



Kerala Public Enterprises (Selection and Recruitment) Board

Opposite KELTRON, Vellayambalam, Thiruvananthapuram

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Version: A

Name of Examination: Electrical Engineering

Date: 13/09/2026

Written examination for:

051-2025-Senior Engineer – Electrical (Executive Trainee – Electrical)-The Travancore Cochin Chemicals Limited

PROVISIONAL ANSWER KEY

Sl No		Answer
1	A	1.47
2	B	6.66 A
3	B	400 MW
4	C	0.5
5	C	2.5%
6	C	resistors of same values across each SCR
7	B	2.8 pu
8	B	39.6 Ω
9	C	become 3 times
10	C	0.08
11	D	both base-emitter and base-collector junction are forward biased
12	C	more than the no-load voltage
13	A	0°
14	A	67.C8
15	C	differentially compounded motor
16	A	NOR with negative logic
17	B	2820 rpm
18	D	0.707 lead
19	C	decrease both rise time and over shoot
20	A	$f < f_0$

21	A	1
22	C	gives a nearly sinusoidal output voltage
23	C	15, 16
24	C	4 rad/s
25	D	Non-linear
26	D	inductive reactance
27	D	stability and voltage profile
28	A	Periodic with a period T
29	D	prevent hunting and to provide starting torque
30	A	active power to busbars and its power angle will increase
31	B	50 W
32	B	demagnetising
33	B	6.3 V
34	D	all of these
35	B	$(1010)_2$
36	D	0.4
37	C	0.30
38	C	$50 e^{-3t}$
39	A	zero
40	B	Damper winding
41	A	3600 W
42	B	125 W
43	A	5 A, 3 A
44	C	may or may not be stable
45	D	entire z plane except $z = 0$ and $z = \infty$
46	C	the existence of stray capacitance between the metallic junctions of the units and the tower body
47	B	3 ms
48	B	within the unit circle
49	D	over compensation due to friction
50	A	960

51	B	1800mH
52	C	Poles and signal type
53	B	Overhead line insulators
54	D	Restriking Voltage
55	A	SI – A = 0
56	B	50%
57	A	Slip
58	C	Voltage divider bias
59	C	BJT in common base configuration has high voltage gain
60	D	6f
61	B	PWM rectifier
62	C	0.1 s
63	D	8 V
64	D	Exponentially bounded
65	C	Ratio of average load to maximum demand
66	B	400 MW
67	B	2
68	A	Memory addressing
69	D	1110 rpm
70	C	Hydro-electric power plants
71	C	Junction and stray capacitances
72	B	Voltage controlled device
73	B	Decreases
74	C	Zero
75	A	Shift right by 3, then scale (compress) by 2
76	B	To reduce $I^2 R$ power losses in transmission lines
77	C	It doubles
78	B	Reduce steady state error
79	C	It introduces a constant steady-state error (offset)
80	D	Solar Cell
81	B	Induction motor drives

82	B	Prime mover input
83	C	Dual slope
84	D	0.6A
85	A	Interconnect two asynchronous AC grids
86	C	Load greater than generation
87	B	0.5
88	C	Opposite to motoring
89	D	Rotor reactance=rotor resistance
90	A	Differential gain to common-mode gain
91	A	8 kHz
92	C	Reduced harmonic distortion
93	D	XOR gate
94	C	Deactivating independent sources and finding resistance
95	C	The same whether referred to the primary or secondary side
96	C	Be positive and non-zero
97	C	Equal to 1
98	B	Output resistance
99	D	Core loss, windage and friction loss
100	B	Phase difference

NB: - Complaints regarding the Provisional Answer Key should be submitted by candidates to the e-mail (kpesrb@gmail.com) of the Board within a period of 4 days from the date of publication of this Provisional Answer Key (both days included) ie. By 11.59 PM on 17/09/2026. Final Answer Key will be published in the official website of KPESRB.

Shine A Haq
Secretary