H.T No: | | | | | | | | | | | **R18** **Course Code: A30163**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: AIR POLLUTION & CONTROL

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

Date: 29.04.2023 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 Air Pollution. 2 M
2. Broadly classify the air pollutants. 2 M
3. Define turbulence. 2 M
4. What is called temperature lapse rate? 2 M
5. Differentiate Indoor air pollution from others. 2 M
6. What is stack air pollution? 2 M
7. List out the various control technique. 2 M
8. Write a note on scrubbers. 2 M
9. Discuss any one global episode as environmental issue. 2 M
10. List out noise standards. 2 M

PART-B

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

11.A). Discuss in detail about the characterization of air pollutants. 10M

OR

11. B). Explain the effects of air pollution on health. 10M

12. A). Discuss in detail about Wind rose diagram. 10M

OR

12. B). Explain about plume behavior in detail. 10M

13. A). Discuss about Sampling of particulate pollutants. 10M

OR

13. B). Explain about Gaussian dispersion model 10M

14. A). Discuss in detail about settling chambers. 10M

OR

14. B). Explain about cyclone separators. 10M

15. A). How to control air pollution due to automobiles? 10M

OR

15. B). Explain about environmental laws and acts. 10M

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H.T No: | | | | | | | | | | | **R18** | **Course Code: A30237**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: HVDC TRANSMISSION

(Electrical & Electronics Engineering)

Date: 02.05.2023 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. State the advantages in DC transmission. 2 M
2. Differentiate between 6-pulse and 12-pulse converters. 2 M
3. What are the special features of converters in HVDC transmission? 2 M
4. Define constant extinction angle and constant ignition angle control of HVDC. 2 M
5. With a neat sketch, explain about DC network. 2 M
6. Write the equation of DC Converter Control. 2 M
7. Discuss the function of surge arrester. 2 M
8. What are the converter faults in HVDC system? 2 M
9. What are the adverse effects of harmonics? 2 M
10. What is the effect of pulse number on harmonics? 2 M

PART-B

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

11.A). With neat sketches explain the different kinds of D.C. links available and list out its merits and demerits. 10M

OR

11. B). Draw the waveforms and explain 6 Pulse converters for the conduction angle of 60 and 120 degrees for the R-load. 10M

12. A). Discuss equidistant pulse firing angle control scheme with its relative merits and demerits 10M

OR

12. B). Explain how Reactive power controlled during transients. 10M

13. A). Explain the principles of DC link control. 10M

OR

13. B). Distinguish between simultaneous method and sequential method with appropriate diagrams in power flow analysis. 10M

14. A). Discuss the operation of surge arrestors for overvoltage protection of HVDC systems. 10M

OR

14. B). i) Explain the basic principles of over current protection. 5M
ii) Explain corona effect in DC Lines. 5M

15. A). i) Explain the causes of harmonic generation in HVDC and effects on the system. 4M
ii) What are characteristic and non-characteristic harmonics? 6M

OR

15. B). Derive an equation for harmonic voltage and current for single tuned filter. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30239**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)
B.Tech VII Semester Supplementary Examinations April/May-2023
Course Name: SWITCHING MODE POWER SUPPLY
(Electrical & Electronics Engineering)

Date: 02.05.2023 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. Explain the principle of volt second balance in inductors. 2 M
2. What are the applications of DC power supplies? 2 M
3. What are the types of DC-DC Converter? 2 M
4. What are the types of SMPS? 2 M
5. List the various classifications of resonant converters. 2 M
6. What is meant by zero voltage switching? 2 M
7. Draw the diagram of Half bridge converter. 2 M
8. What is the function of fly back converter? 2 M
9. What are the disadvantages of on line UPS? 2 M
10. What are the application of off line UPS? 2 M

PART-B

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

11.A). What is the necessity for the SMPS? Draw a block diagram for SMPS and explain its operation. 10M

OR

11. B). Explain the design procedure of transformer for Power electronics applications. 10M

12. A). i) Write short notes on resonant DC power supply. 5M
ii) List the advantages of switched mode power supplies. 5M

OR

12. B). Discuss the operation of parallel resonant dc-dc converter with the help of circuit diagram. 10M

13. A). Explain the operation of following:
i) Zero current switching resonant converters 5M
ii) Zero voltage switching resonant converters 5M

OR

13. B). Write short notes on the following:
i) L type ZCS resonant converter 5M
ii) M type ZCS resonant converter 5M

(P.T.O..)

