



Question Paper For Internal Assessment Examination (Theory) - Credit 3 / 110 /

NAME OF STUDY CENTER: SCHOOL OF AERONAUTICS, NEEMRANA

Instructions for Students / Faculty

Mid Term I (Total 60 Marks, 2 HRS. Syllabus from Unit-1)

- Part A: Total number of questions to be given are six (3 from CO1 and 3 from CO2), each carrying 2 marks and are compulsory to attend. There is no choice. They are short answer type questions (**Not More Than 25 Words for Both Question & Answer**), no objective type or fill in the blanks. Total 12 marks.
- Part B: Total number of questions to be given are six (3 from CO1 and 3 from CO2), out of which student has to answer four (2 from CO1 and 2 from CO2). They are long answer type (**Not More Than 50 Words for Question**), each carrying 4 marks. Total 16 marks.
- Part C: Total number of questions to be given are six (3 from CO1 and 3 from CO2), out of which student has to answer four (2 from CO1 and 2 from CO2). They are numerical answer type / fully elaborative type (**Not More Than 70 Words For Question**)*, each carrying 8 marks. Total 32 marks.

Mid Term II (Total 90 Marks, 2.5 HRS., Syllabus from Unit-2)

- Part A: Total number of questions to be given are ten (5 from CO3 and 5 from CO4), each carrying 3 marks and are compulsory to attend. There is no choice. They are short answer type questions (**Not More Than 25 Words for Both Question & Answer**), no objective type or fill in the blanks. Total 30 marks
- Part B: Total number of questions to be given are six (3 from CO3 and 3 from CO4), out of which student has to answer four (2 from CO3 and 2 from CO4). They are long answer type (**Not More Than 50 Words for Question**), each carrying 6 marks. Total 24 marks.
- Part C: Total number of questions to be given are six (3 from CO3 and 3 from CO4), out of which student has to answer any four (2 from CO3 and 2 from CO4). They are numerical answer type / fully elaborative type (**Not More Than 70 Words For Question**)*, each carrying 9 marks. Total 36 marks.

Mid Term III (Total 90 Marks, 2.5 HRS., Syllabus from Unit-3)

- Part A: Total number of questions to be given are ten (5 from CO5 and 5 from CO6), each carrying 3 marks and are compulsory to attend. There is no choice. They are short answer type questions (**Not More Than 25 Words for Both Question & Answer**), no objective type or fill in the blanks. Total 30 marks
- Part B: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO6). They are long answer type (**Not More Than 50 Words for Question**), each carrying 6 marks. Total 24 marks.
- Part C: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO6). They are numerical answer type / fully elaborative type (**Not More Than 70 Words For Question**)*, each carrying 9 marks. Total 36 marks.

* **LIST OF ELABORATIVE THEORY QUESTION SUBJECTS:** 3 MH4 - 07 Manufacturing Process, 4 AN4 - 06 Aircraft Materials and Processes (Cr 3), 5 AN4 - 05 Aircraft System (Cr 3), 6 AN4 - 05 Avionics-I (Cr 3), 6 MH4 - 03 Applied Hydraulics & Pneumatics (Cr 3), 6 MH5 - 11 Principles of Management (Cr 3), 6 MH5 - 13 Aircraft Electronics System (Cr 3), 7 AN5 - 12 Maintenance of Airframe and System (Cr 3), 7 AN5 - 13 Helicopter Theory (Cr 3), 7 AG6 - 60.1 Human Engineering and Safety (Cr 3), 7 ST - 01 Avionics II (Special Theory Subject) (Cr 3), 7 MH5 - 11 Design of Mechatronics Systems (Cr 3), 7 MH5 - 12 Robotics and Machine Vision System (Cr 3), 7 MH6 - 13 Medical Electronics (Cr 3), 7 AN6 - 60.1 Aircraft Avionic System (Cr 3), 8 AN5 - 12 Maintenance of Power Plant and System



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NAME OF STUDY CENTER: SCHOOL OF AERONAUTICS, NEEMRANA(Cr 3), 8 AN5 - 13 Unmanned Aerial Vehicles & Systems (UAV) (Cr 3), 8 MH5 - 13 Product Development & Launching
(Cr 3), 8 EC6 - 60.2 Robotics and control (Cr 3)**Instructions For Faculties**

There should be total 6 Course Outcomes (COs) for each subject.

