Chapter 7: Observations and Findings

7.1 Observations

7.1.1 Observations from Interview

a. Technical skills, logical ability and communication skills of the fresh candidates are essential parameters and attitude as additional parameter while recruiting the fresher candidates.
b. The experts are of the opinion that present curriculum needs alignment with industry expectations with frequency of 3 years to match with industry needs.
c. Current fresh candidates are poor in soft skills; industry needs a street smart fresher.
d. In opinion of expert following points were revealed
   * Institute play major role in campus placement.
   * Establishment of Training and Placement Office and appointment of experienced Training and Placement Officer (TPO) is necessary.
   * Continuous interaction with industry experts by TPO is mandatory.
   * Training of students for Aptitude Test, Mock Interview and soft skills is essential.
   * Involvement of alumni for appraising the current students about requirement in industry plays a vital role.
   * Institute must showcase (branding) the performance of students in University examinations and track record for the placement of students with well known industries.
e. The IT experts have suggested that institute should undertake the following for developing employable fresh candidate:
   * Include well designed soft skills program, problem solving subjects, more number of electives, increase industrial training and mini projects.
   * Industry feel that institute should give free hands to the students to do something creative, allow them to use laboratory to their maximum extend.
   * Avoid traditional assignments.
   * Introduce mini project in a group and evaluation by industry is preferred.
   * Train fresh candidate OFFBIT skills/trends.
* Industry looks for presentation with Return On Investment (ROI) of the work done in terms of time, cost, performance, manpower etc from institute.

7.1.2 Observations from Survey with IT/ITES industry

Following are the observations from survey conducted with IT/ITES industry.

a. IT / ITES industry are inclined to select fresh MCA graduates provided students should have additional qualities required for the job.
b. IT / ITES industry expects curriculum flexibility to enhance employability of MCA students.
c. Good academic record of the student is important.
d. Technical Knowledge plays a vital role.
e. The IT industry prefers skills for Technology Development.
f. Fresh graduate should predominantly acquire knowledge of Application Programming.
g. Industry expects curriculum to focus on a variety of Development Themes.
h. Carrying out a Mini Project is the best practice.
i. Lectures by experts from Industry are strongly recommended.
j. Short Term internship with an enterprise is necessary.
k. MCA graduates tend to change their jobs.

In response to Question 11, the participants were requested to rank their preference to the attributes expected with fresh candidates for final selection, indicated as parameters in the question. Ranking was to be done from 1 to 10 where Rank 1 is the highest rank indicating the most preferred parameter and Rank 10 indicating the least preferred one.
Table 7.1 : % Ranking of Attributes

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Calculated Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Fundamentals</td>
<td>16 %</td>
</tr>
<tr>
<td>Technical Knowledge</td>
<td>15 %</td>
</tr>
<tr>
<td>Problem Solving Approach</td>
<td>14 %</td>
</tr>
<tr>
<td>Attitude</td>
<td>13 %</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>12 %</td>
</tr>
<tr>
<td>Hands-on Experience</td>
<td>10 %</td>
</tr>
<tr>
<td>Awareness of current trends</td>
<td>9 %</td>
</tr>
<tr>
<td>Overall Personality</td>
<td>6 %</td>
</tr>
<tr>
<td>Physical Fitness</td>
<td>3 %</td>
</tr>
<tr>
<td>Local Candidate</td>
<td>2 %</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

7.1.3 Observations from Survey with Faculty

a. Faculty prefer flexibility in curriculum.

b. Faculty needs to understand the need of industry in term of academics through frequent interaction with industry experts.

c. Faculty also need to understand that it is a role of teacher to make student able for employment by providing value added inputs.

7.1.4 Observations from Survey with Students

a. Students are expecting job placement from institute.

b. Students are not aware about job opportunities other than software development.
7.1.5 Observations from university curricula
The curriculum of six universities have unequal distribution of different domains.

Aggregate Contents of MCA Curriculum

![Pie chart showing the distribution of Core Subjects, System Development Programming, Application Programming, Scripting Languages, Higher Order Programming, Module Based Development, Component Based Development, Pattern Based Development, and Framework Based Development.]

7.2 Findings and contribution by researcher
The overall findings from interview, survey and gap analysis are as follows:

a. Industry is still not getting the expected manpower from pool of fresh candidates.

b. With the efforts of faculty, students work on industry sponsored project but more efforts are required to convert them into job offer.

c. Students are having misunderstanding about job profiles, domains available, salary structure and growth of career.

d. The recruiters give high preference to the Strong Fundamentals, Technical Knowledge, and Problem solving Approach as traditional attributes.

e. Researcher has identified two additional parameters which has equal importance while recruiting and they are: Attitude and Communication Skills (Soft Skills).

f. Internship / Hands on training as tool for improving employability

ɡ. Although the curriculum of all the universities has given emphasis on development of Core Competencies, curriculum flexibility with general proficiency and professional development courses is a need to fulfil the expectations of IT/ITES industry from employability perspective.

h. Absence of short term internship in a curriculum is a major concern.

i. Faculty must take lead to offer innovative mini projects, short term internship in association with industry to enhance the job opportunities.