H.T No: | | | | | | | | | | | **R18** **Course Code: A30142**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Environmental Impact Assessment

(Civil Engineering)

Date: 01.07.2024 FN **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. Mention any four limitations of EIA. 2 M
2. What is initial Environmental Examination? 2 M
3. List out the causes of deforestation. 2 M
4. Define sustainability. 2 M
5. Define importance of impact prediction. 2 M
6. Give any four examples for renewable energy. 2 M
7. What is Environmental Audit? 2 M
8. What are the objectives of Environmental Audit? 2 M
9. Define wild life Act. 2 M
10. Define water Act. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Explain network method of EIA. 10M

OR

11. B). How Matrix method will help project planner? 10M

12. A). Describe how project development activities will have an impact on vegetation and wild life. 10M

OR

12. B). Explain the factors that lead to increase in deforestation. 10M

13. A). How would you identify and introduce mitigation measures after assessing the impacts? 10M

OR

13. B). Explain the ways through which the soil quality can be determined. 10M

14. A). Explain the environmental audit procedure and also the pre-audit activities, on-site activities, post-audit analysis. 10M

OR

14. B). Explain the significance of having Environmental legislations in a country. 10M

15. A). Elaborate the circumstances which led to the Environmental Protection Act. 10M

OR

15. B). What are the salient features of Air (Prevention & Control) Act? 10M

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H.T No: | | | | | | | | | | | **R18** | **Course Code: A30233**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Electric Smart Grid Technologies

(Electrical & Electronics Engineering)

Date: 12.07.2024 FN **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 Smart Grid. 2 M
2. What is the role of Renewable Sources in Smart Grids? 2 M
3. What is Automation? 2 M
4. List the Componets of Smart Grid. 2 M
5. Write the principle of fuel cell. 2 M
6. Mention advantages of EVs over Conventional Vehicles. 2 M
7. Listout the various classical load flow methods 2 M
8. Listout the built-in performance measures of DSOPF. 2 M
9. Write types of PMUs. 2 M
10. Define Wide Area Measurement System. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Explain the benefits associated with Smart Grid when compared to conventional Grid. 10M

OR

11. B). Explain the concept of Resilient and self-healing grid. 10M

12. A). Explain in detail about achitecture of Smart Grid 10M

OR

12. B). Enumerate the major points that are forced drivers for demanding Smart Grid. 10M

13. A). Write a short note on Energy Storage Systems. 10M

OR

13. B). Compare various types of Electric Vehicles and Mention challenges of Plug-in Hybrid Electric Vehicles. 10M

14. A). Explain the Load Flow in Smart Grid using flowchart. 10M

OR

14. B). Write a short notes on Contingency studies for Smart Grid. 10M

15. A). Explin the priciple of syncro phasor and Also give performance types of PMUs. 10M

OR

15. B). Explain Load Frequecy Control in Microgrids. 10M

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H.T No: | | | | | | | | | | | R18 | Course Code: A30232

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Electrical Instruments

(Electrical & Electronics Engineering)

Date: 12.07.2024 FN **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. For moving iron type instruments, give the expression for the deflecting torque. 2 M
2. Describe errors in measuring instruments. 2 M
3. Give specific use of Instrument Transformers. 2 M
4. Write Ratio and Phase angle errors in potential transformers. 2 M
5. Mention the measuring instruments to measure active power. 2 M
6. Draw the circuit diagram for measurement of three phase reactive power. 2 M
7. What is meant by creeping in an energy meter. 2 M
8. Explain the operating principle of maximum demand meter. 2 M
9. What are advantages of electrical transducers? 2 M
10. Classify the Transducers. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Explain the construction and operating principle of PMMC instrument. Derive the expression for deflection of PMMC 10M

OR

11. B). Elaborate the designing procedure of shunts and series resistance in instruments for extension. 10M

12. A). With neat sketch explain about the types of frequency meters. 10M

OR

12. B). Brief about the operation and working principle of MI type power factor meter. 10M

13. A). Explain the construction and working of principle of single-phase dynamometer type wattmeter. 10M

OR

13. B). Write the procedure to extend the range of wattmeter using instrument transformer. 10M

14. A). Explain the operation of single-phase induction type energy meter. 10M

OR

14. B). i) A 50A, 230V meter on full load test makes 61 revolutions in 37s. If the normal disc speed is 520 revolutions per kWh, find the percentage error. 5M

ii) How to test by phantom loading energy meter using R.S.S meter. 5M

(P.T.O..)

