

VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE
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S.Y. B.Sc. SEM: VI

INTERNAL TEST

DATE: 11th March 2019

SUB: Industrial chemistry

TIME: 10:00 am to 12:00 pm

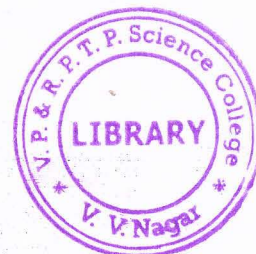
SUB CODE: US06CICH05

TOTAL MARKS: 50

Q1.MCQ

[08]

1. The temperature range covered by the industrial bimetallic thermometer is _____ F⁰
(a) -50 to 100 (b) -40 to 800 (c) -100 to 1000 (d) None of these
2. In liquid expansion thermometer used as
(a) mercury (b) Toluene (c) Alcohol (d) all of these
3. 1 newton per square meter _____
(a) one Psi (b) 1 Pa (c) a & b both (d) 1N/m²
4. The pressure range of bronze spring is _____
(a) 600 psi (b) 1000 psi (c) 10000 psi (d) 800 psi
5. The orifice plate made by _____
(a) stain less steal (b) aluminum (c) copper (d) Silver
6. Pitot tube fluid velocity is _____
(a) $\sqrt{2gh}$ (b) $3fg$ (c) $h_0 + h$ (d) $C \sqrt{2gh}$
7. The panels of mounting instrument are usually made of _____
(a) copper (b) mild steal (c) plastic (d) iron
8. A controlled valve is essentially a variable orifice and hence its flow equation is _____
(a) $CV\sqrt{\Delta P}$ (b) ΔC (c) PV (d) All of these



Q.2 Answer the following in short.(Attempt five, each two marks)

[10]

- (1) Explain working of optical pyrometer.
- (2) Discuss mercury in glass thermometer.
- (3) List the different units of pressure
- (4) Write the classification of pressure measuring devise.
- (5) Write principle of rotameter
- (6) Write about classification of orifice plate
- (7) Differentiate analog and digital indicator
- (8) Write the objective of data recorder

Q.3 Write a note on expansion thermometer or bimetallic thermometer.

[08]

OR

Q.3 Write note on thermal well.

[08]

Q.4 Discuss bourdon tube pressure gauge

[08]

OR

Q.4 Write a note on sight glass method

[08]

Q.5 Explain working of rotameter

[08]

OR

Q.5 Derive an equation of d. Orifice meter

[08]

Q.6 Write the different between circular and strip chart recorder

[08]

OR

Q6 Explain fixed pointer movable scale & fixed scale moveable pointer.

[08]