

GUJARAT TECHNOLOGICAL UNIVERSITY
ME- SEMESTER II- EXAMINATION – SUMMER 2015

Subject Code: 2725405**Date: 28/05/ 2015****Subject Name: Embedded and Linux Programming****Time: 2:30 PM – 5:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What do you mean by Linux kernel configuration? Explain the steps in Linux kernel configuration. **07**
(b) Discuss the features of Device Drivers. **07**
- Q.2** (a) What is function parameter? Explain different types of parameters in C functions. **07**
(b) Explain any five string manipulation library functions with suitable examples. **07**
- OR**
- (b) Explain loading, debugging and profiling. **07**
- Q.3** (a) Describe various reasons to choose Linux Environment for Embedded System development **07**
(b) Discuss various Host/Target Development set-up types. **07**
- OR**
- Q.3** (a) What are various Host/Target debug setup? Discuss each one in detail. **07**
(b) Explain Linux System, Embedded Linux System and Real time Embedded Linux System. **07**
- Q.4** (a) Describe generic architecture for Embedded Linux System. **07**
(b) Discuss various Buses you studied which are used for Embedded System development. **07**
- OR**
- Q.4** (a) Write a short note on (1) Memory Technology Devices (2) serial port **07**
(b) Write different steps involved for testing of Linux Device Driver. **07**
- Q.5** (a) Explain the procedure to install a Boot loader in detail. Also discuss GRUB and LILO Boot Loader in brief. **07**
(b) What do you mean by open source technology? Explain Ext2 and Ext3 file system. **07**
- OR**
- Q.5** (a) What are the different types of device drivers? Discuss any two in detail. **07**
(b) Write a short note on: (1) Squashfs (2) JFFS2 (3) Tmpfs **07**
