## 2021

## COMPUTER SCIENCE — HONOURS

Paper: DSE-B-4 (Advance Java) Full Marks: 50

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer question no. 1 and any four from the rest.

## 1. Answer any five questions:

 $2 \times 5$ 

- (a) Differentiate between servlets and applets.
- (b) Is it possible to include the results of another page in jsp?
- (c) How can you create Custom Tags in JSP? Show with an example.
- (d) What are the different data types present in javascript?
- (e) Discuss the NaN property in javascript.
- (f) Explain the use of css() method in jQuery.
- (g) Discuss about the functionalities of Spring IOC container.
- (h) Discuss about the functionalities of JVM.
- 2. (a) Explain life cycle of servlet.
  - (b) Discuss getcharacterencoding() and setcharacterencoding() methods.
  - (c) Write the differences between httpservlet and genericservlet.

4+(2+2)+2

- 3. (a) Explain jsp life cycle.
  - (b) Write the advantages of using jsp.
  - (c) Discuss different jsp scripting elements.

4+2+4

- **4.** (a) What is javascript?
  - (b) Show how javascript handles onclick(), onmouseover() and onload() events with example.
  - (c) Discuss how to do client side validation using javascript.

2+(2+2+2)+2

- **5.** (a) What is jquery?
  - (b) Show the steps of form validation using jQuery with an example.

Please Turn Over

| T(6th S | m.)-C  | Computer ScH/(DSE-B-4)/CBCS  (2)   |         |
|---------|--|--|---------|
|         | (c)  | Explain application server services of jQuery.                                 |         |
|         | (d)  | Give an example using jQuery.length.   | 2+3+3+2 |
| 6.      | (a)  | What is a session?   |         |
|         | (b)  | Show how a session is created.   |         |
|         | (c)  | What are the session information passing mechanisms between client and server? |         |
|         | (d)  | How to destroy a session?  | 2+2+4+2 |
| 7.      | (a)  | What are the advantages of spring framework?                                   |         |
|         | (b)  | Explain spring MVC framework.  |         |
|         | (c)  | Discuss the spring jdbc packages.  | 2+4+4   |
| 8.      | Write short notes on any two of the following: |  | 5×2     |
|         | (a)  | Servlet collaboration  |         |
|         | (b)  | Exception handling in jsp.   |         |
|         | (c)  | Spring AOP   |         |
|         | (d)  | Spring ORM framework.  |         |
|         |  |  |         |