14. A). Explain the following:
i) Half bridge converter — 5M
ii) Full bridge converter — 5M

OR

14. B). Explain the following:
i) fly back converter — 3M
ii) forward converter — 3M
iii) push pull converter — 4M

15. A). What is filter and explain different types of filters used in SMPS. — 10M

OR

15. B). Describe series and parallel resonant filters with examples. — 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30240**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: HIGH VOLTAGE ENGINEERING

(Electrical & Electronics Engineering)

Date: 04.05.2023 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 break down voltage? 2 M
2. Illustrate thermal break down. 2 M
3. Plan the high voltage AC generation for testing. 2 M
4. Extend the use of impulse voltage. 2 M
5. Interpret the partial discharge measurement. 2 M
6. Outline use of CRO to measure high voltage impulse. 2 M
7. Analyze the charge accumulation in clouds. 2 M
8. Outline the uses of surge modifier. 2 M
9. How isolators are test to confirm its electrical strength. 2 M
10. List the safety precautions in HV laboratories. 2 M

PART-B

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

11.A). Explain in detail about distribution and control of surge voltages. 10M

OR

11. B). Explain the difference between photo-ionization and photo electric emission. 10M

12. A). Explain the generating circuits for high voltage AC. 10M

OR

12. B). Explain impulse currents generating circuits. 10M

13. A). Explain the measurement techniques for high direct current. 10M

OR

13. B). Explain the measurement of dielectric constant and loss factor. 10M

14. A). How over voltages occurred due to switching surges? 10M

OR

14. B). What are the principles of insulation coordination in case of HV systems? 10M

15. A). How surge arresters are tested? 10M

OR

15. B). Explain the terms: 10M
    i). Withstand voltage
    ii). Flash over voltage
    iii). 50% Flash over voltage.

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30242**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: UTILIZATION OF ELECTRICAL ENERGY

(Electrical & Electronics Engineering)

Date: 04.05.2023 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. List the advantages and disadvantages of electric drive over other drives. 2 M
2. Give some applications of induction heating. 2 M
3. What are the factors governing the selection of motors? 2 M
4. On what factors dielectric losses depend. 2 M
5. What are the advantages of coiled coil filament gas filled lamp? 2 M
6. Define Illumination. 2 M
7. What is Lamp Efficiency? 2 M
8. What are the disadvantages of diesel electric traction? 2 M
9. Define Dead weight, Accelerating weight, Adhesive weight. 2 M
10. Explain train resistance referred to traction. 2 M

PART-B

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

11.A). What is meant by load equalization? Derive the expression for instantaneous motor torque, M.O.I of the fly wheel and the motor slip. State any assumptions made. 10M

OR

11. B). DC compound motor is selected for the operation of a lift. The operating cycle is repeated continuously throughout the day. Load going up for 1 minute: 7.5hp, loading period at the top 2 minutes: 5hp, load going down 1 minute: 60 hp, loading period at the bottom 3 minutes: 5hp. Select the smallest size of the motor suitable for the above load cycle. 10M

12. A). With a neat sketch explain the working principle of core type and coreless type induction furnace. 10M

OR

12. B). A slab of insulating material 150 cm^2 in area and 1cm thick is to be heated by dielectric heating. The power required is 400 W at 30 MHz Material has relative permittivity of 5 and p.f. of 0.05. Absolute permittivity is 8.854×10-12 F/m. Determine the necessary voltage. 10M

13. A). Explain the construction and working of a mercury vapor lamp. 10M

OR

13. B). A hall 30 m long and 15 m wide with a ceiling height of 5 metres is to be provided with a general illumination of 120 lumens/m2. Taking a coefficient of utilization of 0.5 and depreciation factor of 1.42, determine the number of fluorescent tubes required, their spacing, mounting height and total wattage. Taking luminous efficiency of florescent tube as 40 lumens/watt for 80 w tube. 10M

(P.T.O..)

