Multiple-Choice Questions: (All Multiple-Choice Questions carry Two Marks each.)

Q.1. The Costs under the Different Probable Scenarios is as follows:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>No Contingency</th>
<th>Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$P = 0.999$</td>
<td>$P = 0.001$</td>
</tr>
<tr>
<td>Insurance</td>
<td>₹ 357/-</td>
<td>₹ 357/-</td>
</tr>
<tr>
<td>No Insurance</td>
<td>₹ 0/-</td>
<td>₹ 9,87,654/-</td>
</tr>
</tbody>
</table>

What is the expected cost if insurance is not purchased to cover the contingency?

A. ₹ 357/-
B. ₹ 0/-
C. ₹ 9,87,654/-
D. ₹ 987,654/-

Q.2. Un-Reported Losses =
   a) Payments + Case Reserves.
   b) Case Reserve Development.
   c) Un-Reported Occurrences / Claims Reserve.

Q.3. Ultimate Losses =
   a) Reported Losses + Un-Reported Losses.
   b) Estimate of Incurred Losses.
   c) Paid Losses + Case Reserves.

Q.4. I. B. N. R. means:
   a) Incurred But Not Repudiated.
   b) Incurred But Not Recorded.
   c) Initiated But Not Residual.
   d) Informed But Not Registered.
   e) Incurred But Not Reported.

Q.5. E. L. C. F. means:
   a) Excess Loss Cost Factor.
   b) Excess Loss Claim Finder.
   c) Excess Leverage Calculation Factor.
   d) Equipment Location Claim Formula.

Q.6. U. L. A. E. does not include:
   a) Costs associated with Printing the Rate Manual.
   b) Salary of Claims Vice-President.
   c) Outside Legal Expense on a Specific Claim.
Q.7. U. L. A. E. means:
a) University Level Actuarial Examination.
b) University Level Actuarial Education.
c) Uninsured Loss Adjustment Expenditure.
d) Unallocated Loss Adjustment Expenses.

Q.8. If:
Exposure Units = 32,458;
Claim Count = 8,145; and
Scale Factor = 1,000;

Then: Frequency Per ‘K’ Exposure Units is:
a) 0.39872408
b) 80.52
c) 25.08
d) 39,874.69287

Q.9. This is Not Relevant for estimating I. B. N. R.:
a) Accident Date. b) Accounting Date.
c) Recorded Date. d) Report Date.
e) Valuation Date.

Q.10. Large Insurance Companies require Re-Insurance Not because:
a) They may have very volatile claims experience.
b) They may be prone to significant accumulations.
c) They may write very large or unusual risks.
d) They have a diversified portfolio.

Q.11. Risk is Not categorized as:
a) Impure Risk. b) Pure Risk.
c) Objective Risk. d) Subjective Risk.

Q.12. Loss Ratio Method of the Rate Making Process is Not:
c) Requiring Existing Rates. d) Based on Premium.

Q.13. If:
Premium-Related Expense Factor = 0.2965,
Profit and Contingencies Factor = 0, and
Ratio of Non-Premium-Related Expense to Losses= 0.0642,
Then:
Target Loss Ratio is:
a) 0.1166 b) 0.1616
c) 0.6611 d) 0.6161

Q.14. An Actuary need not be skilled in:
a) Accountancy. b) Computer Technology.
c) Economics. d) Human Resources Development.
e) Marketing.
Q.15 Procedure of Actuarial Science is not borrowed from:
   a) Economics.
   b) Finance.
   c) Financial Engineering.
   d) Psychology.
   e) Statistics.

Essay-Type Questions: (All Essay-Type Questions carry Ten Marks each.)

Q.16 Write Short Notes on:
   b) Composite Rating.
   c) Attributes of good Individual Risk Rating System.
   d) Steps in designing an Individual Risk Rating System.

Q.17 Define ‘Loss Reserve’.
   What are the Key Dates in the Data Organization and Loss Reserve Estimation Process?

Q.18 Distinguish between the following:
   a) Pure Premium Method and Loss Ratio Method.
   b) Frequency and Severity.
   c) Retrospective Individual Risk Rating System and
      Prospective Individual Risk Rating System.

Q.19 Write a Note on ‘Profit and Contingencies’.

Q.20 Write a Note on ‘Cost Variation in Automobile Insurance’.

Q.21 Write Short Notes on the Following:
   a) The Balance Sheet.
   b) The Income Statement.

Q.22 Following Data is available:

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>12</th>
<th>24</th>
<th>36</th>
<th>48</th>
<th>60</th>
<th>72</th>
<th>84</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>22,603</td>
<td>40,064</td>
<td>54,301</td>
<td>64,114</td>
<td>71,257</td>
<td>75,950</td>
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<tr>
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<td>43,970</td>
<td>58,737</td>
<td>71,841</td>
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<td>2006</td>
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<td>2007</td>
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<table>
<thead>
<tr>
<th>Paid Loss History</th>
<th>Age in Months</th>
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<tbody>
<tr>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>36</td>
<td>48</td>
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<td>60</td>
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<td>84</td>
<td></td>
</tr>
<tr>
<td>Accident Year</td>
<td>Reserve</td>
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<tr>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td>2004</td>
<td>4,972</td>
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<td>2009</td>
<td>32,647</td>
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<td>33,475</td>
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</table>

**Paid Allocated Loss Expense**

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<tr>
<th>Accident Year</th>
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<tbody>
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<td></td>
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<tr>
<td>2004</td>
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<tr>
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<tr>
<td>2009</td>
<td>357</td>
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<td>2010</td>
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</table>

Calculate a Reserve Need for A.L.A.E.

**END**