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## 1.Language:

## 1.1-English:

#### English

Familiarity with English Language in its various nuances is an essential skill, especially in the current climate of global networking. Ideally, any recruitment should involve a test of skills in handling the Language in ways that promote the objectives of a company and establish desired rapport. Needless to state, an appropriate test is necessary.

AMCAT English evaluation is ideal to evaluate written English skills of an individual. Our English Test uses a variety of internationally standardized resources for framing questions aimed at determining the candidate's ability to understand

(a) the written text

(b) the spoken word and

(c) communicate effectively through written documents.

#### The test broadly covers the following areas:

- A wide-ranging Vocabulary to cope with general and specific terminology.
- Syntax and sentence structure, the incorrect use of which distorts meaning and becomes a communication hurdle.
- Comprehension exercises designed to test a candidate's ability to read fluently and understand correctly.
- The ability to understand and use suitable phrases, which enrich the meaning of what, is conveyed.



# 1.2-SVAR

SVAR (Hindi for 'Musical Note') is our state-of-the-art automated spoken English assessment tool that helps you to evaluate a candidate on his/her pronunciation, fluency, intonation, listening, language anticipation and spoken English understanding. The test meets international reliability standards and is being used extensively by the industry to evaluate spoken English suitability for roles ranging from international voice processes to internal communication. SVAR enables automatic evaluation of a candidate's attempt at it using voice synthesis technology and bears very high correlation with manual raters. SVAR finds applicability in global business processes, corporate sales and servicing, hospitality and in education & training. It is accurate for neutral, native and foreign accents.

We have also developed a number of variants of SVAR that are being widely used in various parts of the world:

- SVAR US
- SVAR ARABIA
- SVAR LATAM
- **SVAR PHILIPPINES**
- SVAR UK

# 2. Cognitive

# . 2.1- Logical Ability

- The Logical Ability section assesses capacity of an individual to interpret things objectively, to be able to perceive and interpret trends to make generalizations and be able to analyze assumptions behind an argument/statement. These abilities are primary for success of a candidate in the industry. Specifically, these are divided into following sections:
- **Deductive Reasoning:** Assesses the ability to synthesize information and derive conclusions. **Inductive Reasoning:** Assesses the ability to learn by example, imitation or hit-and-trial. This also provides an indication of how creative the individual is.

Abductive Reasoning: Assesses the critical thinking ability of an individual to see through loopholes in an argument or group of statements.

All these abilities are tested both using numerical and verbal stimuli. Various case studies have shown AMCAT Logical Ability to strongly correlate to technical trainability, soft-skill trainability and process trainability. It also demonstrates strong correlation to performance in roles of analysts and knowledge processes. Certain thresholds of logical ability also correlate to sales and support related role performance.



# **2.2- Critical Reasoning**

The critical reasoning module assesses an individual's ability to think through and analyze logical arguments. It adjudges how an individual responds to information coming from multiple sources and his ability to use logical constructs to offer reasoning in situations which may not be familiar to him or her. It is a very important tool to assess a candidate's performance at work.

# 2.3- Information Gathering and Synthesis

This test measures the candidate's ability to gather, comprehend and evaluate information from single or multiple source(s). This checks whether the candidate is able to locate relevant information, order and classify data, interpret graphs, charts and tables and make rule based deductions.



# 2.4-Quantitative Ability (Non-Technical)

The Quantitative ability (Non Tech) section measures the candidate's numerical ability and accuracy in mathematical problems. The questions range from purely numeric calculations to problems of arithmetic reasoning, percentage analysis and quantitative analysis. Specifically these are divided into following sections -

#### a. Basic Numbers

This section tests whether the candidate has understanding of basic number system, i.e., fractions, decimals, negative, positive, odd, even numbers, rational numbers, etc. The candidate should know how to do basic operations on these numbers.

#### **b.** Number Theory

This section requires a candidate to apply the concepts related arithmetic reasoning and basic algebra. It assesses the candidate's understanding on factors/divisibility and his/her ability to perform basic algebraic operations.

#### c. Applied Mathematics

Apart from operations on numbers, the candidate should know how to convert a real-world problem into equations, which could be solved to find an unknown quantity. Students need to be competent in reading and using quantitative data, in understanding quantitative evidence and in applying basic quantitative skills to the solution of real-life problems in order to perform effectively as professionals and citizens. To assess the same, the candidates are tested on Word Problems representing various real world scenarios.

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<b>Basic Numbers</b> Decimals and fractions Factorization, divisibility, HCF, LCM Basic algebra Odd, even, prime, rational numbers	Word problems Application of algebra to real world Direct and inverse Proportion Common Applications: Speed-time-distance Profit, Loss Percentage, age relations, Mixtures Miscellaneous
General Maths	

# 2.5 - Quantitative Ability (Technical)

The Quantitative ability section measures the numerical ability and accuracy in mathematical calculations. The questions range from purely numeric calculations to problems of arithmetic reasoning, percentage analysis and quantitative analysis. Specifically these are divided into following sections -

#### a. Basic Mathematics

This section tests whether the candidate has understanding of basic number system, i.e., fractions, decimals, negative, positive, odd, even numbers, rational numbers, etc. The candidate should know how to do basic operations on these numbers, understand concepts of factors/divisibility and have good practice on algebra.

#### **b.** Applied Mathematics

Apart from operations on numbers, the candidate should know how to convert a real-world problem into equations, which could be solved to find an unknown quantity. Students need to be competent in reading and using quantitative data, in understanding quantitative evidence and in applying basic quantitative skills to the solution of real-life problems in order to perform

effectively as professionals and citizens. To assess the same, the candidates are tested on Word Problems representing various real world scenarios.

#### c. Engineering Mathematics

These are aspects of mathematics needed for Engineering disciplines and analysis of data. This includes permutation-combination, probability and understanding of logarithms.



# 2.6 - Spatial Reasoning



# **2.7 - Construction Mathematics**



# 3. Behavioural

### 3.1 - AM DIRECT: Managerial Case Based Test

The AM-DIRECT Situational Judgment Test assesses the practical intelligence and behavioral traits of a candidate on a set of competencies that are required to perform well in a midmanagerial role. It adjudges how different competencies will affect different work areas of the individual and which job role would best suit him or her. AM Direct assesses a candidate on three major work areas: Work Management, Client/Customer Management and Team Management. The test assesses the candidate's ability to handle and perform in each area and offers a proficiency score for the same.

## 3.2 - AM LEAD: Leadership Situational Judgment Test

The AM-LEAD Situational Judgment Test assesses the practical intelligence and behavioral traits of a candidate on a set of competencies that are required to perform well in a senior-managerial role. It measures an individual's ability to perform in various work areas and functional areas by measuring competencies in vital areas like strategic thinking and planning, problem solving, decision making , project execution among others.

AM LEAD is also instrumental in identifying job fitment of an individual in multiple areas like Sales, Client Servicing/Project Management, Operations etc.

## 3.3 - AM START: Workplace Competency Evaluation

AM START is our assessment suite used to evaluate workplace skills and values needed for an entry level role. It measures the practical intelligence and behavioral traits of a candidate on a set of vital competencies like integrity, learning attitude, teamwork, prioritization capability etc. AM-Start when used in conjunction with Aspiring Minds Personality Inventory, aptitude and domain tests, provides a complete and comprehensive insight into the candidate and become an effective suite for entry level talent evaluation.

## **3.4 - AM TEACH: Teachers Situational Judgment Test**

Teacher's Situational Judgment Test has been designed to evaluate a teacher's ability to handle various situations he/she faces in the school environment. This module measures the test taker on the following competencies that are required on the job:

a) Ability to communicate effectively to motivate students and to provide constructive feedback

b) Ability to manage a classroom so as to create a conducive environment for teaching as well as learning

c) Ability to plan and schedule an effective lesson plan and to choose the best teaching methodology

d) Ability to assess and evaluate the students' performance in a bias-free manner

e) Ability to create a partnership between parents and the school to facilitate discussions regarding the students' progress

The test consists of questions in the form of situations followed by 3-5 choices. The candidate needs to mark the best and the worst response option for the given situation.