14. A). Discuss the main features of various train services. What type of train services corresponds to trapezoidal and quadrilateral speed time curves? 10M

OR

14. B). A train has a schedule speed of 40 kmph between two stops which are 4 km apart. Determine the crest speed over the run if duration of stops is 60 sec and acceleration and retardation are both equal to 2 km/hr. Assume trapezoidal speed time curve. 10M

15. A). Show that if the speed-time curves are similar, Specific Energy Consumption are equal. 10M

OR

15. B). An electric train has an average speed of 42 km/h on a level track between stops 1.4 km apart. It is accelerated at 1.7 km/h/s and is braked at 3.3 km/h/s. Assuming tractive resistance as 50 N/t. allowing 10% for rotational inertia, and efficiency to motors 85%. Estimate the specific energy consumption. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30243**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: FLEXIBLE AC TRANSMISSION SYSTEM DEVICES

(Electrical & Electronics Engineering)

Date: 06.05.2023 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 a FACTS controller? 2 M
2. What are the advantages of FACTS controllers? 2 M
3. Define Pulse width modulation. 2 M
4. Draw the circuit diagram of three phase full bride VSC. 2 M
5. Define transient stability. 2 M
6. What are the advantages of Static VAR compensators? 2 M
7. Draw the static V-I characteristics of SVC. 2 M
8. What are the main components in STATCOM? 2 M
9. List different series compensators. 2 M
10. What are the applications of TCSC? 2 M

PART-B

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

11.A). What are main types of FACTS controllers? With neat schematic diagrams, explain them in brief. 10M

OR

11. B). Explain in detail various factors limiting the transmission line loading capability. 10M

12. A). What is pulse number of a converter? Draw and discuss the transformer connections for 12 pulse and 24 pulse operation of a converter. 10M

OR

12. B). Compare current source converters with voltage source converters. 10M

13. A). What are the objectives of the static shunt compensation? With the support of the phasor diagrams, discuss the mid-point voltage regulation of a line. 10M

OR

13. B). Explain the damping of power oscillation with static shunt compensation. 10M

(P.T.O..)

14. A). Explain the basic construction, principle of operation and VI characteristics of STATCOM. 10M

OR

14. B). Compare the performance of SVC and STATCOM from the point of view of transient stability improvement. 10M

15. A). Explain the concept of series compensation and how does it help in improving transient stability and power oscillation damping in the power system. Draw the relevant diagrams. 10M

OR

15. B). Explain, with a neat sketch and waveforms, the GCSC type of series controller. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30244**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: RELIABILITY ENGINEERING

(Electrical & Electronics Engineering)

Date: 06.05.2023 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 effect of Preventive maintenance on Reliability? 2 M
2. What is the difference between hazard rate and failure rate? 2 M
3. Derive an expression for Reliability of Series System. 2 M
4. Define reliability function F(t). 2 M
5. Define Partially redundant system. 2 M
6. Write short notes on State space diagram. 2 M
7. Write short notes on reduce event tree. 2 M
8. What are the applications of Markovian models in reliability analysis? 2 M
9. Write short notes on frequency balance approach. 2 M
10. What are the Applications of Cutset Approach? 2 M

PART-B

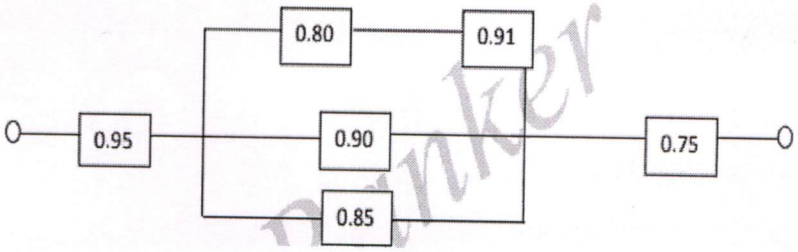
Answer the following. Each question carries TEN Marks. **5x10=50M**

11.A). Derive an expression for Standard Deviation of Binomial Distribution. 10M

OR

11. B). Explain the concept of bath tub curve with a neat diagram. 10M

12. A). Distinguish with block diagrams parallel series and mixed parallel series systems and write down appropriate formula in each case. 10M



OR

12. B). Assume that six units can be arranged in three series and parallel configuration. Draw their block diagram of arrangement and estimate reliability of the system if each has reliability of 0.85. 10M

(P.T.O..)