- Mid Term Question Papers are to be submitted as per Course Outcomes (COs) which should be divided equally in Part A, Part B and Part C according to Mid Term Examination and Credit Point.
- In Mid Term-1, the questions are to be given from CO1 and CO2. In Mid Term-2, the questions are to be given from CO3 and CO4. Similarly, in Mid Term-3, the questions are to be given from CO5 and CO6.
- **FACULTY MEMBERS, PLEASE ENSURE EXCEPT ABOVE LISTED SUBJECTS, NO THEORITICAL ELABORATIVE QUESTION SHOULD BE GIVEN IN PART 'C' OF QUESTION PAPER**

INSTRUCTION FOR STUDENTS

- **STUDENT IS ALLOWED TO ENTER LATE NOT MORE THAN 15 MIN AFTER STARTING OF EXAM,**

QUESTION PAPER & STUDENTS DETAILS

Type of Exam	Mid Term 2	Date of Submission	21/06/2021
Name of Faculty	Ms. Barsha	Date of Examination	30/06/2021
Course	B.Tech Engineering) (Mechatronics	Semester	SEMESTER : 6
Batch	Fourth (4)	Subject	6 MH4 - 05 Object Oriented Programming (Cr 3)-

COURSE OUTCOMES FOR REFERENCE TO FRAME QUESTION PAPERS

(Faculties are required to mention Course Outcome Number against each part of the question paper)

Course Outcome	3) Able to use the basic principles of of programming by using object oriented design. 4) Able to develop programs with advanced features of the C++ programming language.		
Email I'd	barsha@soaneemrana.org	Phone No.	885-118-0397
Student Name		Student Reg No.	

PART A

All the questions are compulsory to attend.

1. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.

CO 3

Question : 1 Define function overloading.



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11	Function	E Balagurusamy	
Question : 2	Define operator overloading.		
12	Operator	E Balagurusamy	
Question : 3	Mention the name of four operators that cannot be overloaded.		
15	Operator	E Balagurusamy	
Question : 4	Mention the use of scope resolution?		
14	Operator	E Balagurusamy	
Question : 5	State the syntax for unary and binary operator overloading.		
12	Operator	E Balagurusamy	
2. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.			CO 4
Question : 6	State the syntax for operator overloading while outside the class.		
11	Operator	E Balagurusamy	
Question : 7	Mention the difference between n and endl?		
16	Basics of C++	E Balagurusamy	
Question : 8	State the definition of Manipulators.		
16	Basics of C++	E Balagurusamy	
Question : 9	Benefits of using set precision and set iosflags manipulator function.		
14	Manipulator	E Balagurusamy	
Question : 10	Mention basics data types used in C++.		
	Operators	E Balagurusamy	

PART B

FOR MIDTERM 1 - Part B: Total number of questions to be given are six (3 from CO1 and 3 from CO2), out of which student must answer four (2 from CO1 and 2 from CO2).

FOR MIDTERM 2 - Part B: Total number of questions to be given are six (3 from CO3 and 3 from CO4), out of which student must answer four (2 from CO3 and 2 from CO4).

FOR MIDTERM 3 - Part B: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO6).

3. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.

CO 3

Question : 1	Mention the difference between static member function and static member variable?		
18	Function	E Balagurusamy	



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Question : 2	Explain a program in c++ that overload binary operator '+'.		
15	Operator	E Balagurusamy	
Question : 3	Explain dynamic memory allocation in C++.		
14	Memory	E Balagurusamy	
4. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.			CO 4
Question : 4	Explain all manipulator functions in c++.		
11	Manipulator	E Balagurusamy	
Question : 5	Mention polymorphism and constructor overloading.		
14	Basics of C++	E Balagurusamy	
Question : 6	Explain Static memory allocation with example		
12	Memory	E Balagurusamy	
Question : 7 (Old Pattern)			
PART C			
FOR MIDTERM 1 - Part C: Total number of questions to be given are six (3 from CO1 and 3 from CO2), out of which student must answer four (2 from CO1 and 2 from CO2).			
FOR MIDTERM 2 - Part C: Total number of questions to be given are six (3 from CO3 and 3 from CO4), out of which student must answer four (2 from CO3 and 2 from CO4).			
FOR MIDTERM 3 - Part C: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO6).			
5. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.			CO 3
Question : 1	Explain with C++ code to overload '==' operator.		
15	Operator	E Balagurusamy	
Question : 2	Explain the concept how we can deal with two dimensional array in C++.		
16	Array	E Balagurusamy	
Question : 3	State constructors and explain the different types of constructor in C++.		
13	Constructor	E Balagurusamy	
6. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.			CO 4
Question : 4	Write a program in c++ that swap two numbers using passing by reference.		



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17	Function	E Balagurusamy	
Question : 5	Mention an abstract class? Write down its Advantages.		
15	Basics of C++	E Balagurusamy	
Question : 6	Explain a program in c++ to Check Whether a Number is Prime or Not.		
15	Programming	E Balagurusamy	
Upload Scanned Document In Case of Numerical or Diagram For Any of The Above Questions. (Mention question number with relevant fig / numerical / equations. Max 150 KB)			
I have scrutinized the question paper. There is no spelling mistake or any type of irrelevant question.			

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