## 3.5 - AM Personality Inventory (Forced Choice)

AMPI – Forced Choice is the forced choice form of AMPI. Based on the Big Five model measuring the candidate's personality on the five traits: Extraversion, Conscientiousness, Emotional Stability, Agreeableness and Openness to experience, the Forced Choice inventory has been developed in an attempt to reduce the effect of faking and social desirability. In this format, the candidates are presented with two statements, both equally desirable socially, making the candidate endorse one of them. Thus, by asking a candidate to endorse one of the two options, the item forces out, per se, the true inclinations and traits of the candidate. Since the candidate cannot make him/herself look good on both the statements, the faking tendency is reduced.

Forced-Choice Personality questionnaires have shown to have higher validity and reliability than the traditional Personality inventories. While AMPI-FC is aggressively used for certain entry hiring roles, such a testing strategy is also very suitable for assessing candidates at the mid-management to senior management level.

## 3.6 - AM Personality Inventory (Likert based)

AMPI, Aspiring Minds' flagship personality assessment is based on the contemporary five-factor model of personality also commonly known as the "Big Five" model. It measures five broad traits: Extraversion, Conscientiousness, Emotional Stability, Openness to Experience and Agreeableness. International studies have shown the Big Five model to be the most effective model to predict job performance.

AMPI is being deployed as a selection filter and for internal workforce evaluation. Being India's most deployed Personality tool, over quarter a million candidates have been evaluated on AMPI for various job roles across different sectors. It is also useful in being able to predict success in roles spanning from sales, customer service, relationship management, collections, technical support, managerial roles, leadership, etc.

AMPI is uniquely constructed to remove cultural and linguistic biases and is ideal for developing economies. The tool works effectively in evaluating individuals who would have not faced job situations in the past and hence effective in evaluating entry level talent as well.

## 3.7 - Retail – Situational Judgement Test

The AM Retail Situational Judgment Test is our assessment suite used to evaluate an individual's potential functional fitment in the retail sector. Retail is a vast sector requiring a lot of manpower having the right set of skills needed to work efficiently in a retail store. Understanding the customer's requirement, active listening, knowledge of the product being sold, persuading the customer and making the customer realise the value of the product are some essential traits that a retail store person must possess. To remove the guesswork out of hiring, the retail situational judgment test has been designed to objectively evaluate a candidate on skills/competencies required for a retail job. Candidates are evaluated on key job skills like communication and relationship building, customer service, sales skills amongst others for a variety of roles.

## 3.8 - Sales Competency Test

The Aspiring Minds Sales Competency Test is our assessment suite used to evaluate selling skills of an individual. In the current changing sales environment, the success of any organization is inextricably linked to its sales; therefore it is imperative to hire good sales people. Insight into the customer's business, active listening and modifying the sales pitch based on the customer requirements, persuading the customer and creating a mutually beneficial situation for the organization and the customer are the essential traits that a sales person must possess. Organizations today want analytical sales personnel who can sift through information and adopt appropriate strategies to help achieve the business objectives.

To remove the guess work out of hiring, Sales Competency test is based on Sales Situation Judgment Test and AMPI (Aspiring Minds Personality Inventory). Situational Judgment Test objectively evaluates the candidate on various skills/competencies required for a sales job. AMCAT Sales Suitability report is based on a sound competency framework. Based on research conducted across different sectors, key on-job skill sets and personality traits were identified, that correlate to high performance in the sales profile and the report presents a score across each of these competencies.

### **3.9 - Customer Service Situational Judgment Test**

The AM Customer Service Situational Judgment Test is our assessment suite used to evaluate an individual's potential functional fitment in the customer support domain. The candidate is assessed by asking for his/her response on various critical situations faced in his/her job. This response determines his/her performance and achievement in this profile. To remove the guesswork out of hiring, the test has been designed on a sound competency framework. Based on research conducted, we identified key on-job skill sets that correlate to high performance in the profile of Customer Support and the report presents a score in each of these competencies. While all these traits influence the likelihood of success, certain traits may be more critical than the others depending on the specific business context.

## **3.9 - HR Situational Judgment Test**

The Aspiring Minds HR Situational Judgment Test is our assessment suite for hiring HR personnel keeping in mind the core competencies required to succeed at the job. The HR SJT, as it is called, has been so designed that it can evaluate HR personnel across roles and sectors on competencies like problem solving, organizational communication and behavioral traits among others. The test comprises questions which simulate real life job scenarios wherein each question is mapped to a particular competency. The candidate is asked to choose the 'best' and 'worst' options to tackle the situation. The answers given by the candidate are then mapped against the correct 'best action' and 'worst action.' The competencies that HR SJT measures are:

- Business Effectiveness
- Interpersonal Understanding
- Planning and Organizing Skills
- Credible Activism

The results from the assessment and the feedback are used to select potential high performers and can be used to probe the applicant further in the interview 'selection' process.

## 3.10 - Shop Floor Manager Situational Judgment Test

In this module, you will be provided with various situations that a shop floor supervisor faces in an automotive setup. Based on the situation provided, we wish to understand what action you will take in the given situation. There are a total of 16 questions in this section which have to be answered in 20 minutes. For each question, there are three or more choices out of which only one choice is correct. A direction is included with each question. All questions have to be answered and you cannot review any question, once you have moved on to the next question.

t	Shop floor Manager SJT	
I	Work Management	
	Team Management	
	Problem Solving	
	Decision Making	
I		
I		
I	www.aspiringminds.in	

## 3.11 - Customer Centricity

This module evaluates the candidate's ability to handle customer queries, requests and complaints promptly, decisively and respectfully, leading to a positive customer experience. It evaluates how the candidate helps and understands customers, ensures that customer obligations are met, resolves customer complaints, and cultivates long-term relationships with customers.

## 4 – Skills

### 4.1 – Engineering Modules

### 4.1.1 – Computer Programming :

Computer Programming assessment is ideal for evaluating entry level talent's exposure and expertise in Computer Programming. Covering basic programming constructs, data structures, algorithms and object oriented programming concepts, the assessment gives a holistic view of the candidate's capabilities in programming. The module is Language Agnostic and hence will allow a candidate with prior knowledge of a particular programming language to be assessed without bias.

The test is language-independent and all programming questions use a pseudo-code. Significant effort has been made to exclude memory-based and rote-learning questions. The test contains questions on debugging programs, finding the output of programs, completing incomplete programs, finding complexity of algorithms, questions on implementation and operations on different data structures, etc.

The computer programming module has shown very high correlation to technical trainability and success in the role of software engineer. At a lower threshold of scoring, it has the capability to predict the duration of training required to convert a fresh engineer into a deployable software engineer. Being adaptive and standardized, the test also helps differentiate among very well trained engineers for research and product development roles.



### 4.1.2 – Electronics & Semi Conductor

The Electronics and Semiconductor test assesses the suitability of the candidate for the SOC, Embedded Systems, VLSI design, etc. companies. The module has been designed to assess graduates from electronics and electrical engineering background. It tests a candidate's understanding on core concepts pertaining to semiconductors, analog and digital electronics. The module draws upon knowledge about various semiconductor components like diodes and transistors, signals, amplification and filtering etc. The questions in this test are not just based on factual knowledge of various subject concepts but they also include numerical problems and inference based questions based on circuit based diagrams, designed to check if the candidate is able to extrapolate the concept to practical scenarios.



### 4.1.3 – Electrical Engineering

The Electrical Engineering test is designed to assess a candidate's knowledge required to work in the power sector. The test checks the candidate's knowledge on the fundamentals of electrical engineering, concepts of instrumentation & control and electronics.



### 4.1.4 – Mechanical Engineering

The test on Mechanical Engineering assesses a candidate's knowledge and understanding of core concepts like mechanics, kinematics, thermodynamics, material science, structural analysis etc. It requires a candidate to apply the principles of physics and material science for analysis, design, manufacturing and maintenance of mechanical systems.



### 4.1.5 – Civil Engineering

The Civil Engineering test assesses a student's knowledge and understanding of the core principles involved in the branch of civil engineering. The test includes concepts related to structural engineering, geotechnical and water resources engineering, transportation engineering and surveying.