13. A). Tabulate the relationship between f(t), F(t), R(t) and h(t). 10M

OR

13. B). Explain the following terms: 10M
(i) Reliability. (ii) MTTR. (iii) MTTF. (iv) MTBF.

14. A). Explain two state Markov process for calculation of steady state probabilities. 10M

OR

14. B). Explain one state Markov process for calculation of steady state probabilities. 10M

15. A). Develop the expressions for basic probability indices of a system in which all the components must fail for the system failure. 10M

OR

15. B). Derive the expressions for frequency of encountering states in One Component Repairable Model. 10M

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H.T No: | | | | | | | | | | | R18 | Course Code: A30554

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)
B.Tech VII Semester Supplementary Examinations April/May-2023
Course Name: JAVA PROGRAMMING
(Common for EEE, ME & ECE)

Date: 08.05.2023 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. Use of JVM. 2 M
2. What are the differnt possibilities of creating of objects? 2 M
3. Use of "final" keyword in Java. 2 M
4. Types of Inheritance concept. 2 M
5. What is checked Exception? 2 M
6. Explain different Exception names which occur in general. 2 M
7. What are the methods used for start and execute the Thread? 2 M
8. What is the purpose of the sleep() method in Thread? 2 M
9. Which packages need to import to work with Files in Java? 2 M
10. Discuss different Streams in java files with sample. 2 M

PART-B

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

11.A). Explain about Constructor Overloading and Method OverLoading with example. 10M

OR

11. B). What are the different access specifiers in Java, illustrate with example? 10M

12. A). Build a matrix multiplication program using Two-Dimensional Arrays. 10M

OR

12. B). Test about Command line arguments, find the highest value among the 3 command line arguments. 10M

13. A). Sample examine for creation of packages, accessing a package and hiding the classes. 10M

OR

13. B). What is nested try with example? Role of the "finally" key word Exception handling? 10M

14. A). What is difference between Process and Thread? How Thread is useful than Process? 10M

OR

14. B). Explain, Why Thread sleep() and yield() methods are static? 10M

15. A). What is the difference between BufferedReader and Scanner in Java with example? 10M

OR

15. B). When does java.io.FileNotFoundException: (Access is denied) comes? How do you fix that,illustrate with suitable example? 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30531**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)
B.Tech VII Semester Supplementary Examinations April/May-2023
Course Name: PYTHON PROGRAMMING
(Common for all Branches)

Date: 08.05.2023 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. List the basic data types available in Python with examples. 2 M
2. Mention any two limitations of Python. 2 M
3. Define recursion with an example. 2 M
4. Compare lists and array. 2 M
5. How will you update list items? Give one example. 2 M
6. Can functions return tuples? If yes give example. 2 M
7. What are instance variables, and what role does the name self play in the context of a class definition? 2 M
8. Explain what the __str__ method does and why it is a useful method to include in a class 2 M
9. Why does the blur function need to work with a copy of the original image? 2 M
10. What happens when you enter a number with a decimal point into an Integer Field? 2 M

PART-B

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

11.A). Write about different types of python operators with example scripts. 10M

OR

11. B). Sketch the structures of interpreter and complier. Details the difference between them. Explain how python works in Interactive mode and script mode with examples. 10M

12. A). Write a program to determine the factorial of a given number with and without the use of recursion. 10M

OR

12. B). Write the syntax and explain the concept of 10M
   (i) recursive function with an example.
   (ii) lambda function with an example.

13. A). Write a function that takes a number as an input parameter and returns the corresponding text in words, for example, on input 452, the function should return 'Four Five Two'. Use a dictionary for mapping digits to their string representation. 10M

OR

13. B). Describe the following: 10M
   (i) Creating the list
   (ii) Accessing values in the lists
   (iii) Updating the list
   (iv) Deleting the list elements.

(P.T.O..)

14. A). i) Write a short notes on Special Class methods, with the help of an example explain the significance of the _init_() method. 5M

ii) Write a short notes on different built in attributes associated with a class. 5M

OR

14. B). Write a menu driven program that keeps record of books and journals available in a library. 10M

15. A). Write a line of code that adds a Float Field to a window, at position (1, 1) in the grid, with an initial value of 0.0, a width of 15, and a precision of 2. 10M

OR

15. B). Explain the turtle graphics with two dimensional shapes. 10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30160**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)
B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: DISASTER MANAGEMENT & MITIGATION

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

Date: 08.05.2023 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. State different types of the disasters. 2 M
2. Define landscape approach. 2 M
3. Name the types of endogenous hazards. 2 M
4. Write on man induced disaster. 2 M
5. List three major causes of earth quakes occurred in India. 2 M
6. Briefly write on the occurrence of landslides. 2 M
7. Differentiate between cold wave and heat wave. 2 M
8. List the impacts of floods in India. 2 M
9. Write about the emergency stage of disaster management. 2 M
10. Give an insight on mitigation techniques of any one type of disaster. 2 M