15. A). With the help of characteristics discuss the principle of operation of LVDT and its advantages. 10M

OR

15. B). i) With neat diagram explain the working principle of strain gauges. 5M

ii) Enumerate the differences between a PN diode and a Photo diode and briefly explain the working of Photo diode. 5M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30371**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Refrigeration & Air Conditioning

(Mechanical Engineering)

Date: 03.07.2024 FN **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 tonne of refrigeration. 2 M
2. Sketch Bell coleman cycle on P-V diagram. 2 M
3. What is the effect of the sub cooling of liquid on the COP? 2 M
4. Mention the advantages of vapour compression refrigeration system over air refrigeration system. 2 M
5. What are the causes of ozone depletion? 2 M
6. Give the designation for Dichloro-tetrafluro-ethane refrigerant. 2 M
7. What is the principle of the steam jet refrigeration system. 2 M
8. Define and write the expression for entrainment efficiency in steam jet refrigeration system. 2 M
9. What is an adiabatic saturation process. Represent the same on a psychrometric chart. 2 M
10. How do SHF and GSHF differ from one another? 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Explain Bootstrap aircraft refrigeration system. 10M

OR

11. B). An ice plant is working on a reversed Carnot cycle produces 15 tons of ice per day. The ice is formed at 0^0 C and water supplied is also at 0^0 C. The heat is rejected to atmosphere at 25^0C. The heat pump used to run the plant is coupled to a Carnot engine receives heat from a source at 220^0 C and it rejects the heat to atmosphere. The fuel Calorific value, 44.5 MJ/kg is used for supplying the heat. Determine the following (i) power developed by the engine and (ii) fuel used/hr. Take enthalpy of fusion of ice=334.5 kJ/kg. 10M

12. A). What is the effect of sub cooling and super heating in vapor compression process and show it in T-S and h-s diagram? 10M

OR

12. B). An ammonia ice plant operates between a condenser temperature of 30^0C and an evaporator temperature of -20^0C. It produces 10 tons of ice per day from water at 25^0C to ice at -10^0C. Assuming simple saturation cycle, determine: i) the capacity of refrigerating plant ii) mass flow rate of refrigerant and iii) COP of the cycle. 10M

13. A). What points are considered in selecting a condenser for a refrigeration system. Also explain working of any one type of condenser used in refrigeration system with neat sketch. 10M

(P.T.O..)

OR

13. B). Where air-cooled condensers are preferred over water-cooled condensers? Give examples with specific reasons? 10M

14. A). Make a comparative list between vapour absorption system and a compression system? 10M

OR

14. B). For a steam jet refrigeration system, the steam enters the nozzle at 8 bar just dry saturated state. The condenser pressure is 0.07 bar and flash chamber is to be maintained at 5^0 C. The make-up water enters the flash chamber at 35^0 C. Taking nozzle, entrainment and compressor efficiencies are η_n=0.94, η_e=0.75 and η_c=0.65 respectively, compute
(i) amount of steam per kg of vapour formed in the flash chamber, (ii) COP, and (iii) volume of vapour leaving the flash chamber per ton per hour. 10M

15. A). Explain the difference between comfort air-conditioning and industrial air conditioning. 10M

OR

15. B). What are the different types of fans used in air-conditioning systems? Discuss their applications with their relative advantages and disadvantages. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30441**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Digital Design Through Verilog HDL

(Electronics & Communication Engineering)

Date: 03.07.2024 FN **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. Summarize the significance of programming language Interface. 2 M
2. What is functional verification? 2 M
3. Define Keywords and Identifiers. 2 M
4. Create the following variables in Verilog 2 M
   a) An integer called count
   b) An array called delay. Array contains 20 elements of the type integer.
5. Inspect Blocking and Non-Blocking assignments. 2 M
6. Illustrate the assignments with delays. 2 M
7. Dissect the conditions for task to be defined. 2 M
8. Outline the uses of complier directives. 2 M
9. Dissect the significance of test bench techniques. 2 M
10. Interpret the capacitive model. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Analyze the following terms relevant to Verilog HDL 10M
   i) Simulation versus synthesis
   ii) System Tasks.

