Guru Nanak Dev Engineering College, Ludhiana

Department of Computer Science & Engineering

Ref No: Dated:

Diagnostic Assessment - Online Test

Under TEQIP-III project, National Association of Software and Services Companies (NASSCOM) is conducting *Diagnostic Assessment -Online Test* on **23rd-24th Dec,2019** at GNDEC Campus to identify the skill set of 2nd, 3rd and 4th year students for their upcoming training and placement requirement in IT industry. *NASSCOM* is the premier trade body and chamber of commerce of the technology industry in India and comprises over 2800 member companies including both Indian and multinational companies that have a presence in India (https://www.nasscom.in/). This assessment will help the students to recognize their strengths and weaknesses in their competence level of basic subjects' knowledge and skill set.

Important Points for Students:

1. This assessment is **mandatory** for all CSE 2nd, 3rd and 4th year students and attendance will be marked on the spot.
2. Students are required to carry their **original Govt. authorized photo Identity card/College ID card**, without which they will not be allowed to participate in the assessment.
3. Students are required to report *Ten minutes* before the commencement of test as per following schedule.

Schedule for Diagnostic Assessment –Online Test

Date & Time >>>>		23/12/2019			24/12/2019		
		Slot-1 09 AM-11 AM	**Slot-2** 12 Noon-2 PM	**Slot-3** 03 PM-5 PM	**Slot-1** 09 AM-11 AM	**Slot-2** 12 Noon-2 PM	**Slot-3** 03 PM-5 PM
Venue	OS-II Lab	D4CS-A2	D4CS-E1	D2CS-E3	D3CS-B1	D2CS-B2	D3CS-E3
	PL-II Lab	D4CS-A1	D4CS-E2	D2CS-E1	D3CS-B2	D2CS-B1	D3CS-E2
	Research Lab	D4CS-B1	D4CS-E3	D2CS-E2	D3CS-A1	D2CS-A1	D3CS-E1
	SL-III Lab	D4CS-B2	-----		D3CS-A2	D2CS-A2	----

Sample Test Paper Part-A:
http://nactech.nasscom.in/Web/Download.aspx?FileName=NAC-Tech%20-%20Sample%20Paper%20(Abridged).pdf

Sample Test Paper Part-B:
http://nactech.nasscom.in/Web/Download.aspx?FileName=NAC-Tech%20Part%20B%20Sample%20(Abridged).pdf

Diagnostic Test Syllabus
Mode of Assessment - Online

Part-A

Skill	Competencies Checked	Duration (in mins.)
Communication Ability	Verbal building blocks by evaluating skills like grammar, spellings, punctuations and vocabulary. To assess English usage by evaluating skills like structure, arguments and verbal reasoning.	11
Reading Comprehension	Comprehension of English passages and ability to make inferences from a large amount of information. Be able to connect the dots and make an assessment based on information and ideas spread across the passage.	10
Analytical Ability and Logical Reasoning	Problem solving skills through questions on quantitative reasoning. To assess candidate's logical skills by evaluating skills like Deduction, Induction and Visualization.	20
Attention to Detail	Eye for detail.	5
Ability to manage work and safety	Awareness of and ability to work in an organizational context through questions around organisational policy, procedures, team structure, time management and health and safety issues	14
	total duration	60 mins.

Part-B

Skill	Competencies Checked	Duration (in mins.)
Computer Fundamentals	Knowledge and understanding of basics of a computer, its components and functions, instruction cycle	6
Operating Systems	Knowledge and understanding of system and operating software, process management, memory management, file system management and device management	4
Networking	Knowledge and understanding of Networking, inter-networking and distributed networking	4
RDBMS	Understanding and application of files and Databases, Entity Relationship Modeling, Normalization and SQL	4
SDLC	Understanding and application of phases of SDLC and its implementation models	4
Algorithms & Programming Fundamentals	Understanding and application of phases of SDLC and It implementation models Problem solving ability (i.e. understanding and application of Logic and Problem Solving techniques, Algorithm Design Techniques, Sorting Algorithms, Basic Data Structures and Analysis of Algorithms) and Programming ability (including Basic Programming Concepts, Control Structures and Best Practices in Programming, Arrays and Pointers, String Handling, Functions, Code Optimization Techniques)	4
Design / System Architecture	Importance of architecture, process to identify the communication, control and frame work of subsystems, output of design process, early stages of system design process, major subsystem components, Basics of software engineering and system architecture	4
	total duration	30 mins.

HoD(CSE)