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R18

Course Code: A30013



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: **BUSINESS MANAGEMENT & FINANCIAL ANALYSIS**

(Common for CSE & IT)

Date: 06.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. Define Management. 2 M
2. Explain any two functions Management. 2 M
3. Explain the concept of plant layout. 2 M
4. Write any two objectives of financial management. 2 M
5. Briefly discuss about microeconomics. 2 M
6. Write different stages in product life cycle. 2 M
7. Define production function. 2 M
8. Explain any two objectives of Pricing. 2 M
9. Explain the objectives of business enterprise. 2 M
10. Explain any two Turnover ratios. 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). Mention the principles of scientific management and also discuss why these principles of management are still practical in organization context. 10M
- OR**
11. B). Explain the different theories of motivation. 10M
12. A). Examine the recent trends in marketing & marketing mix. 10M
- OR**
12. B). Analyze the objectives and functions of Human Resource management. 10M
13. A). What do you mean by elasticity of demand? Analyze the different measures and types of elasticity of demand. 10M
- OR**
13. B). What do you understand by demand forecasting? Examine different methods of demand forecasting of existing products. 10M

(P.T.O.)

14. A). What do you understand by market? Examine different types of markets. 10M

OR

14. B). A company reported the following results. 10M

Sales Rs.15,00,000

Variable cost Rs.9,00,000

Fixed cost Rs.2,00,000

Ascertain the following:

- i. P/V Ratio
- ii. B.E.P sales
- iii. Margin of safety.
- iv. Sales required to earn a profit of Rs.5,00,000.

15. A). What do you understand by trading account? Prepare the format for trading account and profit & loss account. 10M

OR

15. B). What is meant by ratio analysis? Examine the liquidity, activity and profitability ratios. 10M

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Course Code: A30163



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: AIR POLLUTION & CONTROL

(Common for EEE, MECH, ECE, CSE & IT)

Date: 08.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. Define Inversion. 2 M
2. Give any four examples for aerosols. 2 M
3. Write a note on Mixing height. 2 M
4. Discuss the terms wind direction & speed. 2 M
5. List out the difficulties encountered in sampling. 2 M
6. What is called mass spectrometric analysis? 2 M
7. Define efficiency of separating devices. 2 M
8. Write a note on dust trap. 2 M
9. Discuss exhaust emission. 2 M
10. List any four functions of state pollution control board. 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). Explain about Primary and Secondary air pollutants. 10M
- OR**
11. B). Summarize the influences of hydrogen fluoride & hydrogen chloride as air pollutants. 10M
12. A). Briefly explain about estimation of plume rise. 10M
- OR**
12. B). Elaborate secondary meteorological parameters that influence air pollution. 10M
13. A). Write a detailed note on Gaussian dispersion Models. 10M
- OR**
13. B). Explain about Adsorbers & Condensers– the sampling devices. 10M
14. A). Elaborate about mechanical scrubbers. 10M
- OR**
14. B). Summarize about Electrostatic Precipitator. 10M
15. A). Explain the significance of air pollution control area. 10M
- OR**
15. B). Brief about Environmental (Protection) Act 1986. 10M

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Course Code: A30534



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: **DESIGN PATTERNS**

(Common for CSE & IT)

