

5<sup>TH</sup> SEM./ COMMON TO ALL/ 2023(W) NEW

Th-1 Entrepreneurship and Management & Smart Technology

Full Marks: 80

Time- 3 Hrs

Answer any Five Questions including Q No.1& 2  
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10
  - a. What is entrepreneurship?
  - b. What is start up ?
  - c. What is project appraisal?
  - d. List the components of project cost.
  - e. Define management.
  - f. Write the need of inventory management.
  - g. List two barriers in business communication.
  - h. Write two methods of maintaining relations with subordinates.
  - i. What is trademark? Write two advantages of having trade marks.
  - j. What is smart technology?
2. Answer **Any Six** Questions 6 x 5
  - a. Explain in brief the qualities of entrepreneur.
  - b. What is Maslow theory of motivation. Explain.
  - c. Explain SSI, Ancillary unit and Tiny units.
  - d. Write a note on staffing as a function of management.
  - e. Explain ABC Analysis (selective inventory control), a model of inventory managements.
  - f. Write the components of IOT.
  - g. Explain different styles of leadership.
  - h. Write five points in payment of wages act.
3. Explain the assessment of demand and supply in potential area of growth. 10
4. Write the important functions of management. 10
5. Explain TQM concept-Quality Policy, Quality Management and quality system. 10
6. Explain the concept of 4Ps in marketing management. 10
7. Explain the application of IOT in smart healthcare and smart agriculture. 10

TH-2 INTERNET & WEB TECHNOLOGY

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2  
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10
  - a. Write the two uses of computer network.
  - b. Name the protocols used in metropolitan area network.
  - c. Define MTU.
  - d. What do you mean by Namespace ?
  - e. Write the address range of CLASS B IP address .
  - f. State the difference between HTTP & HTTPs.
  - g. What is RSS Feed?
  - h. Name the different non-primitive datatype used in javascript.
  - i. Write the syntax & purpose of HTML fieldset element of the form.
  - j. Write the syntax & purpose of PHP string function with example.  
Explode () , strpos ()
  
2. Answer **Any Six** Questions 6 x 5
  - a. Distinguish between server side scripting & client side scripting.
  - b. State & explain the PHP Session .
  - c. Write a program in javascript to check the string is palindrome or not.
  - d. How does a search engine work? Explain.
  - e. Differentiate between classfull IP address & classless IP address.
  - f. Write the short notes (any two):
    - i. NVT
    - ii. ISP
    - iii. E-Commerce
    - iv. IRC
  - g. Explain the various application level protocol.
  
3. Define html form. Why we use html form? Explain the syntax & purpose of different html form tag with example. 10
4. Briefly explain the basic security principle concept. 10
5. Define firewall. Explain the types of firewall. Describe the working principle of firewall. 10
6. Define cookies . how cookies works in javascript? How to create a cookie in javascript. 10
7. Compare & contrast the Internet , Intranet & Extranet. 10

5<sup>TH</sup> SEM. / CS & E/ IT / 2023(W) NEW

Th-3 Software Engineering

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2  
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10
  - a. Define phase containment error.
  - b. What do you mean by the “99% complete” syndrome in software development?
  - c. What are the different activities of project manager?
  - d. Why Gantt chart is used?
  - e. Define fan-in and fan-out.
  - f. Why SRS is called as black-box specification of the system.
  - g. Define structure analysis.
  - h. Define debugging.
  - i. List different menu used in menu based interface
  - j. Define software reliability
  
2. Answer **Any Six** Questions 6 x 5
  - a. Discuss about function point metric .
  - b. Briefly discuss the spiral model of software development. Why spiral model is known as a meta model.
  - c. Write characteristics of Good software Engineer.
  - d. What is code inspection? How it is different from code walk through?
  - e. Define DFD. Explain different symbol used in DFD.
  - f. Define SRS. Write about different category of user of SRS document
  - g. Explain team structure with diagram.
  
3. Discuss about different Empirical Estimation Techniques. 10
4. Define cohesion and coupling. Explain their classification. 10
5. What is testing? Discuss about black box testing with example. 10
6. Discuss about different types of user interface. 10
7. What is prototyping? Under what circumstances it is beneficial to construct a prototype model. Discuss the prototyping mode of software development. 10

**Th-4 Computer Hardware and Maintenance**

**Full Marks: 80**

**Time- 3 Hrs**

**Answer any five Questions including Q No.1& 2**  
**Figures in the right hand margin indicates marks**

1. Answer **All** questions 2 x 10
    - a. Name four Major vendors of Computer Software.
    - b. What is BIOS?
    - c. Define virus.
    - d. Define Memory Access Time.
    - e. Name four Antivirus softwares available in the market.
    - f. What are the different slots in the Mother Board.
    - g. Write the function of North Bridge.
    - h. Define four types of Monitors.
    - i. Write the function of UPS.
    - j. List different types of RAM.
  2. Answer **Any Six** Questions 6 x 5
    - a. What are the different types of job carried out in an Organisation?
    - b. Explain Basic maintenance Concept.
    - c. Explain the function of ROM-BIOS.
    - d. Describe about the Memory Hierarchy.
    - e. Write the procedure to Assemble a computer.
    - f. Explain the different types of Scanners Available.
    - g. Describe about two Main Chipsets of Mother Board.
- Answer Any **Three** Questions
3. Write the Main Components of Mother Board. Explain the function of each component fitted on the Mother Board. 10
  4. Describe the Hard Disk Drive Construction and its working principle. 10
  5. Identify the basic concept of Maintenance. Explain how the computer system is Prevented, Corrected and Maintained. 10
  6. List out the interconnecting devices in a Computer Network and explain their functions briefly. 10
  7. Write short notes on any Two. 10  
POST  
NIC  
Core2 Duo Processor

5<sup>TH</sup> SEM./ CS& E/ IT /2023(W) NEW

Th-5 Mobile Computing

Full Marks: 80

Time- 3 Hrs

Answer any five Questions including Q No.1& 2  
Figures in the right hand margin indicates marks

1. Answer **All** questions 2 x 10
  - a. Write down any four characteristics of Mobile Computing.
  - b. What does MSC stand for?
  - c. Write any two differences between Peer-to-Peer architecture and Client Server architecture.
  - d. What is the role of Mobile Agent?
  - e. Give an example of Hidden and Exposed Terminal.
  - f. Write down any two advantages of Radio Frequency.
  - g. What is the need of correspondent Node in terms of Mobile IP?
  - h. Write down the needs of Wireless Application Protocol.
  - i. Differentiate between CDMA and CDMA-2000.
  - j. What are the various components of UMTS architecture?
2. Answer **Any Six** Questions 6 x 5
  - a. Differentiate between CSMA/CA and CSMA/ CD.
  - b. Explain the working principal of Mobile IP.
  - c. Define Antenna. Classify different types of Antenna.
  - d. Differentiate between Piconet and Scatternet in Bluetooth communication.
  - e. Illustrate WWW architecture for Mobile Computing with proper diagram. .
  - f. Explain about the functional components of Global System for Mobile Communication.
  - g. Differentiate between SMS and MMS

Answer Any **Three** Questions
3. Briefly explain about all the generations of Mobile Communication. 10
4. Define Modulation. Elaborate different types of Modulation used in Mobile Computing. 10
5. Explain about the various standards of IEEE 802.11. 10
6. What does IS-95 stands for? Describe the architecture of IS-95. 10
7. Write short notes on- (Any two) 10
  - i. Wireless Sensor Network
  - ii. N-Tier architecture
  - iii. Near and Far Terminal
  - iv. GPRS