OR

11. B). i) Using an example, Brief about concurrent and procedural statement with syntaxes. 5M
   ii) Interpret the components of a Verilog module with block diagram. 5M

12. A). i) Design D flip-flop with gate primitives. 5M
   ii) Write the Verilog program for 2 bit comparator using gate level model. 5M

OR

12. B). Develop the Verilog code for CMOS NOR in data flow model. 10M

13. A). i) How intra assignments delay control, event based timing control takes place in Verilog HDL? 5M
   ii) Write program for Moore machine in behavioral model. 5M

OR

13. B). i) Write short notes on Simultaneous Procedural Assignments. 5M
   ii) Identify the differences between an initial behavior and an always behavior. 5M

(P.T.O..)

14. A).	i) Illustrate the blocks in the logical synthesis.	5M
	ii) Brief about RTL synthesis.	5M
	OR	
14. B).	i) Inspect the synthesis of the disable statements using a program.	5M
	ii) Explain the non-blocking assignments of synthesis.	5M
15. A).	i) Write a program for NMOS inverter with pull up loads.	5M
	ii) Implement a 4X1 mux using CMOS transmission gates.	5M
	OR	
15. B).	i) Briefly explain any one method used for sequential circuit testing.	5M
	ii) Write Verilog module for 8-bit comparator with test bench.	5M

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H.T No: | | | | | | | | | | | **R18** | **Course Code: A30457**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Computer Organization

(Electronics & Communication Engineering)

Date: 03.07.2024 FN **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. Differentiate between byte addressable and word addressable. 2 M
2. Infer the following addressing mode with suitable example. 2 M
   (a) Register indirect
   (b) Index addressing mode
3. Why 2's complement number representation is better than 1 's complement? 2 M
4. How overflow condition is detected during binary addition? 2 M
5. How does the processor resolves among simultaneous interrupt requests? 2 M
6. List the functions of DMA. 2 M
7. Define cache coherency. 2 M
8. List the advantages of pipeline technique. 2 M
9. Recall Memory Hierarchy. 2 M
10. List the different types of locality of references. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). i) Briefly explain different functional blocks of CPU. 5M
ii) Inspect the layout of an instruction and thus write different types of instruction according to the appearance of number of address, with the advantages, disadvantages and one example. 5M

OR

11. B). i) Discuss briefly about any three addressing modes of instruction with example. 5M
ii) Determine with explanation of the different types of instruction sets in a general CPU. 5M

12. A). i) Multiply the -7×3 using booth's multiplication algorithm. 5M
ii) Determine the advantages of carry look ahead adder in comparison to ripple carry adder. Explain by taking some examples. 5M

OR

12. B). i) Divide the following using restoring division algorithm 14 ÷ 5. 5M
ii) Explain a binary addition subtraction logic network. 5M

(P.T.O..)

13. A). i) Develop the micro routine for single bus Organization to execute the following instruction: ADD (R1)+, R2 . 5M

ii) Construct the schematic diagram of the architecture of a 8086 processor, clearly showing the general purpose, Special purpose registers and the data path. Explain the function of each component. 5M

OR

13. B). i) Develop micro routine for single bus Organization to execute the following instruction: SUB R1, 40 5M

ii) Construct the CPU 3-bus 0rganization and explain the diagram with it's advantage and disadvantage. 5M

14. A). Discuss by writing short notes on (i) pipelining (ii) cache coherency. 10M

OR

14. B). What is throughput? How to enhance the throughput. Explain with examples. 10M

15. A). i) Write a short note on hierarchical memory organization. 5M

ii) Write different mapping techniques in cache with their merits and demerits. 5M

OR

15. B). i) Estimate the number of hits and misses in a 4-blocked cache for the LRU policy if the sequence of block reference by CPU is given like;2,2,3,4, 2, 5,6, 4, 7,5. 5M

ii) Explain the importance of associate mapping and how to determine the different bits. Explain the disadvantages over direct mapping. 5M

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H.T No: | | | | | | | | | | | **R18** Course Code: A30527

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Information Security

(Common for CSE & IT)

Date: 28.06.2024 FN **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 Interruption. 2 M
2. What is DES? 2 M
3. What is message authentication? 2 M
4. What is key management? 2 M
5. Define Digital Signature. 2 M
6. What is PGP? 2 M
7. Define TLS. 2 M
8. What is security Association? 2 M
9. Define Threats. 2 M
10. What is Trusted Systems? 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Discuss the network security model with neat illustration and explain the components of model. 10M

