# MGKVP University Question Paper B.C.A. Examination, 2017

#### Fifth Semester

## Second Paper

## (Java Programming and Dynamic Webpage Design)

### MGKVPonline.com

Time: Three Hours

Maximum Marks: 75

Note: Attempt any five questions. All questions carry equal marks.

Note: The answers to short questions should not exceed 200 words and the answers to long questions should not exceed 500 words.

- 1. (a) What is 'byte code' in Java? How it is related to Java Virtual Machine? 5
- (b) Describe the mathematical operators used in Java. 5
- (c) Write a program in Java to demonstrate the use of arrays. 5
- 2. (a) What is 'class' in java? How it is different with 'object'? 5
- (b) What is Inheritance? Describe the types of Inheritance. 5
- (c) What is multithreading programming? How it helps to improve the processing time? 5
- 3. (a) What is Java Applet? How it is different from Java Application program? 5
- (b) Why applet is considered a secure program? 5
- (c) Describe the Applet Life Cycle. 5
- 4. (a) What is AWT control? Describe the function of Button and label in applet. 5
- (b) What is layout manager? How does it work? 5
- (c) Describe any three string functions in Java. 5
- 5. (a) What is datagram socket? How it is different with TCP/IP based server socket? Explain with an example. 7½
- (b) Explain how one can establish a connection between a Java Program and a database using JDBC? 7½
- 6. (a) What is HTML? Explain text styling features in HTML? 5
- (b) Explain how we can link an image in webpage. 2+1
- (c) What is <FRAMESET>? Write a frame set that divides the webpage in three vertical columns? How to add contents in frames? 7
- 7. (a) What is HTTP servlet? Explain servlets life cycle. 7½
- (b) Explain session tracking in Java Servlets. 7½
- 8. (a) What do you understand by "Java Server Pages"? Explain the data types used in JSP. 7½
- (b) Explain custom tag libraries in Java Server Pages. 7½

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