Sample Questions for Module 1 - Introduction to Computer Security: Terminologies

1) Define the following terminologies:
   (i) Data confidentiality       (ii) Privacy
   (iii) Data integrity          (iv) System integrity
   (v) Availability              (vi) Authentication (both user and message authentication)
   (vii) Accountability

2) Define the following:
   (i) Vulnerability             (ii) Threat
   (iii) Risk                   (iv) Attack
   (v) Countermeasure           (vi) Adversary

3) Distinguish between active attacks and passive attacks and how they can be detected/prevented?

4) Explain two significant attacks (threat actions) that will affect each of the following [Hint: Refer Table in Slide # 9]:
   (i) Confidentiality
   (ii) Integrity
   (iii) Availability

5) Complete the following table on threats/consequences of attacks on each of the assets, as and when applicable:

<table>
<thead>
<tr>
<th></th>
<th>Availability</th>
<th>Confidentiality</th>
<th>Integrity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
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<tr>
<td>Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Lines</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>