### 4.1.6 – Chemical Engineering

The assessment on Chemical Engineering has been designed to check the suitability of the candidate for the various chemical industries like Inorganic, natural products, petroleum and polymer industries. The module checks the candidate's basic knowledge on several chemical engineering processes and equipments, their design and operation. It requires the candidate to apply the concepts of physical sciences (e.g., chemistry and physics) together with material sciences to processes that convert raw materials or chemicals into more useful or valuable forms. The module has an appropriate mix of conceptual and numerical based problems that would check the candidate's understanding on principle and functioning of different chemical engineering processes and equipments.



### **4.1.7 – Production Engineering**

The assessment on Production Engineering is designed to check a candidate's knowledge of manufacturing concepts as well as their practical application at work place. The test comprehensively covers the concepts of core production subjects as well as CAD/CAM.



### 4.1.8 – Industrial Engineering

The Industrial Engineering test is designed to assess a student's knowledge and understanding of the basic concepts related to operation research and management, management science, systems engineering, ergonomics and safety engineering. The test also includes various principles and methods of engineering analysis, design and management.



### 4.1.9 – Production & Industrial Engineering

The assessment on Production and Industrial Engineering is designed to check a candidate's basic knowledge of manufacturing concepts as well as their practical application at work place. The test comprehensively covers the concepts related to core production subjects as well as CAD/CAM. It also tests for the knowledge of various principles and methods of engineering analysis, design and management.



### 4.1.10 – Metallurgical Engineering

The Metallurgy Engineering test is designed to assess the graduates from metallurgical and manufacturing engineering background. It encompasses various topics that test a candidate's knowledge of various industrial metallurgical processes, metallurgical thermodynamics, design of various furnaces etc.



### 4.1.11 – Paint Technology

The Paint Technology test evaluates a candidate's knowledge and understanding of the core concepts of paint technology like manufacturing coatings, evaluating them, treating the surface, understanding coating defects and troubleshooting.



### 4.1.12 – Automotive Engineering

The Automotive Engineering test applies elements of mechanical, electrical, electronic and safety engineering to the design, manufacture and operation of motorcycles, automobiles, cargo-trucks etc. The test focuses on applied automobile design and testing, experimental/scientific methods related to automobile engineering and maintenance.



### 4.1.13 – Polymer Technology

The Polymer Technology module assesses elementary knowledge in the field of polymer science. The module tries to gauge both the theoretical as well as practical knowledge of the candidate across various topics like polymer chemistry, processing, testing, etc. The module has an appropriate mix of conceptual and application based problems that would check the candidate's understanding on various polymer characteristics, properties and rheology. The module provides an opportunity to evaluate candidates for multiple job profiles in polymer manufacturing industries, specifically as production engineers or technologists, quality control inspectors and polymer specialists.



### 4.1.14 – Telecommunications

This module has been designed to assess graduates from various engineering backgrounds such as B. Tech. in Electronics Engineering, Electronics &Communication Engineering and Electronics & Telecomm Engineering on their knowledge of analog and digital transmission, microwave engineering and electromagnetism. The Questions in this test are a mix of theoretical, numerical and conceptual based.

Industries dealing in manufacture and services of electronics consumer goods and appliances, private companies manufacturing radio equipment and electronics, sectors of digital tv, satellites, computer networking assess candidates with this test for the role of Electronics Engineer.



### 4.1.15 – Instrumentation Engineering

This test is designed to assess students on their knowledge of the uses and application of certain electronic devices and instruments in various industries and in instrumentation and control labs. It is mainly aimed at assessing graduates from various engineering backgrounds such as Instrumentation & Control Engineering, Applied Electronics & Instrumentation Engineering, Electronics & Instrumentation Engineering, Electronics Instrumentation Engineering etc.



### 4.1.16 – Mining Engineering

The Mining Engineering test assesses a candidate's knowledge and understanding of the mining methods, mineral processing, mining machinery & mineralogy, petrology and stratigraphy. A candidate requires to possess this knowledge if he needs to take up a career in the field of mining. The scope of this subject includes job roles like exploration, development, operations improvement & capitalization and site reclamation.



### 4.1.17 – Mineral Engineeering

The Mineral Engineering test will assess the candidates' knowledge and understanding of mineral Processing & Metallurgy, mineralogy, petrology & stratigraphy, physical separation processes, particle technology.



### 4.1.18 – Petrochemical Engineering

The petrochemical test will assess the candidate's knowledge of fluid and thermal Principals, petrochemical process and petroleum composition and processing. The tests are computer based and can be easily deployed for large scale recruitment as well as for walk-in hiring.



## 4.1.19 – Embedded Software Engineering

The test assesses a candidate on skills needed for understanding the embedded system specifications, developing software module as per the requirement, testing and validating the software module; coordinating with design engineers for system integration among others.



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### 4.1.20 – Physics

The module on Physics has been designed to assess graduates from various backgrounds on their knowledge, understanding and application of the basic concepts of Physics. It tests a candidate's understanding on core concepts including classical mechanics, Electromagnetism, modern physics etc. It requires a candidate to apply the principles and laws, involved in various topics such as Newton's laws, Electromagnetic theories etc, to real world situations. The questions in this test are not just calculation based such that a person who knows the right formulae can excel in it, but it lays lot of emphasis on inference-based questions, graph interpretation and assertion/reasoning that evaluate the student's ability to comprehend the applications of various laws and principles and not just memorize the formulae/equations.


# 4.1.21 – Aeronautical Engineering



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# 4.1.22 – Optoelectronics Engineering

Optoelectronics Engineering	
Communication System	
<ul> <li>Broadband Communication</li> <li>Digital and Optical Communication System</li> </ul>	
Photonics	
Optics and Laser Communication     Photonics Switching and Networking	
Semiconductor and Optoelectronics	
Optoelectronic Instrumentation     Semiconductor Optoelectronics	
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# 4.1.23 – Photonics Engineering





## 4.1.24 – Power Electronics & Drives





## 4.1.25 – VLSI & Embedded Systems





# 4.1.26 – Mechatronics Engineering

Mecha	tronics Engineering	
Basic Mechatronics Systems and	d Components	
<ul> <li>JK Flip Flop and D Flip Flop</li> <li>Logic Gates</li> </ul>		
Sensors and Feedback Devices		
<ul> <li>Different Types of Sensors</li> <li>Static and Dynamic Chara</li> <li>Errors and Output Impeda</li> <li>Transducers for Measurer</li> </ul>	; cteristics of Sensors ance of Sensors ment of Displacement	-
Control Elements and Actuator	S	
<ul> <li>Mechanical Actuation System</li> <li>Electrical Actuation System</li> <li>Pneumatic and Hydraulica</li> <li>Electrical Motors</li> </ul>	tems ms Actuation Systems	
Computational Elements and C	ontrollers	
<ul> <li>Basic Concepts of Control</li> <li>Controllers for Robotics an</li> <li>Microprocessors and Micro</li> <li>PLC and SCADA/Human M</li> <li>Communication Protocols</li> </ul>	Systems nd CNC rocontrollers 1achine Interface	-
Application of Mechatronic Sys	stems	
<ul> <li>Factory Automation and I</li> <li>Design of Simple Mechatri</li> </ul>	ntegration	



# **4.1.27 – Electronics & Embedded Systems Engineering**

The Electronics and Embedded Systems Engineering test will assess candidate's knowledge and understanding of concepts like embedded systems, analog and digital electronics.