Date: 10.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. What is Builder Design pattern? 2 M
2. How to select design pattern? 2 M
3. What is meant by recursive composition? 2 M
4. Explain the Glyph Abstract class hierarchies. 2 M
5. What is the difference between creational patterns and structural patterns? 2 M
6. Explain the intent of proto type design Pattern. 2 M
7. What are the applications of Composite design Pattern? 2 M
8. Explain the structure of the Decorator design Pattern. 2 M
9. Discuss the Applicability of Mediator design Pattern. 2 M
10. Draw the structure of Interpreter design Pattern. 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). What is design pattern and list the Catalog of Design Patterns. 10M
- OR**
11. B). Discuss about design pattern in Smalltalk MVC. 10M
12. A). What is meant by recursive composition and explain the Glyph Abstract class hierarchies? 10M
- OR**
12. B). Explain Supporting Multiple Look-and-Feel Standards. 10M
13. A). Explain with an example how adapter patterns can be implemented. 10M
- OR**
13. B). Discuss the consequences and applications of Prototype. 10M
14. A). Draw the structure of the proxy pattern and write the applications. 10M
- OR**
14. B). Draw the structure of the Facade pattern and write the applications. 10M
15. A). Write the consequences and issues when using the visitor pattern. 10M
- OR**
15. B). Explain with an example how Chain of responsibility patterns can be implemented? 10M

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Course Code: A31206



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: **HUMAN COMPUTER INTERACTION**

(Information Technology)

Date: 13.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. Relate the terms Human Computer Interaction and User Interface Design. 2 M
2. What is meant by good user interface? 2 M
3. List some limitations of Human interaction with computers. 2 M
4. List out the importance of human characteristics that have an influence on design. 2 M
5. What is the purpose of screen? 2 M
6. What are the three components of HCI? 2 M
7. Explain is the role of HCI in software engineering. 2 M
8. What are the HCI pattern evaluation techniques? 2 M
9. What are the three types of cognitive models in HCI? 2 M
10. How do you focus on user experience? 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). Is good design of user interface important? What comprises a good design? Explain clearly. 10M
- OR**
11. B). Explain the importance and benefits of good design. 10M
12. A). Discuss the importance of human characteristics which should be Considered in interface design. 10M
- OR**
12. B). Explain various types of statistical graphics that are used in screen design 10M
13. A). Explain screen based and device based control mechanism in detail. 10M
- OR**
13. B). Explain various New and Navigation schemes selection of window with example. 10M
14. A). Explain heuristic HCI pattern evaluation techniques. 10M
- OR**
14. B). Explain universal design principles and also explain multi model interaction 10M
15. A). What is Augmented reality? Explain the applications of Augmented reality and also explain the cognitive architecture. 10M
- OR**
15. B). Explain goal and task hierarchies of cognitive modeling. 10M

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Course Code: A30540



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: **BIG DATA ANALYTICS**

(Common for CSE & IT)

Date: 15.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. Write the characteristics of Big Data. 2 M
2. Define NoSQL database? List few NoSQL database systems. 2 M
3. What is replication factor and what is the default replication factor of Hadoop? 2 M
4. What is HDFS? 2 M
5. What is Mapper Phase? 2 M
6. What is Sorting and shuffling phase? 2 M
7. What is Apache PIG? 2 M
8. Write the procedure for executing pig program. 2 M
9. List the advantages of HIVE. 2 M
10. What is managed table? 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). Explain the differences between RDBMS and Big Data? Give suitable applications of each with an example. 10M
- OR**
11. B). Discuss the real time applications of Big Data and Big Data Analytics with suitable examples. 10M
12. A). Discuss block size concept of HDFS with a neat diagram. 10M
- OR**
12. B). How the communication takes place between name node and data node? Also explain fault-tolerance of HDFS. 10M
13. A). Implement Map Reduce Program for Word Count Problem. 10M
- OR**
13. B). Explain Hadoop's ecosystem and write a Hadoop command to copy data from local file system to HDFS and HDFS to local file system. 10M

(P.T.O.)

