**Academic Task Number: CA-2 Course code:** **CAP785 (S:DE525/G:1)**

**Date of allotment:** **01-03-2024** **Course title: Web Performance Optimization**

**Date of submission: 01-03-2024 Maximum Marks: 50 (J/E-25 and Viva-25)**

**Academic Task Type: Practical CA**

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| **Question Number** | **Question Statement** | **Course Outcome** | **Bloom’s level** | **Marks per Question** |
| Q1 | Let's say you're developing your own website that contains many images (Website must contain minimum 20 high resolution images) and other multimedia contents.  Pre-optimization activities:   1. Evaluate the performance of your website using developer tool or google page-insight and record the data in report.   Your website visitors may visit your website on different devices with varying screen sizes and resolutions. So, your goal is to improve the website's loading speed while maintaining image quality by applying the following image optimization techniques-   1. Reduce Image size of all images. 2. Convert these images into webp format and replace them on website. 3. Use Srcset attribute to reduce scaling time. 4. Use media query for image responsiveness on mobile and laptop screens. 5. Record the new data and make a comparison table in report. | CO3, CO4 | L3-Apply  L4-Analyze | 25 |