### The syllabus is given below :-

### **Analog Electronics**

- Basic of circuit analysis
- Small signal and large signal circuit analysis
- Oscillators and feedback
- Op-amps
- Filters

# **Digital Electronics**

- Boolean algebra and minimization of boolean functions
- Logic families
- Combinational circuits
- Sequential circuits
- VLSI basics

### **Embedded Systems**

- RTOS based embedded systems
- Designing embedded software
- Basic embedded processor/microcontroller architecture
- Implementation of operators and expressions
- Programming embedded systems

### 4.2 – IT Modules

#### 4.2.1 – C

The C language module has been designed to assess candidates' understanding of basic concepts and methods in C. This test covers all the major areas including data types, decision control loops, functions, pointers, arrays, strings, storage classes, dynamic memory allocations etc. of C language. The questions in this test are not just knowledge based such that a person who knows the right function in C can excel in it, but it lays lot of emphasis on application based, output based and error based questions. The scenarios covered are a mix of both commonly used concepts as well as some not so commonly used concepts thereby giving a variety of questions with different difficulty level. It will test a candidate not only on knowledge of C but also on the ability to think logically, understand the code, predict the output and check for errors if any which the candidate would be required to do in profiles requiring a strong hold in C.



4.2.2- C++

#### C++

The module on C++ has been designed to assess the candidate's skill level in C++ programming by examining the programming constructs of this language along with the knowledge of object oriented programming and their implementation in C++. While C++ module tests only the candidate's expertise and knowledge in C++ language, combining this module with Computer Programming module, will help you also gauge whether the candidate has a good understanding of programming concepts.

IT companies which hire for the role of Software Developer assess the candidates on this module in addition to the basic aptitude modules.



# 4.2.3 – Core Java (Entry Level)

The Java module is typically targeted to evaluate candidates having between 1 to 5 years of work experience in the industry. The module is ideal for quick elimination prior to interviews. A combination of aptitude and technology assessment can help in better evaluation and elimination.

Those IT companies which hire for the Software Developer profile and are in search for candidates with good programming skills in Java, use this domain-specific assessment in addition to aptitude and computer programming assessments to screen the applicants.





# 4.2.4 – Core Java (Advanced Level)

The Core Java (Advanced Level) module is designed to test the skills of the professionals with 2-4 years of experience in Core Java. This test covers all the major areas including arrays, data types, exception handling, Oops, packages, inheritance, Collections, threads etc. of Core Java. The questions in this test are not just knowledge based but it lays lot of emphasis on application based, output based and error based questions. The scenarios covered are a mix of both commonly used concepts as well as some not so commonly used concepts thereby giving a variety of questions with different difficulty level. It will test a candidate not only on knowledge of Core Java but also on the ability to think logically, understand the code, predict the output and check for errors if any which the candidate would be required to do in profiles requiring a strong hold in Advanced Core Java.





### 4.2.5 - ASP.NET with C#

The ASP.NET with C# module tests the candidate's skills in ASP.NET programming using C#. Basically, this module lays emphasis on .NET framework and fundamentals, C# fundamentals and advanced ASP.NET like state management, security and networking services etc. A wide variety of conceptual, output and application based questions on the above major aspects will assess the candidate's programming skills and his/her comfort level towards the language.

The IT companies, which hire software developers for building dynamic web applications, use this module to evaluate and screen the applicants.



4.2.6 – SQL

The SQL assessment module has been designed to assess the candidate's understanding towards basic and advanced queries which are used to handle and manipulate the data present in a database. The candidate's knowledge is tested for DDL (data definition language), DML (data manipulation language) and DCL (data control language) statements.

Apart from SQL queries, this module also checks the candidate's knowledge for PL/SQL commands. As PL/SQL is an application development language, so the programming skills of the candidate are also evaluated.



The companies, which require database managers and database administrators, can use this module to hire the applicants.



### 4.2.7 – UNIX

The UNIX module has been designed to assess the knowledge of the candidate about the UNIX environment, shell structure and programming, commands, file system and organization. This module can be used to assess candidates seeking "Administrator" profile in IT companies.





## 4.2.8 - Computer Science

The Computer Science assessment module has been designed to assess the candidate's knowledge in basics of Operating System and Computer Architecture, Computer Networks and Database concepts. A wide variety of conceptual, output-based, numerical and application based questions on the above mentioned topics will assess the candidate's theoretical and practical knowledge and his/her comfort level in these widely used concepts.

The Software companies which hire software developers, database administrator and network engineers, use this module to evaluate and screen the applicants.





### 4.2.9-Java Frameworks

The JAVA Frameworks module has been designed to assess a candidate's knowledge on some basic and advanced features related to frameworks in Java.

This module tests a candidate's knowledge on concepts of Generics, Core Fundamentals, Design Patterns, Exception Handling, Threads, Struts and springs. The questions in this test are not just based on factual knowledge but they cover a good mix of theory, programming and conceptual/practical questions.

The Java Frameworks test assesses the suitability of the candidate for application development and other related profiles in IT based companies.

4.2.10- Computer Programming

Computer Programming assessment is ideal for evaluating entry level talent's exposure and expertise in Computer Programming. Covering basic programming constructs, data structures, algorithms and object oriented programming concepts, the assessment gives a holistic view of the candidate's capabilities in programming. The module is Language Agnostic and hence will allow a candidate with prior knowledge of a particular programming language to be assessed without bias.

The test is language-independent and all programming questions use a pseudo-code. Significant effort has been made to exclude memory-based and rote-learning questions.

The test contains questions on debugging programs, finding the output of programs, completing incomplete programs, finding complexity of algorithms, questions on implementation and operations on different data structures, etc.

The computer programming module has shown very high correlation to technical trainability and success in the role of software engineer. At a lower threshold of scoring, it has the capability to predict the duration of training required to convert a fresh engineer into a deployable software engineer. Being adaptive and standardized, the test also helps differentiate among very well trained engineers for research and product development roles.



# 4.2.11 – Search Engine Optimization

The Search Engine Optimization (SEO) module has been designed to assess a candidate's knowledge on SEO and its different strategies.

This module tests a candidate's knowledge on basics of SEO (Need and planning), SEO strategies (keywords, tags, Links etc.) and SEO maintenance (Tools and resources, Directories and Search Engines, Search Result comparisons, Elements and Trades). The questions in this test are not just based on factual knowledge but they cover a good mix of theory and conceptual/practical questions. The Search Engine Optimization test assesses the suitability of the candidate for Digital Marketing and other related profiles in IT based companies.



4.2.12 – Perl

The Perl module has been designed to assess a candidate's basic knowledge of Perl scripting language.

This module tests a candidate's knowledge on concepts of Object Oriented Programming, Packages and Modules, File Handling, Strings, Perl Functions and Loops and Arrays. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to write and understand Perl scripts.The Perl test assesses the suitability of the candidate for scripting in IT based companies.

4.2.13 - The Python module has been designed to assess a candidate's basic knowledge of Python scriptinglanguage.

This module tests a candidate's knowledge on concepts of Variables and operators, Control structures, Objects, Dictionaries and Files and Modules. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to write and understand basic Python scripts.

The Python test assesses the suitability of the candidate for scripting in IT based companies.

4.2.14 – QTP

The QTP module has been designed to assess a candidate's basic knowledge of concepts in Quick Test Professional tool.

The test contains questions based on basics of QTP, Objects, Recording Modes and Checkpoints, Synchronization, Parameterization and Functions, Regular Expressions, Error Handling and Recovery, Database Connections and Debugging and Programming in QTP. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the suitability of the candidate for testing, quality assurance and other related profiles in IT based companies.



#### 4.2.15 – Manual Testing

The Manual Testing module has been designed to assess candidate's knowledge on testing concepts and techniques.

This module tests a candidate's knowledge on basics of software testing (terminologies, life cycles, verification and validation etc.), testing techniques and management plans (planning and organization, test cases and reports and matrices). The questions in this test are not just based on factual knowledge but they cover a good mix of theory and conceptual/practical questions.

The Manual Testing test assesses the suitability of the candidate for testing and other related profiles in IT based companies.



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4.2.16 – Web Development

The test aims to assess the candidate's ability to design and maintain web applications that include static and dynamic content. This would include design, layout and coding of a website.

#### 4.2.17 – Desktop Publishing Skills



#### 4.2.18 - .NET WPF

The Dot Net WPF module has been designed to assess a candidate's knowledge on topics of WPF.

This module tests a candidate's knowledge on concepts of Basic .Net, WPF Fundamentals and OOP, XAML – Control, Events and Layouts, working with Windows, multimedia and Application deployment. The questions in this test are not just based on factual knowledge but they cover a good mix of theory, programming and conceptual/practical questions.

