Course Assessment Test

Course Title	Intro to React	Date	11 - 15 Sept
Name		Dept	

No	Question	Pre-Course Answer	Post-Course Answer
1	Which of the following are the key features of React ? i. is a frontend JavaScript library to build UIs for both web and mobile platforms ii. widely used for developing Single Page Applications (SPA) iii. uses components as building blocks, which are capable of maintain changing state over a period of time iv. Uses a virtual DOM to determine changes in the component hierarchy before updating the actual browser DOM to change the browser view a) Features i, ii and iii, b) Features i, ii and iv c) Features ii, iii and iv d) All the features listed above		D
2	What build tool does Create React App (CRA) use in order to bundle the JavaScript code for a React project that is served to a browser? a) Babel b) Webpack c) ESLint d) JSBundle		B
3	Identify which of the following statements regarding components in React is correct: i. App.js is the root component file by default, which contains the main function component (the root component) that will be rendered by default. ii. There can be multiple components in App.js, in which case the main one that will be		A

	used in rendering is identified with `export default`. iii. The name of the main component in App.js which is associated with the `export default` statement can be also App, or it can be any other name iv. The `export default` statement must be used directly together with the definition of the component function, and cannot be provided in a separate statement a) Statements i, ii and iii, b) Statements i, ii and iv c) Statements ii, iii and iv d) All the statements listed above		
4	What is an example of a function that violates the rule for a pure component function in React? a) A function that has another function defined within it b) A function that returns JSX directly without any interpolating statements c) A function that modifies a variable that is declared outside of at the top-level of a JavaScript program d) A function that imports components using a named import rather than a default import		C
5	React components use props to communicate with each other. Identify the correct ways in which a child component can access the data passed down from its parent component via props. i. Accessing the relevant properties from the `props` object when data is passed as attribute values in the JSX tag of the child component ii. Accessing the relevant properties from `data` object when data is passed as reference values in the JSX tag of the child component iii. Accessing the children property from the `props` object when data is nested between JSX tags of the child component iv. Accessing the content property from the `props` object when data is passed as JavaScript arrow functions to the child component a) Method i) and ii) b) Method i) and iii) c) Method ii) and iii) d) Method iii) and iv)		B

6	Identify all the different approaches possible for styling a React app
	
	    i. Using inline styles directly in the built-in component specified in JSX of a component
	    ii. Importing a style sheet into a component
	    iii. Using a CSS preprocessor such as SASS or LESS
	    iv. Using a CSS module, which are CSS files in which all class names and animation names are scoped locally by default
	
	    a) Approaches i, ii and iii,
	
	    b) Approaches i, ii and iv
	
	    c) Approaches ii, iii and iv
	
	    d) All the approaches listed above
			D

7	Identify which of the following statements about event handlers are true
	
	    i. They can only be defined as an arrow function inline in the JSX
	    ii. Have full access to the component props
	    iii. Typically have names that start with handle, followed by the name of the event (i.e. handleClick, handleInput, handleMouseEnter)
	    iv. Are triggered in response to user interactions like clicking, hovering, focus on form inputs and so on
	
	    a) Statements i, ii and iii,
	
	    b) Statements i, ii and iv
	
	    c) Statements ii, iii and iv
	
	    d) All the statements listed above
			C

8	Identify which of the following statements about the `useState` hook are true
	
	    i. It returns a state variable and state setter function to update the variable
	    ii. Array destructuring is typically used obtain the state variable and state setter function
	    iii. The hook should only be called at the top level of the component
	    iv. The hook normally accepts 3 arguments: the initial value of the state variable, the reference to the event handler that uses it, and a reference to the component in which it is defined
	
	    a) Statements i, ii and iii
	
	    b) Statements i, ii and iv
			A

	c) Statements ii, iii and iv d) All the statements listed above		

9	How would you update a state variable multiple times within the same event handler using multiple calls to its corresponding state setter function before the next render occurs?
	
	   a) Provide a transient variable outside the event handler that is accessed via the `props` object in the body of the event handler
	
	   b) Ensure that the state setter function is declared as an arrow function outside the body of the event handler
	
	   c) Pass a reference to the state setter function from a mutator method that has access to the corresponding state variable in the component function enclosing the event handler
	
	   d) Pass a state updater function as an arrow function to the state setter function
			D

10	Which of the following JavaScript array methods should you use to create a new array (rather than mutate an existing array) when using the setter function to update a state array variable?
	
	   i. push
	  ii. filter
	 iii. map
	 iv. unshift
	
	   a) Method i) and ii)
	
	   b) Method i) and iii)
	
	   c) Method ii) and iii)
	
	   d) Method iii) and iv)
			C

Total			