

SURENDRANATH COLLEGE
INTERNAL ASSESSMENT
SEMESTER-1, 2018-19
SUBJECT- CEMG
GE- 1

Time- 30 min

Full Marks-10

CU Reg. No.-	SECTION-	ROLL NO.-
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MARKS OBTAINED	Signature of Examiner- With date
MARKS CONVERTED TO 10	Approved by HOD- With date

Tick the correct answer

QNo.1	Maxwell velocity distribution formula contains velocity as a) C b) C ² c) C ³ d) C ⁴	<i>Marks</i> 1
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QNo.2	Pairing of electrons takes place in the p, d and f orbitals after each orbital of the given set is singly occupied. This is called a) Aufbau principle b) (n+l) rule c) Pauli's exclusion principle d) Hund's rule	<i>Mark s</i> 1
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QNo.3	Dimension of surface tension is a) ML ⁻¹ T b) ML ⁻² c) MT ⁻² d) MLT ⁻¹	<i>Mark s</i> 1
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QNo.4	The half-life period of a 'n' th order reaction proportional to - a) [A] ⁿ⁻¹ b) [A] ⁿ⁺¹ c) 1/[A] ⁿ⁻¹ d) 1/[A] ⁿ⁺¹	<i>Mark s</i> 1
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QNo.5	What is the value of gas constant? R in Jmol ⁻¹ K ⁻¹ a) 0.0082 b) 8.314 c) 0.8431 d) 0.082	<i>Mark s</i> 1
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QNo.6	In vander waals equation, the pressure correction is	<i>Mark</i>
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	a) a/V b) a/V^2 c) a/V^3 d) a/V^4	<i>s</i> 1
QNo.7	The most acidic compound is a)acetic acid b)formic acid c)phenol d)isopropyl alcohol	<i>Marks</i> 1
QNo.8	An optically inactive dicarboxylic acid having two asymmetric carbon atom is a) formic acid b) acetic acid c) meso tartaric acid d) oxalic acid	<i>Mark</i> <i>s</i> 1
QNo.9	Which of the following represents the ionization of water? a. $\text{H}_2\text{O} \rightleftharpoons \text{H}_2 + \frac{1}{2} \text{O}_2$ b. $2\text{H}_2\text{O} \rightleftharpoons \text{H}_3\text{O}^+ + \text{OH}^-$ c. $2\text{H}_2\text{O} + \text{O}_2 \rightleftharpoons 2\text{H}_2\text{O}_2$ d. $\text{H}_2\text{O} \rightleftharpoons \frac{1}{2} \text{O}_2 + 2\text{H}^+ + 2\text{e}^-$	<i>Mark</i> <i>s</i> 1
QNo.10	Hydrolysis of (i) methyl chloride and (ii) t-butyl chloride follows the mechanism - a) (i) SN^1 (ii) SN^2 b) (i) SN^2 (ii) SN^1 c) both SN^1 d) both SN^2	<i>Mark</i> <i>s</i> 1