The Dot Net WPF test assesses the suitability of the candidate for application development and other related profiles in IT based companies.



#### 4.2.19 - Shell Scripting



4.2.20 - .NET WCF

The Dot Net WCF module has been designed to assess a candidate's knowledge on topics of WCF.

This module tests a candidate's knowledge on concepts of Basic .Net, WCF Architecture and Programming model, SOA, WCF programming and WCF management. The questions in this test are not just based on factual knowledge but they cover a good mix of theory, programming and conceptual/practical questions.

The Dot Net WCF test assesses the suitability of the candidate for application development and other related profiles in IT based companies.



# 4.2.21 – Agile Software Development



### 4.2.22 – Android Development



#### 4.2.23 – Angular JS



4.2.24 – C# with .NET



### 4.2.25 – C# Programming



4.2.26 - CEN Services & IP/MPLS Networking



#### 4.2.27 - COBOL Programming







 $4.2.29 - CSS_3$ 



4.2.30 – Data Engineering (Algotithms)



#### 4.2.31 – Data Science









### 4.2.33 - Hadoop



#### 4.2.34 - HTML5

The test for HTML5 will assess the concepts pertaining to this subject. This test covers all the major areas including Basic & Data Elements, Multimedia & UI Elements, Application APIs etc. of HTML5.



### 4.2.35 – Java Developers



4.2.36 - Java Web Services & XML



### 4.2.37 – Java Script









#### 4.2.39 – Job Control Language

The Job Control Language module has been designed to assess candidates' understanding of basic concepts and methods in Job Control Language. This test covers all the major areas including statements, commands, parameters, procedures, utilities, datasets, data groups, control job processing, allocation and Abends etc. of Job Control Language. The questions in this test are not just knowledge based such that a person who knows the right function in JCL can excel in it, but it lays lot of emphasis on application based, output based and error based questions. The scenarios covered are a mix of both commonly used concepts as well as some not so commonly used concepts thereby giving a variety of questions with different difficulty levels. It will test a candidate not only on knowledge of JCL but also on the ability to think logically, understand the code, predict the output and check for errors, if any, which the candidate would be required to do in profiles requiring a strong hold in JCL.



### 4.2.40 – jQuery







### 4.2.42 – Microstrategy







### 4.2.44 – MS Access







#### 4.2.46 - Node.JS



4.2.47 - Oracle DBA (Entry Level)

The Oracle DBA module has been designed to assess a candidate's knowledge of basic and advanced concepts in Oracle Database Management.

The test contains questions based on Oracle Database Architecture, Database Environment, Administration and Management, Backup, Recovery and Flashback technology, Data Movement and Network Scheduler and Configuration. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to understand, manage and manipulate critical Oracle databases for database administration and other profiles in companies which require database management services.



4.2.48 - Oracle DBA (Advanced Level)

The Oracle DBA module has been designed to assess a candidate's knowledge of basic and advanced concepts in Oracle Database Management.

The test contains questions based on Oracle Database Architecture, Database Environment, Administration and Management, Backup, Recovery and Flashback technology, Data Movement and Network Scheduler and Configuration. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to understand, manage and manipulate critical Oracle databases for database administration and other profiles in companies which require database management services.





#### 4.2.49 – Oracle PL SQL



4.2.50 - PHP


#### 4.2.51 – R Programming



4.2.52 - RESTful Web Services



#### 4.2.53 – Ruby









#### 4.2.56 – Tableau









- 4.2.58 Visual Basic for Applications
- 4.2.59 Drupal
- 4.2.60 Mulesoft
- 4.2.61 MicroStrategy
- 4.2.62 Pega
- 4.2.63 Sales Force
- 4.2.64 SAP BW
- 4.2.65 SAP Sales & Distribution
- 4.2.66 SAP Business Objects & Universe
- 4.2.67- .NET WCF
- 4.2.68 Agile Testing
- 4.2.69 Biz Talk
- 4.2.70 Core Java (Entry Level)

# 4.3 – IT Infrastructure Modules

### 4.3.1 – Hardware & Windows Client

- 5 The Hardware and Windows Client assessment has been designed to assess the candidate's knowledge of hardware devices and their configuration, windows client, security and troubleshooting.
- 6 A wide variety of theoretical and practical questions on the above major aspects will assess the candidate's expertise in this module.
- 7 This module evaluates a candidate's skill set which is required for hardware and network administrators for the I.T. Infrastructure of the Networking and Software companies.

# Hardware and Windows Client Hardware · N/W device configuration: Router, Switches, Gateway, Cables Memory types (DDR2, SDRAM, etc). · Basic architecture: bus, master-slave, etc. · Motherboard components: processor, CMOS, slots, etc. Troubleshooting Troubleshooting hardware errors. Troubleshooting device and driver. · Troubleshooting Windows problem: Virus, BSOD, Worm etc. Windows Client · Security: Firewall, Anti-Virus, Spyware, Policies Network Setting on XP: TCP/IP, Proxy Setting etc. Managing and Maintaining Users · External hardware: printers, scanners



# 4.3.2 – Networking & Implementation

The Networking and Implementation assessment has been designed to assess the candidate's knowledge of networking basics, various protocols and networking models, routing and implementation of networking. This module is meant to test the practical knowledge required in the profile of Network Engineer or Network Administrator.

A wide variety of conceptual, output and application based and numerical based questions on the above major aspects will assess the candidate's theoretical and practical knowledge and his/her comfort level towards various networking concepts.

The Networking and Software companies which hire network administrators for their I.T. Infrastructure can use this module to evaluate and screen the applicants.



#### 4.3.3 – Linux

The LINUX module has been designed to assess the knowledge of the candidate about LINUX commands, network and system administration. If the candidate has a sound knowledge of LINUX security and configuring network services, then the companies can hire them as administrators by assessing them through this module.





# **4.3.4 – Cloud Computing**

The Cloud Computing module has been designed to assess a candidate's basic knowledge of cloud technology. The test contains questions based on basics of cloud computing, various cloud service models, virtualization and private clouds which check if the candidate has basic awareness level knowledge in cloud technologies so that he can be further trained in this domain. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to understand and manage the cloud.

The IT companies, which hire candidates for their Cloud Management Team, use this test to screen the applicants.



# 4.3.5 – Mobility

The Mobility module has been designed to evaluate a candidate's knowledge on widely used mobile technologies.

This module tests a candidate's knowledge on important concepts of mobile networks, basics of UI development using HTML5 and Phone Gap and basics of mobile application development (IOS and Android). The questions in this test are not just based on factual knowledge but they cover a good mix of theory, programming and conceptual/practical questions. The Mobility test assesses the suitability of the candidate for mobile application development and other related profiles in mobile technologies based companies.



### 4.4 – MBA Modules

### 4.4.1 – Financial & Banking Services

The Banking and Financial Services module has been designed to check general financial knowledge and its application for a graduate in all subject areas that affect a financial manager's decisions. The module has been designed to assess a fresh graduate without any industry experience. The focus is to test understanding beyond the theoretical aspects taught in graduate studies. The module assesses the students understanding of how financial instruments behave in real life scenarios and impact of external entities on their value, practical understanding of taxation, macroeconomics, etc. It does not involve any complicated calculations.

It is most appropriate to use the module to hire fresh graduates as it gives insights into their interest and understanding of the financial markets. Since the questions combine theoretical knowledge with pragmatic behavior, only a person who has a natural keenness in these areas would be likely to excel more.

- **Investments:** Here the candidate is assessed on basics of the equity market including stock valuation based on multiples and CAPM. Knowledge of bond markets is checked through questions on bond valuation. Candidate's working knowledge of Options and Derivatives is gauged through an understanding of what these products mean.
- **Banking Products:** Suitability for the banking industry is assessed through questions testing familiarity with various banking products vis-à-vis CASA, FDs, Loans/Debts, Trade Services and Credit Cards.
- **Macro Economics:** Financial sector is closely linked with the macro-economic environment and factors such as inflation, interest rates etc. Thus, a candidate needs to have knowledge of various macro-economic variables and their implications on various investment options and banking products pricing.
- **Taxation:** This section evaluates two things 1) candidate's knowledge of tax on income from multiple sources like dividends, interest amount etc and the effect of various scenarios on tax payable. 2) knowledge of tax rebates offered under different investment schemes.