OR

11. B). Explain various modes of operations about block ciphers. 10M

12. A). i) Explain about RSA Algorithm. 5M
ii) Discuss about Diffie-Hellman Key Exchange. 5M

OR

12. B). Explain about Hash Functions. 10M

13. A). Discuss about Digital Signatures in detail. 10M

OR

13. B). Discuss about Pretty Good Privacy. 10M

14. A). Explain about IP Security Architecture. 10M

OR

14. B). Discuss about Secure socket layer. 10M

15. A). Explain about Intruders. 10M

OR

15. B). Explain about Intrusion Detection Systems. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30529**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Software Testing Methodologies

(Common for CSE & IT)

Date: 28.06.2024 FN **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 Testing.	2 M
2.	Mention the goals of testing.	2 M
3.	Explain data flow graph anomaly with an example.	2 M
4.	Compare data flow and transaction flow.	2 M
5.	Define domain testing with an example.	2 M
6.	Define cross and parallel term in path testing.	2 M
7.	What is logic-based testing?	2 M
8.	What are testability tips?	2 M
9.	What is power of matrix?	2 M
10.	Explain about WinRunner.	2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A).	Describe implementation and application of path testing.	10M
	OR	
11. B).	What is the importance of bug? Explain different types of bugs?	10M
12. A).	Illustrate the differences between testing and debugging.	10M
	OR	
12. B).	Discuss in detail data flow testing strategies.	10M
13. A).	Write about path products, path expression and reduction procedure in detail.	10M
	OR	
13. B).	Compare Nice and ugly domains and give examples to each domain.	10M
14. A).	What are the principles of state testing? Discuss advantages and disadvantages?	10M
	OR	
14. B).	Explain about decision tables in detail.	10M
15. A).	Write about node reduction algorithm? Explain with an example.	10M
	OR	
15. B).	Explain in detail about graph matrices and power of matrix.	10M

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H.T No: | | | | | | | | | | | R18 | Course Code: A30528

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Data Warehousing & Data Mining

(Common for CSE, CSC & CSM)

Date: 12.07.2024 FN **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 Data warehouse. 2 M
2. Compare OLTP and OLAP. 2 M
3. Define Data mining. 2 M
4. Why do we preprocess the data? 2 M
5. What is association mining? 2 M
6. Define apriori property. 2 M
7. What is Bayes theorem? 2 M
8. Define rule-based classification. 2 M
9. What is the goal of clustering? 2 M
10. What is the drawback of k-means algorithm? 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Explain about the Three-tier data warehouse architecture with a neat diagram. 10M

OR

11. B). Discuss the following: 10M
i) Star schema
ii) Snow Flake schema
iii) Fact constellation schema

12. A). How to classify data mining systems? Discuss. 10M

OR

12. B). Describe about Major issues in Data mining. 10M

13. A). Explain about the Apriori algorithm for finding frequent item sets with an example. 10M

OR

13. B). i) What are the advantages of FP-Growth algorithm? 5M
ii) Discuss the applications of association analysis. 5M

14. A). Explain decision tree induction algorithm for classifying data tuples and with suitable example. 10M

OR

14. B). Discuss about Naïve Bayesian Classification. 10M

15. A). What is outlier detection? Explain K-Means algorithm with an example. 10M

OR

15. B). Elaborate on the key issues in hierarchical clustering algorithm. 10M

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H.T No: | | | | | | | | | | | **R18** Course Code: A36217

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Cyber Laws & Ethics

(CSC)

Date: 28.06.2024 FN **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 the necessity of IT Act, 2000 ? 2 M
2. What are the amendments of the IT Act, 2000 ? 2 M
3. List any two amendments to Indian evidence Act. 2 M
4. What is the extra terrestrial Jurisdiction? 2 M
5. Define Digital/Electronic signature in Indian laws. 2 M
6. What are the cyber regulations? 2 M
7. Define the term cyber squatting. 2 M
8. What is reverse hijacking? 2 M
9. Define EDI. 2 M
10. Define Cryptography Law. 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Discuss various authorities under IT Act, 2000 and their powers. 10M

OR

11. B). Explain penalties and offences in detail. 10M

12. A). Explain amendments to Bankers book evidence Act in detail. 10M

OR

12. B). Discuss traditional principles of Jurisdiction. 10M

13. A). Elaborate E- Governance concepts and practicality in India. 10M

OR

13. B). Explain E- contracts and its validity in India. 10M

14. A). Explain the following 10M
    i) Copyright in computer programmes
    ii) SPDI and Reasonable security practices in India

OR

14. B). Demonstrate relevant provisions of patent Act 1970. 10M

15. A). Describe the UNCITRAL model law. 10M

OR

15. B). Explain cyber laws of major countries. 10M

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H.T No: | | | | | | | | | | | R18 | Course Code: A36613

