(b) Describe the m ing of a photo elastic casting. (10)

8. Write short notes o (20)

(a) Brittle coating a ation

(b) Separation of st s

(c) Gauge sensitivi

Roll No. .....

22223

M. Tech. 1st Semester Mechanical Engg. (Machine Design) Examination– December, 2016

EXPERIMENTAL STRESS ANALYSIS

Paper : M-805-A

Time : 3 hours ***Max. Marks : 100***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

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

1. (a) Explain the working of single pressure output pneumatic strain gauge. (10)

(b) Explain with sk dual-temperature-compensated se conductor strain gauge. (10)

2. Discuss the various s of bonded type gauges. (20)

3. What is strain gauge sive ? Explain how strain gauge adhes used in strain groups and how the f of gauges is done. Explain. (20)

4. Explain with th elp of sketch Potentiometer circuit Wheatstone bridge. (20)

5. (a) Enumerate the properties of an ideal photoelastic material. (10)

(b) Write short note on plane polarized and elliptically polarized light. (10)

6. (a) Explain the working of reflection Polariscope employed to record the birefringe coating data. (10)

(b) Explain any one type of pf mismatch technique. (10)

7. (a) Explain the method calibration of ideal photoelastic material using a circular disc, under diametral compression. (10)