AVIA 123 – Chapter 14 Study Guide - IMC

1. IMC = __________ ____________ ____________ and refers to a state of the atmosphere where __________ and __________ are below specific minimum __________ 14-1

2. The counterpart to IMC is VMC = __________ ____________ ____________ 14-2

3. Category, Meanings and Ceiling and Visibility for VMC and IMC conditions are 14-2

<table>
<thead>
<tr>
<th>Category</th>
<th>(meaning)</th>
<th>Ceiling</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. VFR</td>
<td></td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>b. MVFR</td>
<td></td>
<td>_______</td>
<td>_______</td>
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<tr>
<td>c. IFR</td>
<td></td>
<td>_______</td>
<td>_______</td>
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<tr>
<td>d. LIFR</td>
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</tbody>
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4. There are four visibilities of consequence in aviation
   a. __________ – the distance the observer or machine reports
   b. ____________ __________ - the Oblique distance at which a pilot can see landing aids such as runway lights and markings.
   c. ____________ ____________ – Visibility from the Control Tower
   d. ____________ ____________ – Visibility measured straight up 14-3

5. The four kinds of fog – and the causes – are: 14-4
   a. ____________ fog – Contact Cooling
   b. ____________ fog – Contact Cooling
   c. ______ fog – Adiabatic Cooling
   d. ______ fog – Evaporation that causes Saturation
   e. ___ Fog – Radiation cooling below freezing

6. The most common causes of lowered visibility are 14-4/7/8/9
   a. FG – ______
   b. FU – ______
   c. HZ – ______
   d. DU – ______
   e. ______ – a concentration of _____ (FU) and exhaust (nitrogen dioxide NO₂)
   f. BLDU – ______ ______
   g. BLSN – ______ ______

7. A weather depiction chart shows current _______ and _______, and a pilot can rapidly assess which areas of the US are _______, _______, and _______. Some weather depiction charts include actual _______ (precipitation) _______ _______, _______, and _______. 14-4