PART-B

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

11.A). Discuss about the environmental stress and concept of environmental hazard. 10M

OR

11. B). Explain in detail on human ecology and its application on geographical researches. 10M

12. A). Differentiate between man induced hazards and natural hazards. 10M

OR

12. B). Describe in detail about endogenous and exogenous hazards. 10M

13. A). Discuss the environmental impacts of volcanic eruptions. 10M

OR

13. B). Explain the distribution of earthquakes and methods to reduce effects of the earthquake. 10M

14. A). Write the methods of conservation measures for soil erosion. 10M

OR

14. B). Discuss in detail about chemical hazards and nuclear explosion. 10M

15. A). Explain the role of an engineer to reduce the effects of different disasters occurred in India. 10M

OR

15. B). Describe in detail the emerging approaches of disaster management and recommend some remedies to control the disasters. 10M

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H.T No: | | | | | | | | | | | R18 | Course Code: A30555

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: INTRODUCTION DATABASE MANAGEMENT SYSTEMS

(Common for EEE, ME & ECE)

Date: 08.05.2023 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.	Identify the Difference between Traditional file Systems and DBMS.	2 M
2.	Classify the Aggregation Operations.	2 M
3.	Discuss the Referential Integrity.	2 M
4.	Interpret the Advantages and Disadvantages of VIEWS.	2 M
5.	Outline the Purpose of ANY and ALL in SQL.	2 M
6.	How to Sort Results in SQL?	2 M
7.	Determine the Control Statements in Advanced SQL.	2 M
8.	Identify the need of Cursors in SQL.	2 M
9.	Elaborate the Purpose of Normalization.	2 M
10.	Interview the Rule to be followed in 3NF.	2 M

PART-B

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

11.A).	i) Analyze the Unary Operations.	5M
	ii) Classify the Set Operations.	5M
	OR	
11. B).	i) Outline the SPARC Architecture.	5M
	ii) List the Join Operations.	5M
12. A).	Illustrate the Entry Integrity, Domain Constraints and General Constraints in SQL.	10M
	OR	
12. B).	i) Design the VIEW Materialization.	5M
	ii) Evaluate the Restrictions on VIEWS.	5M
13. A).	i) How to handle the Aggregate Functions?	5M
	ii) Write Sub queries in SQL.	5M
	OR	
13. B).	Outline how to Handle Multi-table Queries in SQL.	10M
14. A).	How to create functions in SQL explain with an example?	10M
	OR	
14. B).	What is a trigger? How to create it? Discuss various types of triggers.	10M
15. A).	Show the criteria how Normalization Supports Database Design.	10M
	OR	
15. B).	Elaborate about 2NF, 3NF and BCNF with suitable examples.	10M

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H.T No: | | | | | | | | | | | **R18** **Course Code: A30542**

CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech VII Semester Supplementary Examinations April/May-2023

Course Name: CLOUD COMPUTING

(Common for EEE & CSE)

Date: 09.05.2023 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 High Performance Computing. 2 M
2. What is Grid Computing? 2 M
3. Define Cloud Computing. 2 M
4. List the characteristics of Cloud computing. 2 M
5. Define Multitenancy. 2 M
6. Compare Private and public cloud access networking. 2 M
7. Define Infrastructure as a Service. 2 M
8. What are the Characteristics of Paas? 2 M
9. What are the tools for Google Cloud Storage? 2 M
10. Define Rack space. 2 M

PART-B

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

11.A). Illustrate in detail about parallel and distributed computing. 10M

OR

11. B). Discuss in detail about Quantum and Optical computing. 10M

12. A). Explain the Need and Motivation of Cloud computing. 10M

OR

12. B). Describe any two cloud deployment model in detail. 10M

13. A). Explain Cloud Architecture in detail. 10M

OR

13. B). Describe several approaches of cloud migration. 10M

14. A). Explain in detail about Cloud service models. 10M

OR

14. B). Elaborate on cloud service models that emerged after the introduction of cloud computing. 10M

15. A). Discuss in detail Amazon web services. 10M

OR

15. B). Explain the Overview of Aneka. 10M

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