#### 4.4.2 – Human Resources

The HR module has been designed to facilitate hirings in HR at the fresher level. The module covers all specialized courses in HR taught in MBA programs, with greater focus on subjects which have higher practical applicability at the fresher level such as individual and group behavior including motivation, team building, interpersonal communication; performance management including appraisal formats and process, documentation; and human resource information systems.

The test would highlight the particular area of the candidate's strength and would identify whether the candidate is suited for a specialist profile or a generalist profile in HR.

A candidate suited for a generalist profile while conversant with all aspects of HR should be adept in areas like Organizational Behavior, Human Resource Planning, HR information system, Selection process and Performance management.

On the other hand a candidate exceptionally good in any of the sections of selection, performance, industrial relations and training and development might be more suited to a specialist role in that area.



To download sample questions please click below:

# 4.4.3 – Marketing

The marketing module, based on the curriculum taught in 2 years of MBA, would help discriminate candidates who have only theoretical knowledge vs. someone who understands the theory as well as its application.

Marketing is a subject that requires one to probably have more real world knowledge and updates than theoretical knowledge. Basis the test, organizations would be able to identify candidates having a good understanding of all aspects of marketing ranging from fundamentals, to market research, planning and strategy and principles of economics all of which are closely linked and would be required by a marketing professional.

Marketing		
General Marketing	Brand Planning	Sales & Distribution Management
•Marketing Planning •Marketing Strategy •Marketing Management •Principles of Economics	• Brand Management • Advertising Management • Consumer Behavior • Marketing Research	• Sales Management • Distribution Models • Channel Management
Ň	Test for a dream jo	

#### 4.4.4 – Operations

The module on Operations has been designed to assess MBA students on their understanding of basic concepts involved in Operations Management. It lays greater emphasis on the practical aspects of operations. The test checks on the analytical concepts, utility of various management tools & techniques used and the decision making involved in the various steps of the supply chain. The questions in this test are not just theoretical knowledge of various frameworks but they also include numerical problems, graph interpretation and drawing conclusions to check if the candidate is able to analyze and develop solutions to business operational problems. The scenarios covered are a mix of both hypothetical as well as real-time business scenarios thereby giving flair of the kind of issues that a candidate might face in an entry profile in the Operations domain.



### 4.5 – BFSI Modules

### 4.5.1 – Financial & Banking Services

The Banking and Financial Services module has been designed to check general financial knowledge and its application for a graduate in all subject areas that affect a financial manager's decisions. The module has been designed to assess a fresh graduate without any industry experience. The focus is to test understanding beyond the theoretical aspects taught in graduate studies. The module assesses the students understanding of how financial instruments behave in real life scenarios and impact of external entities on their value, practical understanding of taxation, macroeconomics, etc. It does not involve any complicated calculations.

It is most appropriate to use the module to hire fresh graduates as it gives insights into their interest and understanding of the financial markets. Since the questions combine theoretical knowledge with pragmatic behavior, only a person who has a natural keenness in these areas would be likely to excel more.

- **Investments:** Here the candidate is assessed on basics of the equity market including stock valuation based on multiples and CAPM. Knowledge of bond markets is checked through questions on bond valuation. Candidate's working knowledge of Options and Derivatives is gauged through an understanding of what these products mean.
- **Banking Products:** Suitability for the banking industry is assessed through questions testing familiarity with various banking products vis-à-vis CASA, FDs, Loans/Debts, Trade Services and Credit Cards.
- **Macro Economics:** Financial sector is closely linked with the macro-economic environment and factors such as inflation, interest rates etc. Thus, a candidate needs to have knowledge of various macro-economic variables and their implications on various investment options and banking products pricing.
- **Taxation:** This section evaluates two things 1) candidate's knowledge of tax on income from multiple sources like dividends, interest amount etc and the effect of various scenarios on tax payable. 2) knowledge of tax rebates offered under different investment schemes.



# 4.5.2 – Banking Readiness

The Banking Module has been designed to assess elementary banking knowledge of a candidate. The test has been designed for fresher level hiring, for candidates who might or might not have officially studied banking as a subject in graduation.

Candidate is assessed on his knowledge on three macro themes within banking i.e. Financial Instruments having concepts like Mutual Funds, Insurance, Loans etc, Retail Banking Functions including various banking services, and Non retail Banking Functions.



#### 4.5.3 – Insurance Readiness

This is an elementary insurance module which checks for the candidate's basic knowledge of insurance concepts as well as their practical application in the work place.The module assumes that the candidate does not have formal educational or professional training in insurance and hence the module is a good evaluation tool to check how 'ready' the candidate is for the insurance industry and is a surrogate measure of their interest or desire to be in the industry.





### 4.5.4 – Basic Financial Services

The FS basics module has been designed to assess a candidate's fundamental knowledge of financial sector. The module has been designed for fresh graduates who may not have any industry experience in the same field. The module is designed to check candidate's theoretical as well as practical application of the concepts. The module assesses the students understanding of how financial markets operate in real life scenario. The module covers various aspects of financial sector such as primary and secondary market and mutual funds.



#### 4.5.5 – Advanced Financial Services

The FS Advanced module has been designed to assess more elaborated knowledge related to financial sector. The module has been designed for the people who may have relevant industry experience and thus are expected to be aware of elemanantry concepts. The module is a blend of both conceptual and the practical application. The module convers the emerging aspects of financial sector such as mutual funds, its taxation and regulation aspect as well as the broking norms as stipulated by SEBI.



#### 4.5.6 – Investment Banking

The Investment Banking is an advanced module, designed to asses enhanced knowledge of candidate's on various concepts of Financial Analysis and Valuations. The module has been designed for the people who have relevant industry experience in either Banks or Investment companies and thus are expected to be aware of elemanantry concepts. The module tests the candidate's practical application of concepts. The module is a good assessment tool as incoroprates both conceptual and analytical questions.



#### 4.5.7 – Credit Analysis

The Credit Analyst test is designed to assess extensive knowledge on various concepts related to credit. The test evaluates a candidate's understanding of the application of concepts such as Ratio Analysis, Financial Statement Analysis, etc.



#### 4.5.8 - Retail Banking

The Retail Banking test assesses the candidate on his/her knowledge of retail banking concepts like banker-customer relationship, banking products, fee and cash based banking services, electronic transfers and other banking technologies, etc. It also evaluates the candidate on his/her knowledge of concepts of macroeconomics that are relevant to the banking industry.

### 4.5.9 – Economics

This test evaluates a candidate's knowledge and understanding of microeconomics, macroeconomics and international trade theories and policies.



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# 4.5.10- Financial Accounting

This test evaluates a candidate's knowledge and understanding of the various nuances of financial accounting like financial statement analysis, reporting of assets and liabilities, cost concepts and posting journal entries.



# 4.5.11- General Accounting

The module is designed to test commerce graduates with a few years of experience in accounting industry. It assesses their knowledge in theoretical concepts and their application. The module checks for the candidates' knowledge in financial accounting primarily, with additional focus on certain aspects of corporate accounting. A section within the module also focuses on assessing the candidates' knowledge of enterprise business solutions and their comfort in handling computerized accounting systems.

The module is suited for hiring at lateral level in KPOs and BPOs across industrial sectors for general accounting related jobs.



#### 4.5.12 – Financial Research

This test focuses on assessing a candidate's knowledge and understanding of various elements of financial research including financial statement analysis, ratio analysis and project analysis.

# 4.5.13 – Bank Teller Aptitude

The Bank Teller Aptitude test assesses the candidate on his/her knowledge of basic banking operations like opening an account, closing an account, managing transactions, managing cash drawers, etc. It also evaluates the candidate's understanding of the processes to be followed to handle customer queries and grievances.







