



Kerala Public Enterprises (Selection and Recruitment) Board

Opposite KELTRON, Vellayambalam, Thiruvananthapuram

Website: kpesrb.kerala.gov.in, Email: kpesrb@gmail.com

Tel: 0471 - 2995042



Version: C

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	B	1800mH
2	C	Poles and signal type
3	B	Overhead line insulators
4	D	Restriking Voltage
5	A	SI – A = 0
6	B	50%
7	A	Slip
8	C	Voltage divider bias
9	C	BJT in common base configuration has high voltage gain
10	D	6f
11	B	PWM rectifier
12	C	0.1 s
13	D	8 V
14	D	Exponentially bounded
15	C	Ratio of average load to maximum demand
16	B	400 MW
17	B	2
18	A	Memory addressing
19	D	1110 rpm
20	C	Hydro-electric power plants

21	C	Junction and stray capacitances
22	B	Voltage controlled device
23	B	Decreases
24	C	Zero
25	A	Shift right by 3, then scale (compress) by 2
26	B	To reduce $I^2 R$ power losses in transmission lines
27	C	It doubles
28	B	Reduce steady state error
29	C	It introduces a constant steady-state error (offset)
30	D	Solar Cell
31	B	Induction motor drives
32	B	Prime mover input
33	C	Dual slope
34	D	0.6A
35	A	Interconnect two asynchronous AC grids
36	C	Load greater than generation
37	B	0.5
38	C	Opposite to motoring
39	D	Rotor reactance=rotor resistance
40	A	Differential gain to common-mode gain
41	A	8 kHz
42	C	Reduced harmonic distortion
43	D	XOR gate
44	C	Deactivating independent sources and finding resistance
45	C	The same whether referred to the primary or secondary side
46	C	Be positive and non-zero
47	C	Equal to 1
48	B	Output resistance
49	D	Core loss, windage and friction loss
50	B	Phase difference
51	A	1.47

52	B	6.66 A
53	B	400 MW
54	C	0.5
55	C	2.5%
56	C	resistors of same values across each SCR
57	B	2.8 pu
58	B	39.6 Ω
59	C	become 3 times
60	C	0.08
61	D	both base-emitter and base-collector junction are forward biased
62	C	more than the no-load voltage
63	A	0°
64	A	67.C8
65	C	differentially compounded motor
66	A	NOR with negative logic
67	B	2820 rpm
68	D	0.707 lead
69	C	decrease both rise time and over shoot
70	A	$f < f_0$
71	A	1
72	C	gives a nearly sinusoidal output voltage
73	C	15, 16
74	C	4 rad/s
75	D	Non-linear
76	D	inductive reactance
77	D	stability and voltage profile
78	A	Periodic with a period T
79	D	prevent hunting and to provide starting torque
80	A	active power to busbars and its power angle will increase
81	B	50 W
82	B	demagnetising

83	B	6.3 V
84	D	all of these
85	B	$(1010)_2$
86	D	0.4
87	C	0.30
88	C	$50 e^{-3t}$
89	A	zero
90	B	Damper winding
91	A	3600 W
92	B	125 W
93	A	5 A, 3 A
94	C	may or may not be stable
95	D	entire z plane except $z = 0$ and $z = \infty$
96	C	the existence of stray capacitance between the metallic junctions of the units and the tower body
97	B	3 ms
98	B	within the unit circle
99	D	over compensation due to friction
100	A	960

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