KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food .Engg) 2011 Admission VIth Semester Special Re- Examination- June -2015

Cat. No: Elen.3202 Title: Instrumentation and Process Control (2+1) Marks: 80.00 Time: 3 hours I. Fill in the blanks : $(10 \times 1 = 10)$ essentially involve the comparison of the magnitudes of unknown variables with predetermined standard. 2. A thermocouple transduces the temperature signal in the form of 3. The ratio of the change in output to the change in input is the of the instrument. 4. A spurious signal that modifies the output of the instrument is termed as 5. Wheatstone bridge has got three resistances taken in one direction as 121Ω , 119Ω and 119 Ω . The value of the fourth resistance for null balance would be 6. The most common transducer for shock and vibration measurement is are intermediate elements that increase the magnitude of the signal from a transducer so that it can be conveniently displayed or recorded. 8. The atmospheric pressure at sea level is nearly 9. The basis for measuring temperature is given by thermodynamics. 10. The practical range of scale of pH meter varies from zero to _ П. Write short notes on ANY TEN: $(10 \times 3 = 30)$ LVDT 2. Calibration 3. Spectroscopy Static errors 5. Hygrometer Actuator 7. Cascade Control 8. Rotameter Transducer 10. Pitot tube 11. Tachometer

12. Wattmeter