# 4.5.15 – Insurance & Mutual Funds Basics



#### 4.6. Life Science

#### 4.6.1 – Chemistry

Chemistry module comprises of three sections- physical, inorganic and organic chemistry. The student is tested on the various laws, theories and principles governing the various physical phenomena in chemistry. The section on physical chemistry assesses the student on his/her problem solving capabilities too as it covers numerical questions as well. The organic chemistry sections tests the understanding of the various reaction mechanisms. The questions on inorganic chemistry evaluate the student's ability to comprehend the trends in the physical and chemical properties across groups/periods and also predict the anomalous behavior of certain elements.



#### 4.6.2 – Molecular Biology

Molecular Biology module assesses a student's basic understanding of the principles of molecular biology and genetics. This module primarily tests the student's ability to understand the interactions between the various cellular systems which includes the interactions between different types of DNA, RNA and protein biosynthesis as well as the regulatory mechanisms involved. The module covers not just the theoretical aspects but also the practical concepts as it covers the various analytical techniques like PCR, blotting, restriction enzyme digestion, etc. There are questions on the principles behind these techniques, the methodology, result interpretation and limitations.



#### 4.6.3 - Biochemistry

Biochemistry module assesses a student's understanding of the structure and functions of the various bio-molecules along with the physical, chemical and biological context in which they operate within the cell. It also tests the student's knowledge of the various interactions of the cellular components such as proteins, lipids, nucleic acids, etc. This module is focused not just on testing the grasping power of the student but it also gauges the practical knowledge and the logical ability of the student. The module also covers the aspects of metabolism and bioenergetics as these topics assess the student's conceptual understanding of the various biological processes along with the different regulatory mechanisms which take place within the cell.



#### 4.6.4 - Biotech Lab Techniques

The module on Biotech Lab Techniques has been designed to assess the practical knowledge and understanding of the student. The module tests the understanding of the principles, laws and theories that govern various analytical techniques. There are questions which gauge whether the student is able to evaluate as which technique needs to be used for a specific purpose/need. It not just tests the procedural knowledge of the lab experiments but also the candidate's ability to interpret the final output and draw conclusions. This module also covers a section on the principles of fermentation technology, the knowledge of which is very important for a person working in the bioprocess industry.



#### 4.6.5 - Basic Biology

The module on Biology has been designed to assess graduates from Life Sciences, Pharmacology and Nursing backgrounds on their knowledge, understanding and application of the basic concepts of biology. It encompasses various topics that test for a candidate's knowledge of anatomy and physiology of the skeleton system, nervous system, endocrine glands and all other vital organs that play an important role in sustaining life. The module has an appropriate mix of factual and situation based questions that would acquaint the candidates with the functioning of the body and the diagnostics & treatments that they are supposed to know in case of certain deformities/malfunctioning.



#### 4.6.6 – Food Sciences

The Food Sciences module is a module meant for graduates who have pursued B.Sc or B.Tech in Food Technology. This module is aimed at assessing candidates' awareness about the basic aspects of nutritional components of food. Apart from this, through its factual and reasoning question types, it tests candidates on their theoretical and practical knowledge about technologies involved in food processing; identification, reason and prevention of food spoilage; awareness about role or importance of specific ingredients in certain processes pertaining to food processing. A good performace in this module indicates that the candidate is fit to be in a profile related to Food Sciences and will be good at applying his theoretical knowledge to real time scenario.



#### 4.6.7 - Pharmaceutical Sciences

Pharmaceutical Sciences is a module that covers all the basic topics pertaining to Pharma. It tests a candidate on the concepts of Pharmacology, Pharmaceutical Sciences and Pharmaceutics. The test includes various question types – factual, practical oriented and assertion-reasoning based, graphical interpretaions- that evaluate a candidate's theoretical knowledge as well as their ability to apply this knowledge to real time scenarios. It gives an estimate of the candidates' performance on the job. For candidates aspiring to make a career in any field of Pharma- namely: Research and Analysis, Drug design and manufacture, Pharmacy etc, this module is a credible evaluator of their potential.





#### 4.6.8 – Pharmaceutics

The Pharmaceutics module aims at evaluating the potential of B. Pharma students and their awareness of basic concepts pertaining to Colloidal Chemistry, Thermodynamics and Polymer Sciences that form a basis for understanding drug manufacture, delivery and practical aspects of pharmacy. The test is a blend of factual, scenario based, graphical questions and numericals. Owing to this variety of question types and concepts being checked, the test is a credible evaluation tool for probable performance of candidates on the job.





#### 4.6.9 – Pharmacology

The Pharmacology test assesses candidates' knowledge about basic human physiology and their understanding of drug action basis their theoretical knowledge. This module is primarily meant for B.Pharma students. The test includes various question types – factual, practical oriented and assertion-reasoning based- that evaluate a candidate's knowledge of basic salts and intricacies of administration of drugs etc. The assessment focuses on testing students on theoretical knowledge as well a practical concepts that would help them perform better on the job.




### 4.6.10 – Pharmaceutical Analysis

The module on Pharmaceutical Analysis has been designed to assess B.Pharma graduates. This module helps identify the right fit candidate for research and analyst profiles pertaining to Pharmaceutical Sciences. The test, through its varied question types (factual, graphical representations and curves and practical oriented), helps identify candidates who have an analytical bent of mind. The assessment focuses on testing students on theoretical knowledge as well a practical aspects of the subject that would help them fare well on the job.



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### 4.6.11 – Pharmaceutical Chemistry

The Pharmaceutical Chemistry module is aimed at assessing a candidate's awareness of Physical Chemistry, Organic Chemistry, Inorganic Chemistry, Biochemistry and Medicinal Chemistry. These topics act as a basis to understand design, chemical synthesis and development of drugs. For a B.Pharma student aspiring to make a career in drug design and manufacture, it is imperative to know these concepts. A variety of question types like- factual, situation based, questions checking for reaction outcomes etc help assess a candidate's potential in this field.



### 4.6.12 – Nursing basics

The Nursing Basics module is aimed at assessing the capability of GNM and B.Sc. Nursing students to carry out basic functions and procedures like administering injection, carrying out emergency treatments, assisting surgeons, monitoring vital signs etc. The module is a blend of factual questions, scenario based questions and image based questions for identifying instruments/ procedures. This variety helps in evaluating a candidate's skill set which is mandatory for a successful career in Nursing.



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### 4.6.13 – Nursing : Diagnosis & Treatment

The Nursing Diagnosis and Treatment module is a high level module meant for GNM and B.Sc Nursing students. This module tests candidates on awareness about symptoms, diagnosis of diseases and their treatment. It is a challenging module for freshers since it has topics that are somewhat beyond the purview of Nurses who join as freshers. It gives an indication of how good a learner, a candidate might be while on the job. The module checks more on the cognitive ability of a candidate. The module is a blend of factual and situation based questions that are a credible evaluator of a candidate's knowledge pertaining to Nursing and Medicines.



## 4.6.14 – Medical Sales & Aptitude

This test will assess the skills required for the role of a medical sales representative. It measures the candidate on the following aspects: selling skills, branding and promotion, medical terminology, data interpretation & analysis and planning & organizing skills. The tests are computer based and can be easily deployed for large scale recruitment as well as for walk-in hiring.

İ	Medical Sales Aptitude
I	Branding and promotion
I	Medical terminology
I	Data interpretation and analysis
I	Planning and organizing
I	Selling
I	
I	
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# 4.6.15 – Clinical Research



4.6.16 – Medical Terminology

# 4.7 – Business Process Management Modules

# 4.7.1 – Accounts Payable

The Account Payable module tests knowledge as taught in graduation as well as scenario based questions based on knowledge gained by working on the account payable process in a BPO, KPO or within an internal Account Payable department of an organization. The module is a unique mix of theoretical questions and practical scenario based questions testing whether the person can apply his knowledge in dealing with a real world scenario. The module discriminates between candidates having poor, average and good theoretical and working knowledge of accounts payable. It is a must for hiring candidates for Account Payable purpose.



### 4.7.2 – Accounts Receivable

The Account Receivable module tests candidates on fundamentals as taught in graduation as well as scenario based questions based on knowledge gained by working on the account receivable process in a BPO, KPO or within an internal Account Receivable department of an organization. The module would discriminate between candidates having below average, average and good theoretical and working knowledge of accounts receivable such that they can, at the earliest, start contributing tangibly to the organization. This is what makes the module an essential hiring tool for companies looking to recruit for the account receivable profile.



