

J AND K BOARD OF TECHNICAL EDUCATION

MJ23

ROLL No: _____

Semester:-6th (New)

Branch:- ALL (Except Civil Engg)

Subject:- BASICS OF MANAGEMENT

Max Marks:-100

Time: 03 Hours

Note:- Attempt any five Questions. All Questions carry equal marks.

- ~~Q1~~(a) Explain the term 'Management'. What are the various functions of management? (12)
(b) Explain the importance of departmentalization. (08)
- Q2(a) What are the various types of industrial organizations? Explain. (12)
(b) Explain the Hierarchical Management Structure. (08)
- Q3(a) State and explain the components of Culture. What is the significance of a healthy work culture in an organization? (15)
(b) Define Individual and group behaviour. (05)
- ~~Q4~~(a) Explain the need of Leadership. What are the qualities of a good leader? (12)
(b) Differentiate between a manager and a leader. (08)
- ~~Q5~~(a) Define motivation and its characteristics. What are the factors that affect motivation. (10)
(b) Explain Maslow's Need Hierarchy Theory of Motivation. (10)
- ~~Q6~~(a) Define wage payment. What are the types of wage payment? (12)
(b) Explain job satisfaction with the help of an example. (08)
- Q7(a) Define Purchasing. Explain the procedure followed for purchasing. (12)
(b) Differentiate between marketing and selling. (08)
- Q8(a) Explain the processes :Manpower Planning, recruitment and selection. (15)
(b) Define Just in time (JIT). (05)
- Q9(a) Explain the terms Income Tax, Sale Tax, Excise duty and Provident Fund. (10)
(b) What is total quality management ? Explain (10)
- Q10 Write short notes on any two. (2x10=20)
(a) Intellectual property rights (b) Customer Relationship Management
(c) Minimum Wages Act 1948 (d) Preventive Maintenance

J & K BOARD OF TECHNICAL EDUCATION

MJ23

ROLL No: _____

Semester:-6th (New)

Branch:- COMPUTER ENGINEERING

Subject:- ARTIFICIAL INTELLIGENCE

Time: 03 Hours

Max Marks:-100

Note:- Attempt any five Questions.

- Q1. a) What is State Space Representation. Represent Water Jug problem using State Space Representation? (10)
b) Write short note on: (10)
i) MinMax Search ii) Natural Language Understanding
- Q2. a) What is Artificial Intelligence. Explain the various application of Artificial Intelligence? (10)
b) Explain in brief history of Artificial Intelligence? (10)
- Q3. a) What is Hill Climbing Search .Discuss the various problem of Hill Climbing ? (10)
b) Differentiate between Breadth First Search (BFS) and Depth First Search (DFS)? (10)
- Q4. a) What is an Expert System. Explain the Architecture of an Expert System? (10)
b) Explain the various steps to built an Expert System ? (10)
- Q5. What is Knowledge Representation. Explain the various techniques of knowledge Representation? (20)
- Q6. Convert the following statements into logical Representation:
1. If I will go to Australia, then I will earn more money.
2. He goes to play a match if and only if it does not rain.
3. He is poor but honest.
4. Every man respects his parent.
5. Not all students like both Mathematics and Science.
6. Some boys play cricket.
7. We will leave whenever he comes.
8. Not every animal dislikes honey. (20)
- Q7. a) What is Prolog. Explain the various datatypes of Prolog? (10)
b) Write short note on (10)
1. Facts 2. Rules 3. Atoms
- Q8. a) What is Robotics. Explain the various components of Robotics System? (10)
b) Explain distributed Artificial Intelligence? (10)
- Q9. a) Explain the various current developments in Artificial Intelligence? (10)
b) Differentiate between Knowledge and information? (10)
- Q10. a) What is Heuristic Search. Explain A* Search with the help of an example? (10)
b) Explain the various issues of Artificial Intelligence? (10)

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MJ23

ROLL No: _____

Semester:-6th (New)

Branch:- COMPUTER ENGINEERING

Subject:- MOBILE COMPUTING (ELECTIVE II)

Max Marks:-100

Time: 03 Hours

Note:- Attempt any five Questions. All Questions carry equal marks.

