

# Sample Aptitude Test

## Question 1: Analytical Ability (50 Marks)

### Case Study Scenario

#### **Institution: Horizon Technical and Professional College (HTPC)**

Horizon Technical and Professional College (HTPC) was established fifteen years ago with the mission of bridging the gap between academic education and industrial workforce requirements. Located in a rapidly developing industrial corridor, HTPC initially experienced strong enrollment growth due to high demand for technical diplomas in mechanical engineering, electrical systems, information technology, and business management. However, over the past five years, institutional performance indicators have shown concerning trends.

#### **Enrollment and Completion Trends**

Although first-year admissions remain moderately stable, completion rates have declined significantly. Institutional data indicates that nearly 28% of students enrolled in diploma programs fail to complete their studies within the prescribed timeframe. In certain technical programs, such as Industrial Automation and Applied Electronics, dropout rates exceed 35%. Exit interviews suggest that students experience academic difficulty, financial strain, and dissatisfaction with instructional methods.

Faculty reports highlight that many incoming students lack foundational competencies in mathematics, communication, and analytical reasoning. While remedial programs were introduced, attendance is voluntary and poorly integrated into the academic schedule. Students perceive remedial sessions as repetitive and disconnected from practical coursework. Consequently, foundational weaknesses persist throughout the program duration, contributing to academic frustration and attrition.

#### **Instructional Quality and Teaching Methodologies**

HTPC recently invested in digital smart boards, simulation software, and advanced laboratory equipment. Despite these investments, classroom observations reveal that many instructors continue to rely on traditional lecture-based delivery methods. Younger faculty members demonstrate greater adaptability to digital tools, while senior instructors report limited familiarity and insufficient institutional training.

Student feedback surveys consistently emphasize the need for more hands-on learning, industry case applications, and project-based assignments. Employers partnering with HTPC note that graduates possess theoretical understanding but lack applied competencies, teamwork experience, and problem-solving confidence.

The administration recognizes that instructional modernization requires more than technological procurement; it requires faculty development programs, performance incentives, and systematic monitoring of teaching effectiveness.

## **Financial Sustainability and Budget Allocation**

HTPC's financial structure is heavily tuition-dependent, with approximately 78% of operational costs covered through student fees. The remaining funding is sourced from short-term government grants and industry sponsorships. However, these external funding streams fluctuate annually.

The finance department has identified inefficiencies in scholarship distribution. Although merit-based scholarships are advertised, selection criteria are not transparently communicated. Some students allege favoritism, undermining trust in institutional governance.

Moreover, maintenance costs for newly acquired lab equipment have exceeded projections. Without structured utilization planning, some equipment remains underused while still generating depreciation expenses. Accountants recommend implementing cost-benefit evaluation frameworks before future capital expenditures.

## **Operational Inefficiencies**

Administrative audits reveal duplication of responsibilities between departments. For instance, both academic coordinators and department heads maintain separate attendance records, leading to inconsistencies. Reception staff rely on manual scheduling systems, resulting in classroom conflicts and delayed communication.

Lab assistants report that booking requests are often communicated verbally rather than digitally, causing confusion and underutilization of facilities. This lack of structured workflow undermines institutional efficiency and increases operational costs.

## **Market Position and Competition**

HTPC operates in a competitive educational market where private technical colleges aggressively promote digital learning, internship guarantees, and international certification partnerships. In contrast, HTPC's marketing strategy remains traditional, relying on print advertisements and occasional school visits.

Digital presence is limited. Social media engagement is sporadic, and the institutional website lacks updated course descriptions and industry success stories. Prospective students increasingly rely on online research before enrollment decisions, placing HTPC at a competitive disadvantage.

## **Strategic Challenge**

The Board of Governors has commissioned a comprehensive institutional review focusing on:

- Enhancing instructional quality
- Improving student retention
- Strengthening financial sustainability
- Increasing operational efficiency
- Modernizing marketing strategy

The institution must balance academic integrity with financial prudence while maintaining its mission of workforce development.

**Sub-Questions:**

1. Analyze the relationship between student preparedness and completion rates at HTPC.
2. Evaluate the effectiveness of digital and laboratory investments in improving learning outcomes.
3. Assess the sustainability of HTPC's financial model and propose reforms.
4. Discuss how instructional modernization could improve graduate employability.
5. Recommend a strategic marketing framework to strengthen institutional competitiveness.

## **Question 2: Logical Reasoning (50 Marks)**

### **Case Study Scenario**

#### **Institution: Meridian Skills Academy (MSA)**

Meridian Skills Academy (MSA) offers short-term certifications in accounting software, graphic design, digital marketing, and office administration. Although student demand remains high, operational inefficiencies increasingly affect institutional performance.

#### **Scheduling and Coordination Issues**

Receptionists manage class scheduling manually using spreadsheets. Instructors submit availability forms independently, often leading to overlapping bookings. Lab assistants frequently discover double-booked equipment sessions, causing student dissatisfaction and class delays.

These scheduling inconsistencies have downstream financial implications. Accountants report discrepancies between recorded attendance and tuition payment schedules. Some students attend trial sessions without formal enrollment documentation, leading to revenue leakage.

#### **Staff Turnover and Role Clarity**

Reception staff turnover exceeds 40% annually. Exit interviews reveal insufficient onboarding training and unclear role boundaries. Receptionists are expected to manage student inquiries, enrollment processing, fee collection, and class scheduling simultaneously without structured guidelines.

Instructors report frustration due to last-minute schedule changes. Lab assistants feel excluded from planning processes, reducing morale and accountability.

#### **Performance Evaluation Challenges**

MSA recently introduced a performance-based incentive system. However, evaluation criteria differ across departments. Instructors are assessed based on student satisfaction surveys, while administrative staff are evaluated using attendance records and task completion metrics. This inconsistency has created perceptions of unfairness.

#### **Communication Barriers**

Each department uses different communication platforms: instructors use email, receptionists use messaging apps, and accountants rely on accounting software notifications. The absence of a unified system results in fragmented information flow.

#### **Operational Consequences**

The cumulative effect of these inefficiencies includes:

- Delayed certificate issuance
- Student dissatisfaction
- Financial inconsistencies
- Staff demotivation
- Reputation risk

Management seeks a logical restructuring plan that integrates workflow systems, clarifies responsibilities, and ensures accountability.

### **Sub-Questions:**

1. Identify logical connections between scheduling inefficiencies and financial discrepancies.
2. Analyze how inconsistent performance evaluation systems affect staff morale and productivity.
3. Propose a unified workflow and communication model.
4. Evaluate the role of structured onboarding in reducing turnover.
5. Develop a logically sequenced operational restructuring plan for MSA.

Good Luck