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Advanced Python Programming

(Common for CSM & AIM)

Date: 03.07.2024 FN **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 keywords and tokens in Python? 2 M
2. What function allows reading and writing files in Python? 2 M
3. How to perform indexing and slicing using NumPy in Python? 2 M
4. What is data wrangling with pandas in Python? 2 M
5. What is SciPy module in Python? 2 M
6. What is Python Matplotlib? 2 M
7. Explain the importance of Database connection using Python. 2 M
8. What is Flask templates? 2 M
9. What is GUI? 2 M
10. How to create main window using PyQt? 2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Compare Modules and Packages in Python. Write a program to print the current date using python. 10M

OR

11. B). Explain in details about File Handling in python with an example program. 10M

12. A). Create a vector in Python using NumPy with an example. 10M

OR

12. B). Explain the procedure to Loading a dataset into a dataframe using pandas. 10M

13. A). Using an example Create function, modules of SciPy. 10M

OR

13. B). How to create Scatter plot, Bar charts using Matplotlib? 10M

14. A). List the basic steps to connect Python with MYSQL using table Students present in the database 'College'. 10M

OR

14. B). Illustrate how to create a web application using Python Flask. 10M

15. A). Explain the procedure of Installing PyQT. Discuss the advantages of using PyQT over other Python GUI frameworks. 10M

OR

15. B). Compare dumb dialogues, standard dialogs, smart dialogs with examples. 10M

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H.T No: | | | | | | | | | | | **R18** | **Course Code: A30532**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Software Project Management

(CSD)

Date: 03.07.2024 FN **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 basic parameters of software economics?	2 M
2.	What is a peer inspection in software project management?	2 M
3.	What is the elaboration phase of the life cycle?	2 M
4.	What are management artifacts in project management?	2 M
5.	What is checkpoint?	2 M
6.	What is pragmatic planning?	2 M
7.	What is line of business organization?	2 M
8.	List the Responsibility of organization.	2 M
9.	Why do we need metrics for automation?	2 M
10.	What is Mean Time Between Failures?	2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A).	Explain in detail waterfall model with neat sketch.	10M
	OR	
11. B).	Elaborate pragmatic software cost estimation.	10M
12. A).	Discuss in detail about Engineering artifacts.	10M
	OR	
12. B).	Explain in detail about Software process workflows.	10M
13. A).	Discuss in details Iteration planning process.	10M
	OR	
13. B).	Briefly explain Periodic status assessments.	10M
14. A).	Explain in detail evolution of Organizations.	10M
	OR	
14. B).	Explain in detail Automation Building blocks.	10M
15. A).	Discuss in detail pragmatic Software Metrics.	10M
	OR	
15. B).	Briefly explain Management indicators and quality indicators.	10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30533**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech V Semester Supplementary Examinations June/July-2024

Course Name: Mobile Computing

(AID)

Date: 03.07.2024 FN **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.	Which types of different services does GSM offer?	2 M
2.	List any 3 limitations of Handheld devices.	2 M
3.	What is the basic prerequisite for applying FDMA?	2 M
4.	Write the main theme of DHCP in Mobile Communications.	2 M
5.	Can the problems using TCP be solved by replacing TCP with UDP?	2 M
6.	Define Database Hoarding.	2 M
7.	What is selective tuning?	2 M
8.	Define data synchronization.	2 M
9.	List any 4 advantages of MANET.	2 M
10.	Define Reactive protocols.	2 M

PART-B

Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A).	Describe about subsystems of GSM architecture with neat diagram.	10M
	OR	
11. B).	i) Explain about handheld devices and also write the limitations. ii) Write in detail about Mobile computing applications and challenges.	5M 5M
12. A).	Explain about TDMA and FTDMA with suitable example.	10M
	OR	
12. B).	Explain the following: i) Tunneling ii) Encapsulation iii) Route Optimization	10M
13. A).	Explain briefly about Database Hoarding with their architecture.	10M
	OR	
13. B).	Explain conventional TCP/IP protocols and also their limitations while applying in Mobile Computing/Mobile Communications.	10M
14. A).	Explain about pull based and push based mechanism with their advantages and disadvantages.	10M
	OR	
14. B).	Discuss in detail about Tree based index distributed indexing scheme.	10M
15. A).	i) Explain the security attacks in MANETS. ii) Explain the applications of MANETS.	5M 5M
	OR	
15. B).	Explain briefly about DSDV and DSR routing algorithm.	10M

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