ACAD-27 a)	Shri Ramdeobaba College of Engineering and Management, Nagpur -440013		Iss. No.: 01, Rev. No.: 00
Ref. Clause(s): 9.1			Date of Rev: 01/01/2018
Department: Computer Application	Semester : I Shift: I and II Course Code: MCT541 Course Name: OBJECT ORIENTED PROGRAMMING		Page: 01/01
Programme: MCA	Test : 2		Date of Exam: 13/05/2021
Max Marks: 15	Session: 2020-21 (Winter-2020)		Time: 1 Hour

Instructions:

1. **All questions are compulsory.**

2. **Assume suitable data wherever necessary.**

Q. No.	Question	Marks	COs Mapped	EO
Q. 1	Consider a scenario that the user entered two values **Cur_Reading** and **Old_Reading** for Electric bill calculation, where the Cur_Reading should be greater than or equal to the Old_Reading. If the user entered wrong values, that may give wrong calculation. You have to implement Java exception handling mechanism and design a code that shows exception warning "**Please enter proper readings**" for the exception "**OR_GT_CR**" through the exception class available, "**Electric_Exceptions**" and it should print a message "**Save Electric, Save Nation**" at the end of the code.	04	CO2	L5, L6
Q. 2	Discuss the **lifecycle and states of threads** in Java using proper diagram.	04	CO2	L2
Q. 3	Differentiate between Java **Servlet** and **JSP**.	03	CO3	L4
Q. 4	Develop a Java program to read book information (BOOKCODE, BNAME, AUTHOR, PRICE, STATUS='R' default) from the table **BOOKS** and student information (STUDID, NAME, CLASS and BOOKCODE) from the **STUDENT** table. Get STUDID and BOOKCODE from the user and store transaction information (DOI, STUDID, BOOKCODE) to the table **ISSUE.** Update **BOOKS** table by STATUS='I' if STATUS='R' and BOOKCODE of the **STUDENT** table. Use the database name **COLLEGE** for this program.	04	CO3	L6