14. A). i) Explain architecture of PIG and its advantages. 5M
ii) Explain about PIG Relational Operators. 5M

OR

14. B). i) Discuss PIG components. 5M
ii) Explain about pig Load, Store and Relational Operators. 5M

15. A). Explain about HIVE characteristics, architecture and components in detail. 10M

OR

15. B). Explain HIVE data types and demonstrate in creating Table with suitable example. 10M

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Course Code: A30160



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: **DISASTER MANAGEMENT & MITIGATION**

(Common for EEE, MECH, ECE, CSE & IT)

Date: 17.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

1. Define environmental hazard. 2 M
2. Mention about the approaches related to human ecology. 2 M
3. Give examples of Man induced hazards. 2 M
4. Differentiate Endogenous and Exogenous hazards. 2 M
5. State the hazardous effects of volcanoes. 2 M
6. Draw different forms of lightning. 2 M
7. List out the monitoring systems used for tracing the path of cyclones 2 M
8. Identify the Flood hazard status in India 2 M
9. Define the term Rehabilitation. 2 M
10. Write a short note on an emergency stage in disaster management. 2 M

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- 11.A). i) Distinguish between Environmental stress, hazard and disaster. 5M
ii) Describe Ecosystem approach to mitigate environmental stress. In what way it is different from the perception approach? 5M
- OR**
11. B). Human perception changes with environmental degradation. Justify the statement. 10M
12. A). Explain how man-made hazards trigger the natural hazards 10M
- OR**
12. B). Explain different types of Endogenous hazards. 10M
13. A). Summarize about volcanic eruptions impacts on environment 10M
- OR**
13. B). Explain the reason behind Zones of earthquake occurrence in India. List out various hazardous effects of earthquakes. 10M
14. A). i) Mention the causes of drought and the mitigation measures. 5M
ii) Explain the relation between environmental hazard and ecology with respect to drought. 5M
- OR**
14. B). State the factors influencing the soil erosion along with different methods of conservation measures. 10M

(P.T.O..)

15. A). i) Illustrate the considerations related to the disaster management of human resources during the COVID-19 pandemic. 5M
- ii) Write few implementations required in such emergency situations with disaster response team 5M

OR

15. B). Differentiate rescue and preparedness. Explain pre disaster measures that would have reduced the impact of land slide disaster. 10M



CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Regular/Supplementary Examinations December-2022

Course Name: KNOWLEDGE MANAGEMENT

(Common for CSE & IT)

Date: 17.12.2022 AN

Time: 3 hours

Max.Marks: 70

(Note: Assume suitable data if necessary)

PART-A

Answer all TEN questions (Compulsory)

Each question carries TWO marks.

10x2=20M

- | | |
|---|-----|
| 1. What are the challenges in implementing Knowledge management programmes? | 2 M |
| 2. What is leveraging knowledge? | 2 M |
| 3. Outline the barriers to BPR success. | 2 M |
| 4. Summarize the importance of ERP. | 2 M |
| 5. How does knowledge management improve the service industry? | 2 M |
| 6. What are the Different Challenges of Knowledge Management? | 2 M |
| 7. Distinguish knowledge capital and physical capital. | 2 M |
| 8. What is the most important aspect in customer relationship management? | 2 M |
| 9. Define the features and components of learning organization. | 2 M |
| 10. What is the role of web portal in knowledge management? | 2 M |

PART-B

Answer the following. Each question carries TEN Marks.

5x10=50M

- | | |
|--|-----|
| 11.A). Define Knowledge Management and Explain the Scope and features of Knowledge Management. | 10M |
| OR | |
| 11. B). Explain the Classification of Organizational knowledge. | 10M |
| 12. A). What are the tools you can apply for Knowledge Management? Explain them with Instances. | 10M |
| OR | |
| 12. B). How do you Create effective KM systems through IT? Explain. | 10M |
| 13. A). How knowledge management systems are turning manufacturing into a competitive weapon? Explain. | 10M |
| OR | |
| 13. B). Explain the future trends of knowledge management. | 10M |
| 14. A). Discuss the role and relevance of internet search Engines and Knowledge Management practices. | 10M |
| OR | |
| 14. B). Discuss on "Business Ethics and Knowledge Management". | 10M |
| 15. A). Explain the ten steps of knowledge management road map implementation of Amrit Tiwana. | 10M |
| OR | |
| 15. B). Explain the role of Knowledge management in Organizational restructuring. | 10M |