

Winter 2019 – 1st In-semester Examination

IT629 – Web Development

ID:

Name:

Max Marks: 20

Time: 90 mins

Instructions:

1. All four question are compulsory and carry equal marks.
2. The answers are to be written on the question paper itself in space provided below every question.
3. Supplementary sheet provided is only for rough work and should NOT be attached to the question paper.
4. No queries / clarifications are entertained. If you have any doubt about a question, try to the best of your understanding.

Q1.

Observe the desired output below and the read through the notes (Notes are not part of the output):

Team A

- **Ankur**
- Meenal
- Rohan

Description of team A

Team B

- **Swati**
- Bharat
- Diya

Description of team B

Team C

- **Paresh**
- Mehak
- Asif

Description of team C

Notes about the output:

1. The name of every team (e.g. Team A) is in italics i.e. its font-style is italic
2. Name of first member of the team is bold to denote her/him as captain. i.e. its font-weight is bold.
3. Team member background-color alternates between LightGray and default within the list, starting with LightGray.
4. Description of each team has no style applied

Now complete the CSS3 in <style> element in below html so that the output is as desired. Note that the **style rules should be generic**, i.e. you should not assume that there are only three teams, or that the team size is fixed to three etc.

```

<!DOCTYPE html>
<html><head>
  <style>
    <!-- your answer goes here -->

  </style></head>
<body>
  <p data-team="Team A">Team A
    <ul><li>Ankur</li><li>Meenal</li><li>Rohan</li></ul>
    <p>Description of team A</p>
  </p>
  <p data-team="Team B">Team B
    <ul><li>Swati</li><li>Bharat</li><li>Diya</li></ul>
    <p>Description of team B</p>
  </p>
  <p data-team="Team C">Team C
    <ul><li>Paresh</li><li>Mehak</li><li>Asif</li></ul>
    <p>Description of team C</p>
  </p>
</body></html>

```

Q2.

Observe the following output in a HTML5 compliant browser:

Mangoes are juicy stone fruit from numerous species of tropical trees belonging to the flowering plant genus *Mangifera*, cultivated mostly for their edible fruit. Indian mango, *Mangifera indica*, has been distributed worldwide to become one of the most widely cultivated fruits in the tropics. Mango is called *aam* in Hindi. A summer drink called *aam panna* [citation required] comes from mangoes.

Note that there is no style applied in the output above. Complete the following html by giving proper semantic meaning to the text so that output looks like above due to its semantics (and not due to the style).

Help:

- i. Apply class named Taxonomy to any words with taxonomical significance. You don't need to define the Taxonomy class, only apply it.
- ii. Language code for Hind is hi
- iii. [citation required] is a side comment
- iv. First five words of the para are just stylistically offset and have not particular semantic meaning as such.

```
<!DOCTYPE html>
<html><body>
  <p
    <!-- your answer goes here -->
```

```
  </p>
</body></html>
```

Q3.

In the following page (picture), the content has been divided into various sections marked A, B, J. Create HTML5 document / code that places each of these components (use their names only i.e. A, B...J etc. and not their actual content) in most appropriate sectioning content elements.

Notes:

- i. Section E has two children – F & G. Also, section H has two children - I & J
- ii. Ignore styling

An investigation on strength distribution, subcritical crack growth and lifetime of the lithium-ion conductor $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ **B**

Authors **C**
 Juliane Franciele Nonemacher, Hao Zheng, Martin Finsterbusch

Energy materials
 First Online: 02 January 2019

D
 325
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Abstract **F**

E
G
 Due to the good chemical stability regarding lithium and cathode materials under high voltage, $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ (LLZO) is considered as a promising electrolyte in all-solid-state Li-ion batteries. However, to enable stable long-term operation, knowledge of the mechanical boundary conditions is required. Since mechanical properties of the components and cells depend on the microstructure, the micro- and macro-mechanical properties of LLZO were investigated systemically via indentation tests and ring-on-ring bending (ROR) tests. Hence, fracture stress, elastic modulus, hardness and indentation fracture toughness of the material were carried out.

Copyright information **I**

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About this article **H**



Check for updates

Cite this article as:

Yan, G., Nonemacher, J.F., Zheng, H. et al. J Mater Sci (2019) 54: 5671.
<https://doi.org/10.1007/s10853-018-03251-4> **J**

```
<body>
<!-- your answer goes here -->
```

```
</body>
</html>
```

Q4.

See the following HTML5:

```
<!DOCTYPE html>
<html> <body>
  <section>
    <hgroup>
      <h2>Modern Web Development</h2>
      <h3>Understanding domains, technologies, and user experiences</h3>
    </hgroup>
    <p>This book is authored by Dino Esposito. He is both the author and
copyright holder. The book is published by Microsoft Press and it's first edition
came out in year 2016. The project to publish this book started with production
house team consisting of Devon Musgrave, Steve Sagman and Marc Young. It did an
incredible job and the book was out well in time.</p>
  </section></body></html>
```

Modify the above HTML with appropriate microdata additions to obtain an object with following properties and an embedded object (*without* altering the output of html in browser):

Title = Modern Web Development
Subtitle = Understanding domains, technologies, and user experiences
Author = Dino Esposito
CopyrightHolder = Dino Esposito
DedicatedTo = Silvia

```
Publisher = Microsoft Press
Edition = first
Year = 2016
Team
    Name = Devon Musgrave
    Name = Steve Sagman
    Name = Marc Young
```

```
<!-- your answer goes here -->
```