Manmohan Technical University Office of the Controller of Examinations **Exam Year: 2081, Jestha (Model Question)**	**Exam Roll:** …… Exam Roll in words: ……	
School: SOE	Level: BE	Invigilator's Sign: ……
Program: BEEE	Year/Part: III/II	Superintendent's Sign: ……
Subject: Consumer electronics EG652EX		Code No. ……

i. Answers should be given by filling the Multiple-Choice Questions' Answer Sheet.
ii. The main answer sheet can be used for rough work.

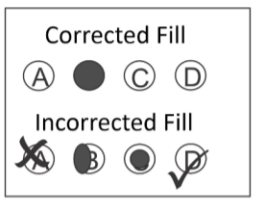
Code No.

GROUP A *(Multiple-Choice Questions)*	**[10x1=10]**	**Time: 20 Minutes**

1. What is the primary function of a tweeter in a loudspeaker system?
   a. Reproduce low frequencies
   b. Reproduce mid-range frequencies
   c. Reproduce high frequencies
   d. Amplify all frequencies
2. Which video scanning technique reduces flicker?
   a. Progressive
   b. Interlaced
   c. Sequential
   d. Raster
3. What is the function of an equalizer in an audio system?
   a. To balance the left and right audio signals
   b. To adjust the frequency response
   c. To amplify sound signals
   d. To store audio data
4. What is the standard refresh rate of an HDTV?
   a. 24 Hz
   b. 50 Hz
   c. 60 Hz
   d. 120 Hz
5. The chrominance signal in color TV is responsible for:
   a. Brightness
   b. Resolution
   c. Color information
   d. Synchronization
6. The function of a set-top box in DTH television is to:
   a. Convert analog signals to digital signals
   b. Decode digital broadcast signals
   c. Improve picture resolution
   d. Enhance sound quality
7. What type of display technology uses organic compounds to emit light?
   a. LED
   b. LCD
   c. OLED
   d. Plasma
8. Which home appliance uses magnetron technology?
   a. Air Conditioner
   b. Washing Machine
   c. Microwave Oven
   d. Refrigerator
9. What is the primary purpose of a voltage regulator in an electronic circuit?
   a. To increase current flow
   b. To ensure a stable voltage supply
   c. To modify signal frequency
   d. To amplify voltage
10. What is the function of an RFID system?
    a. Wireless data transmission
    b. Audio signal processing
    c. Power conversion
    d. Video compression

Multiple Choice Questions' Answer Sheet

Marks Secured: _____
In Words: _____
Examiner's Sign: _____ Date: _____
Scrutinizer's Marks: _____
In Words: _____
Scrutinizer's Sign: _____ Date: _____



1.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	6.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	7.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	8.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	9.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
5.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	10.	Ⓐ	Ⓑ	Ⓒ	Ⓓ

Manmohan Technical University
Office of the Controller of Examinations
Exam Year: 2082, Jestha (Model Question)

School: SOE	Level: BE	Time: 3 Hours
Program: BEEE	Year/Part: III/II	Full Marks: 50
Subject: : Consumer electronics EG652EX		

- ✓ *Candidates are required to give their answers in their own words as far as practicable.*
- ✓ *The figures in the margin indicate* ***Full Marks****.*
- ✓ *Assume suitable data if necessary*.

GROUP A *(Multiple-Choice Questions in separate paper)* **[10×1=10]**

GROUP B ***(****Short Answer Questions -* ***Attempt Any Eight Question)*** **[8×2=16]**

1. Explain the significance of the decibel (dB) scale in acoustics.
2. What are the key differences between mono, stereo, and quad sound systems?
3. Describe the function of a loudspeaker enclosure in audio systems.
4. What are the advantages of LED TVs over LCD TVs?
5. Explain the working principle of a TFT display.
6. What is the purpose of video conferencing systems? List two applications.
7. How does a barcode scanner work?
8. What is the role of a power supply (SMPS/UPS) in electronic devices?
9. How does an air conditioner regulate room temperature?

GROUP C ***(****Long Answer Questions –* ***Attempt Any Six Questions)*** **[6×4=24]**

10. Explain in detail the working principle of a microphone with a suitable diagram.
11. Compare the characteristics of CRT, LCD, and OLED display technologies.
12. Discuss the function and importance of a set-top box in a DTH system.
13. With the help of a diagram, explain the functioning of a refrigerator.
14. Discuss the role of EMI/EMC compliance in consumer electronics.
15. Explain the working of an air conditioning system with a neat diagram.
16. Compare and contrast RFID and barcode technology.

THE END