Visvesvaraya Technological University
“Jnana Sangama”, Belagavi - 590 018

REGISTRAR

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Ref. No. VTU/Aca/A6/2015-16/5935

Date: 7 OCT 2015

CIRCULAR

The Principals of affiliated Engineering Colleges are hereby informed that,

1. The Scheme of Evaluation of Engineering Physics Lab (15PHYL17/15PHYL27) and Scheme of Valuation of Engineering Chemistry Lab (15CHEL17/15CHEL27) for First/Second Semester B.E./B. Tech., 2015-16 are placed on the VTU Website.

2. The Scheme of Evaluation in respect of Computer Aided Engineering Drawing and Workshop labs are already mentioned in the syllabus book.

3. The candidates admitted under lateral entry to III Semester B.E./B.Tech. during the academic year 2015-16 are required to opt for 10CIP18/28 and 10CIV18/28 subjects.

4. The Question Paper in respect of Mandatory non credit course i.e. 15CPH18/28 and 15CIV18/28 are objective Type question papers.

5. The contents of the circular issued from the office of the Registrar (Evaluation) in respect of III Semester M.Tech. Internship are to be adhered to.

The Principals of all the affiliated/constituent engineering colleges of VTU are requested to bring the contents of this circular to the notice of all the concerned.

Sd/-
REGISTRAR
(Dr. K. E. Prakash)

To,
The Principals of all the affiliated/constituent engineering colleges of VTU.

Copy FWCs to:
1. The Registrar (Evaluation), VTU Belagavi, for information and needful.
2. The Special Officers of VTU Regional Offices at Bengaluru, Belagavi, Kalaburagi & Mysuru, for information.
3. The Special Officer, Academic Section, VTU, Belagavi, for information.
4. The Secretary to VC, VTU, Belagavi, for information.
5. Office Superintendent, Academic Section, VTU, Belagavi, for information.
6. The CNC department to upload in VTU web site.

REGISTRAR
(Dr. K. E. Prakash)
Scheme of Valuation

Subject: Engineering Chemistry Lab             Code: 15CHEL17/15CHEL27

Instructions to the examiners

1. A different experiment should be set under Part-B for each batch in a day.
2. Under no circumstances, same experiment shall be set for more than three candidates in a batch under Part-A.
3. Allotment of Part-A experiments to the students shall be strictly by the lot system.
4. A change of experiment can be permitted for only one time under Part-A, strictly by lot system subject to the condition of deduction of fifteen marks under Part-A only.
5. Supplement (with question paper slip) and main answer sheet should be issued to the students in the beginning.
6. In the first ten minutes, students should write the outline of the procedure of the experiments to be performed of both Part-A and Part-B in Main answer sheet only and hand over the same back to the examiner.
7. Procedure of the experiment/s should not be provided to the students during examination under any circumstances.
8. Students shall be permitted to perform maximum three titrations under Part-B.
9. Overwritten values should not be considered for valuation.
10. Examiner should observe and put initial for the readings of the experiments.
11. Weight of the substance under Part-B should be different for all the students and weight of the substance should be given to the students only after confirming the initials for all the three titre values.
12. Blank titre value for the COD experiment under Part-B should be given to the students by the examiner.

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. marks</th>
<th>Part A marks</th>
<th>Part B marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure write-up</td>
<td>14</td>
<td>07</td>
<td>07</td>
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<tr>
<td>Conduction</td>
<td>40</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Calculation, Graph works &amp; Result</td>
<td>16</td>
<td>08</td>
<td>08</td>
</tr>
<tr>
<td>Viva-Voce</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part-A INSTRUMENTAL

Potentiometry, Colorimetry and Flame Photometry
pKα & Viscosity
Conductometry
Total hardness, CaO in cement, Cu in Brass, Fe in Haematite and COD
Alkalinity of Water
Phenolphthaleine
Methyl Orange

<table>
<thead>
<tr>
<th>Error(cm³)</th>
<th>Marks</th>
<th>Error (%)</th>
<th>Marks</th>
<th>Error(cm³)</th>
<th>Marks</th>
<th>Error(cm³)</th>
<th>Marks</th>
<th>Error(cm³)</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.50</td>
<td>20</td>
<td>±5.0</td>
<td>20</td>
<td>±0.50</td>
<td>10+10</td>
<td>±0.2</td>
<td>10+10</td>
<td>±0.2</td>
<td>10</td>
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<tr>
<td>±0.51-0.60</td>
<td>18</td>
<td>±5.1-6.0</td>
<td>18</td>
<td>±0.51-0.6</td>
<td>9+9</td>
<td>±0.3</td>
<td>9+9</td>
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<tr>
<td>±0.61-0.70</td>
<td>16</td>
<td>±6.1-7.0</td>
<td>16</td>
<td>±0.61-0.7</td>
<td>8+8</td>
<td>±0.4</td>
<td>8+8</td>
<td>±0.4</td>
<td>8</td>
</tr>
<tr>
<td>±0.71-0.80</td>
<td>12</td>
<td>±7.1-8.0</td>
<td>12</td>
<td>±0.71-0.8</td>
<td>6+6</td>
<td>±0.5</td>
<td>6+6</td>
<td>±0.5</td>
<td>6</td>
</tr>
<tr>
<td>±0.81-1.0</td>
<td>08</td>
<td>±8.1-10.0</td>
<td>08</td>
<td>±0.81-1.0</td>
<td>4+4</td>
<td>±0.6</td>
<td>4+4</td>
<td>±0.6</td>
<td>4</td>
</tr>
<tr>
<td>&gt;±1.0 Zero</td>
<td>&gt;±10</td>
<td>Zero</td>
<td>&gt;±1.0 Zero</td>
<td>&gt;±0.6 Zero</td>
<td>&gt;±0.6 Zero</td>
<td>&gt;±0.6 Zero</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Graph : 5 marks
Calculation : 3 marks
pKα : Two graphs
5+3 marks
Viscosity:
Calculation: 8 marks

Part-B VOLUMETRY

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. marks</th>
<th>Part A marks</th>
<th>Part B marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graph : 4 marks</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Calculation : 4 marks</td>
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</tr>
</tbody>
</table>

Note: Best two (out of three) titre values to be considered for the valuation of volumetric experiments except Alkalinity of water experiment.
Scheme of Evaluation

Subject: Engineering Physics Lab.  
Code: 15PHYL17/15PHYL27

The student has to perform TWO experiments during the practical examination of THREE hours duration. The scheme of valuation shall be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks for First experiment</th>
<th>Marks for Second experiment</th>
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</thead>
<tbody>
<tr>
<td>Write up: Formula, Tabular column and Circuit diagram / Ray Diagram</td>
<td>3+3+3 = 09</td>
<td>3+3+3 = 09</td>
</tr>
<tr>
<td>Experimental set up / Circuit connection</td>
<td>06</td>
<td>06</td>
</tr>
<tr>
<td>Conduction and reading</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Graph, Calculations, Results and accuracy</td>
<td>2+2+1+1 = 06</td>
<td>4+2 = 06</td>
</tr>
<tr>
<td>Viva-Voce</td>
<td>07</td>
<td>07</td>
</tr>
</tbody>
</table>

Total  = 40 + 40 = 80

Note: The student is required to obtain a minimum of 30 Marks in the practical examination to pass.