Q1 a) Explain mobile computing. What are its advantages? (10)

b) What are wireline and wireless data networks? (10)

Q2 a) Explain the 3-tier mobile computing architecture with the help of diagram. (12)

b) How is mobile computing achieved through internet? Explain (08)

Q3 a) Discuss EDGE. Explain its features, working and advantages. (15)

b) What is the need of operating systems for mobile devices? (05)

Q4 a) Explain 3G cellular networks and their significance. (12)

b) Discuss middleware in mobile computing. (08)

Q5 a) Explain the GSM architecture with the help of neat diagram. (15)

b) What is the JAVA card? Discuss its application in wireless systems. (05)

Q6 a) With the help of a neat diagram, explain the GPRS architecture. (12)

b) Write a short note on CDMA Technologies. (08)

Q7 a) Define Wireless Application Protocol (WAP). Explain its functions. (10)

b) Explain the IEEE 802.11 standards. (10)

Q8. a) Explain the working of Bluetooth. (10)

b) Discuss the working of RFID. How it is different from Bluetooth. (10)

Q9 a) What are the design constraints in applications for handheld devices. (10)

b) List and explain the features of Palm and Symbian OS. (10)

Q10. Write short notes on any two. (2x10=20)

(a) Features of WIMAX

(b) J2ME technology

(c) MMS

(d) Mobile IP

Semester:-6th (New)

Branch:- COMPUTER ENGINEERING

Subject:- INSTALLATION , MAINTENANCE AND TROUBLESHOOTING OF
COMPUTER NETWORKS

Max Marks:-100

Time: 03 Hours

Note:- Attempt any five Questions. All Questions carry equal marks.

- Q1(a) Discuss the various environmental requirements for computer system and Peripherals in a computer room. (12)
- (b) What are the steps for site preparation and design of computer room? (08)
- Q2(a) What is maintenance? Explain Preventive and corrective maintenance (12)
- (b) Explain grounding shielding. What is the benefit of ground shielding. (08)
- Q3(a) Write the specifications of a latest P.C. (10)
- (b) Define LAN failure. How it will be diagnosed ? Explain. (10)
- Q4(a) Explain the troubleshooting of various networking devices in computer networks. (12)
- (b) How is address management done in a local area network? (08)
- Q5(a) Explain the steps for sharing a printer among systems in a LAN. (12)
- (b) Explain how system resources can be shared using network sharing tools. (08)
- Q6 Explain sub-netting and super-netting techniques in the networks. What are the benefits of these techniques. (20)
- Q7(a) Explain Domain Name System. What are its benefits ? Explain. (12)
- (b) What is a Workgroup ? How it will be created? What are its benefits. (08)
- Q8(a) Explain 2-tier and 3-tier network architecture. What shall be the troubleshooting strategy for same ? Explain (12)
- (b) What is a switch? How troubleshooting of switch can be done? Explain. (10)
- Q9(a) Explain the reserved IP addresses. (10)
- (b) What are the different types of addressing classes used in computer networking? Explain. (10)
- Q10. Write short notes on any two. (20)
- (a) Proxy server (b) Router configuration
- (c) Network Access Points (d) Client server technology

J & K BOARD OF TECHNICAL EDUCATION

MJ23L

ROLL No: _____

Semester:-6th (New)

Branch:- COMPUTER ENGINEERING /IT

Subject:- VISUAL PROGRAMMING USING .NET

Max Marks:-100

Time: 03 Hours

Note:- Attempt any five Questions. All Questions carry equal marks.

Q1: a) What is VB .Net? Explain the main features of VB .Net. [5,5]

b) Describe the five different types of variables used in VB .Net with examples. [2x5]

✓ Q2: Define

a) Common Language Runtime (CLR)

b) Common Type System (CTS)

c) Common Language Specifications (CLS) d) Microsoft Intermediate Language (MSIL) [4x5]

✓ Q3: a) What is an IDE in the context of VB .Net? [10]

b) List and briefly explain the key components of the Visual Studio IDE for VB .Net development. [10]

Q4: a) Explain Sub Procedure, function in context of VB .Net [10]

b) Explain difference between By Val and By Ref with the help of example. [10]

✓ Q5: a) Discuss the importance of exception handling in VB .Net. [10]

b) Explain the try-catch-finally block and its role in exception handling with an example. [10]

Q6: a) What are control structures in VB .Net? [10]

b) Compare and contrast the If-Then-Else and Select Case statements in VB .Net with suitable examples. [10]

Q7: a) Explain the concept of database connectivity in VB .Net. [10]

b) Discuss the steps involved in connecting to a database and performing select query. [10]

Q8: a) What are event handlers in VB .Net? [10]

b) List four event handlers and four property of any three controls in VB .Net and explain how to use them. [10]

Q9: a) Explain what is Crystal Reports and how to connect them to a database? [10]

b) Explain Request and response object in Asp dot net and their uses. [10]

Q10: a) Explain web service and list steps to create a web service [10]

b) Explain three tier Client Server architecture [10]

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