### 4.7.3 – AP-AR-Helpdesk

This module assesses a candidate's ability to read and comprehend the standard operating procedures and process flow charts of an AP-AR Helpdesk. It also checks for your ability to take appropriate action on AP-AR queries of clients or vendors.

# 4.7.4 – Accounts Receivable Simulation

## 4.7.5 – Legal Aptitude

The test on Legal Aptitude aims to assess a candidate's knowledge and understanding of legal nuances and various aspects of corporate law. It lays emphasis on the candidate's ability to review and analyze large volumes of legal documents and offer appropriate research support wherever required.



# 4.7.6 – Legal Review



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### 4.8 – Analytics Modules

#### 4.8.1 – Data Interpretation

The Data Interpretation module assesses the candidate's ability to interpret huge volume of statistical data, so as to be able to analyze and draw conclusions basis the given data set. The module requires a candidate to inspect, synthesize and transform large data to meaningful forms. The test broadly covers the different graphical representations like Pie chart, column graph, tables, bar and line graphs etc that would check a candidate's ability to interpret different graphical forms as well as to extract useful information. The module forms the basis for evaluating candidates for multiple job profiles in analytics sector.

#### 4.8.2 - Econometrics

This test will assess your knowledge and understanding of regression, statistical methods and interpretation of economic data.

4.8.3 - The module on Basic Statistics has been designed to assess MBA students on their understanding of basic concepts and methods of statistics. It lays emphasis on quantitative methods and statistical techniques used to investigate and interpret statistical data in order to arrive at meaningful conclusions. A candidate is tested on various topics including descriptive statistics, basics of probability, hypothesis testing, sampling distributions, correlation and linear regression. The questions in this test are not just calculation based such that a person who knows the right formulae can excel in it, but it lays lot of emphasis on inference-based questions, output interpretation, graph interpretation and drawing conclusions. The scenarios covered are a mix of both hypothetical as well as real-time business scenarios thereby giving flair of the kind of statistical investigative studies that a candidate would be required to do in an Analyst profile or other such profiles requiring a strong hold in Statistics.



## 4.8.4 – MS Excel

The excel module has been carefully designed to check only working knowledge of a candidate on Excel. Unlike other excel tests available, it does not check for location of various commands and features. The module is designed to assess without bias how efficiently can a candidate 'work' on excel instead of how well he 'knows or remembers' excel. From basic to advanced features, the module is designed keeping in mind functions that are most often used in 80% of job roles ranging from data entry to analysis. Very advanced and complicated features of excel which might be used in a handful of profiles are not assessed here. The module assesses the candidate's knowledge through practical examples and scenarios which might arise while working on excel.



# 4.8.5 – Informatica

The Informatica module has been designed to assess a candidate's basic knowledge of Informatica Tool and Data Warehousing and Database management concepts. The test contains questions based on Data warehousing, Informatica Designer Mappings and Transformations, Informatica Server Architecture and Administration (Workflows, Database connections, Server Management and Web Services) and Real Time Implementation comprising of loading issues and implementation techniques. The module tests the candidate on various theoretical, conceptual and practical aspects thereby assessing the candidate's ability to understand, manage and manipulate critical databases for database management and other profiles in IT based companies.



# 4.8.6 – Statistical Analysis System

This test will assess the knowledge and application of concepts like base SAS, SAS analytics (Coding + Logical), advanced SAS and other concepts related to Statistical Analysis System.



### 4.8.7 – Critical Reasoning

The critical reasoning module assesses an individual's ability to think through and analyze logical arguments. It adjudges how an individual responds to information coming from multiple sources and his ability to use logical constructs to offer reasoning in situations which may not be familiar to him or her. It is a very important tool to assess a candidate's performance at work.

### 4.8.8 - Business Analysis

The Business Analysis (BA) module primarily assesses the capacity of an individual to analyze requirements, understand business problems, make data driven decisions and provide solutions using statistical methods. The module is primarily used in the hiring process of analysts with 0-3 years' experience. The module distinctly tests the candidate on areas vital for business analysis: making valid assumptions, inference chaining and making sense out of data by critically examining the results obtained by using mathematical tools. The assessment has been designed for candidates who may not have prior industry experience; therefore, focus is more on the fundamental concepts and their application which aren't industry specific.



### 4.9- Automata Modules

### 4.9.1-Automata

Automata is a path breaking tool to evaluate programming skills in a simulated environment. With capability to evaluate programming code beyond correctness and ability to rate code quality, efficiency of execution and provide objective norm based scores, Automata is a leap ahead of commonly available tools in the genre.

The assessment allows evaluation of actual programming skills of a candidate, giving the candidate an opportunity to write the program in an editor, compile and run test cases, all in the assessment environment itself.

Automata comes with a scientifically designed question bank consisting of a wide range of easy to hard programming problems with smartly designed corner and generic tests cases. It evaluates a candidate's knowledge of algorithms, data structures, concepts like recursion, dynamic memory allocation and modular programming. The compiler supports multiple programming languages such as C, C++, Java, etc. The question bank includes distinct problem sets for IT Product and IT Services companies. Some of the unique features of Automata include:

- With a variety of basic, advanced and edge test cases designed for a problem, the code is checked thoroughly for correctness and completeness.
- It is capable of evaluating the time complexity or simply the efficiency of the code.
- The code is scored on quality of the code based on industry defined best practice.
- A detailed report with objective and subjective evaluation of the code.

Automata can be delivered alongside AMCAT, Aspiring Minds' standardized online, adaptive assessment test. It can be delivered on campuses by setting up a local area network and can also be conducted online through an internet connection. Detailed automated reporting on real time and features like interviewer feedback make it easy to use in a mass scale. Automata Pro can be effectively used for fresher hiring as well as hiring lateral programmers.

4.9.2 – Automata Fix

Automata fix assesses the candidate's skill to diagnose and identify any bugs in code and fix them.

# **4.10- Hospitality Modules**

### 4.10.1 – HouseKeeping

This module is aimed at assessing a candidate's awareness about various housekeeping functions ranging from basic cleaning procedures to its peripheral activities like – horticulture, laundry etc. The module focuses on testing a candidate's ability to apply his theoretical knowledge to real time scenarios like problem solving. The module includes situation based, factual, image based and conversation based questions that test if a candidate knows the right manner of carrying out basic procedures of Housekeeping.



## 4.10.2 – Front office Management

The Front Office module is a good assessment tool for evaluating a candidate's awareness about the various functions of a front office- ranging from the various stages of the guest cycle to the knowledge of evaluating the hotel's performance and forecasting demand for rooms.

The module is capable of identifying the right fit candidate for front office profiles like – Front Desk Agent, Concierge, Valet Parking Agent etc- owing to the variety of question types (factual, situation based, numericals and logical reasoning). This module gives the candidates an idea about the documents and their purposes, room plans, room types etc that they need to be aware of, to have a bright start to their career in the Hospitality sector.



### 4.10.3 – Food & Beverage Services

The Food and Beverage module is aimed at assessing the knowledge, skills and competencies that need to be well embedded in a candidate for faring well in any service-oriented profile in the Hospitality sector. This module (meant for Hospitality graduates) has an appropriate mix of a variety of question types- factual, reasoning and situation based- that are high on visual appeal. These questions check for a candidate's knowledge of names and functions of equipments used in any aspect of service, knowledge of service areas and know-how of serving. These skills are imperative for aspirants who wish to make a career in Food and Beverage Service profiles.



### 4.10.4 – Culinary Skills

This module focus at assessing the culinary skills of graduates from Hospitality background. It encompasses various topics that test for a candidate's knowledge about basics of cooking, his/her ability to apply this knowledge to real-time scenario and deal with problem situations during the process of food production. The module has an appropriate mix of factual, situation based and reasoning questions that would acquaint the candidates with the practical nuances of food preparation, presentation, budgeting and planning that they are supposed to know, to perform well in any profile linked to Chef.

