

## Raj Kumar Goel Institute of Technology, Ghaziabad



### PYTHON LANGUAGE PROGRAMMING LAB FILE (KCS453)

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<b>Section- Batch</b>	C - 1

## **VISION OF THE INSTITUTE**

To continually develop excellent professionals capable of providing sustainable solutions to challenging problems in their fields and prove responsible global citizens.

## **MISSION OF THE INSTITUTE**

We wish to serve the nation by becoming a reputed deemed university for providing value based professional education.

## **VISION OF THE DEPARTMENT**

To be recognized globally for delivering high quality education in the ever-changing field of computer science & engineering, both of value & relevance to the communities we serve.

## **MISSION OF THE DEPARTMENT**

1. To provide quality education in both the theoretical and applied foundations of Computer Science and train students to effectively apply this education to solve real world problems.
2. To amplify their potential for lifelong high-quality careers and give them a competitive advantage in the challenging global work environment.

## **PROGRAM EDUCATIONAL OUTCOMES (PEOs)**

**PEO 1: Learning:** Our graduates to be competent with sound knowledge in field of Computer Science & Engineering.

**PEO 2: Employable:** To develop the ability among students to synthesize data and technical concepts for application to software product design for successful careers that meet the needs of Indian and multinational companies.

**PEO 3: Innovative:** To develop research oriented analytical ability among students to prepare them for making technical contribution to the society.

**PEO 4: Entrepreneur / Contribution:** To develop excellent leadership quality among students which they can use at different levels according to their experience and contribute for progress and development in the society.

## PROGRAM OUTCOMES (POs)

### Engineering Graduates will be able to:

**PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

**PO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to

comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO1:** The ability to use standard practices and suitable programming environment to develop software solutions.

**PSO2:** The ability to employ latest computer languages and platforms in creating innovative career opportunities.

### **COURSE OUTCOMES (COs)**

<b>C218.1</b>	Design various functions in Python and demonstrate the basic concepts of Python.
<b>C218.2</b>	Examine searching and sorting in python using function.
<b>C218.3</b>	Examine and demonstrate the concepts of object-oriented programming language in Python.
<b>C218.4</b>	Design the form using python program simulate in Pygmy.

### **CO-PO MAPPING**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>
<b>C218.1</b>	3	1										2
<b>C218.2</b>	2	2	2	1	2							3
<b>C218.3</b>	2	1	2		2							3
<b>C218.4</b>	2	1	2		2							3
<b>C218</b>	2.25	1.25	2	1	2							2.75

### **CO-PSO MAPPING**

	<b>PSO1</b>	<b>PSO2</b>
<b>C218.1</b>	3	3
<b>C218.2</b>	3	3
<b>C218.3</b>	3	3
<b>C218.4</b>	3	3
<b>C218</b>	3	3

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<b>Experi ment No.</b>	<b>Experiment Name</b>	<b>Date of Conduction</b>	<b>Date of Submission</b>	<b>Faculty Signature</b>