello World".   (10)

**Q4.**   a) What is ExpressJS. Explain features of ExpressJS.                      **(10)**

b) What is DNS? Explain working of DNS.                                          **(10)**

**Q5.**   a) What is REST API? What are the principles of REST API.            **(10)**

b) What is Web Browser. Discuss working of Web Browser in detail.    **(10)**

**Q6.**   Short note on: **(Any 4)**                                                            **(20)**

a)  JSON
b)  NPM
c)  JSX
d)  Difference between let and const keyword
e)  Arrow function in ES6

**********

26418

**(3 Hours)** [Total: 80 Marks]

Note : (1). Question number 1 is compulsory.
        (2).Attempt any three questions from the remaining.
        (3).Assume suitable data wherever necessary.

| | | |
|---|---|---|
| Q1 | Solve any Four out of Six. | |
| a) | Explain the characteristics and nature of software. | 05 |
| b) | Describe the advantages and limitations for large sized software projects? | 05 |
| c) | Explain the steps involved in SQA Plan? | 05 |
| d) | Discuss about the principles of user interface design steps? | 05 |
| e) | Explain 3 P's in software project spectrum? | 05 |
| f) | Short note on Mc-Calls Quality factors? | 05 |
| | | |
| Q2a) | Explain the Principles of Agile methodology? Discuss the difference between Agile and Evolutionary Process Model? | 10 |
| b) | Explain V-Model in details? | 10 |
| | | |
| Q3a) | Explain characteristics of SRS? Build an SRS Document for online student feedback system? | 10 |
| b) | What is Feasibility Study? Discuss the different types of feasibility study. | 10 |
| | | |
| Q4a) | Explain LOC and Function Point estimation technique in detail? | 10 |
| b) | Explain different types of coupling and cohesion? | 10 |
| | | |
| Q5a) | Explain Risk Mitigation, Monitoring, and Management (RMMM) plan. | 10 |
| b) | Explain change control process in SCM in detail? | 10 |
| | | |
| Q6a) | What is a risk? Explain different types of risk in details? | 10 |
| b) | Explain software testing strategy and its techniques? | 10 |

**************

**26977**