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| Department of Electrical Engineering  Final – Term Examination Spring 2020  Date: 27/06/2020  Course Details | | | |
| Course Title: | Applied Chemistry | Module: | 2nd |
| Instructor: | Engr. Khalil Muhammad Khan | Total Marks: | 50 |
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Student Details

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| Name: |  | Student ID: |  |

Note: Attempt all of the following questions.

Part A (Objective Type) 10 Marks

1. A good liquid lubricant must possess the property of \_\_\_\_\_\_\_\_\_\_\_  
   a) Low viscosity  
   b) High boiling point  
   c) High freezing point  
   d) Low oiliness
2. Which of the following is not the liquid lubricant?  
   a) Olive oil  
   b) Palm oil  
   c) Castor oil  
   d) Grease
3. Petroleum oils are also called as \_\_\_\_\_\_\_\_\_

a) Petrol oils

b) Hydrocarbon oils

c) Fatty oils

d) Whale oil

4. Petrol captured the market up to the percentage of \_\_\_\_  
a) 100%  
b) 90%  
c) 98%  
d) 75%

5. A dispersion system consisting of two immiscible liquids is called \_\_\_\_\_\_\_\_  
a) Lubricants  
b) Emulsions  
c) Semi solids  
d) Solids

6. In oil in water emulsions, how much water is present \_\_\_\_\_\_\_  
a) 3-20%  
b) 40-50%  
c) 3-4%  
d) 5-8%

7. Which of the following is the example of the electrolytes?  
a) Acids  
b) Metals  
c) Alloys  
d) Oxides

8. The resistance of the conductor in the electrolytic cell \_\_\_\_\_\_\_\_\_\_\_with increase in temperature.  
a) Increase  
b) Decrease  
c) Slightly increase  
d) Do no change

9. The process of decomposition of an electrolyte by passing electric current through its solution is called as\_\_\_\_\_\_\_\_\_\_  
a) Electrolyte  
b) Electrode  
c) Electrolysis  
d) Electrochemical cell

10.  The electrolyte is placed in a special type of cell known as\_\_\_\_\_\_\_\_\_\_\_\_  
a) Conductivity cell  
b) Conductance cell  
c) Equivalent cell  
d) Conduction cell

Part B (Subjective Type) 20 marks

Q. 2 a. What is addition and condensation polymerization? Give examples. (5)

b. Draw a neat sketch of a galvanic cell. (5)

Q.3 a. Write any three applications of liquid crystals (5)

Q.4 a. Explain suspension polymerization method. (5)

b. Write notes on p-type conducting polymers. (5)

Q.5 a. Dielectric constant of gases possess values very close to each other. Why? (5)

Q.6 b. What is a primary battery? Discuss the working and construction of a dry cell. (5)

Q.7 a. Write the design and working of tidal power. (5)