



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: Mechanical Engineering

Date: 13/09/2026

Written examination for:

047-2025 Senior Engineer - Maintenance (Executive Trainee -Mechanical) -Travancore
Cochin Chemicals Limited

PROVISIONAL ANSWER KEY

Sl No		Answer
1	C	Polymers
2	B	shaft speed equals natural frequency of lateral vibration
3	B	Only planar mechanisms
4	B	Proximity to raw materials
5	B	Minimizes flow time
6	B	Optimize transport and transfer between plants
7	A	Symmetrical
8	C	Cellular layout
9	B	Constant selling price
10	B	Smaller processing times
11	B	Force and displacement
12	B	Darcy-Weisbach equation
13	C	Greater than unity
14	A	Pattern
15	C	Deburring
16	B	Centre
17	B	Copper and Zinc
18	B	Control speed
19	B	Vibration
20	A	It moves with constant velocity

21	C	Sudden increase in strain without increase in stress
22	C	Transient conduction
23	B	Strip speed > roll speed
24	B	Tool change
25	C	Al-Mg-Si alloys
26	C	Impact loading
27	A	Decrease in notch radius
28	B	Process variability
29	A	Brittle
30	B	Pitot tube
31	C	Zero
32	C	Analytical dynamics
33	C	Hoop stress
34	C	Equally in all directions
35	B	Increase surface area for convection
36	C	Average temperature of heat addition is higher
37	B	Increase accuracy and productivity
38	B	Source and sink temperatures
39	A	Pressure falls below vapour pressure
40	A	Negligible
41	A	Feed molten metal during solidification
42	A	Hungarian method
43	C	0.3
44	A	$\{bd\}^{3/12}$
45	B	Polycarbonate
46	D	2.0-4.0%
47	A	1 degree of freedom
48	A	Engage and disengage power
49	A	Eliminate random fluctuations
50	A	Waste elimination
51	B	Zero

52	C	Top and bottom points
53	A	Law of energy conservation
54	A	2300
55	B	Total cost = Total revenue
56	B	Scheduling and control
57	B	Continuous improvement
58	A	Symmetrical
59	A	Annual consumption value
60	C	Zero
61	B	Increase in compression ratio
62	A	Parabolic
63	C	Brayton
64	C	Area and $\Delta \{T\}$
65	A	In nozzle
66	A	Calorimeter
67	A	RPM
68	A	Speed and tool life
69	A	Economic Order Quantity
70	D	Both A & B
71	D	Length 4
72	B	Poisson's ratio
73	B	Stress
74	B	Chromium
75	B	Heating below melting point
76	B	Jominy test
77	B	Ratio of last to first gear teeth
78	C	Roller bearing
79	B	Fatigue life
80	B	Eliminate waste
81	A	Delay without affecting project completion
82	B	4.9m/s^2

83	B	L^2
84	A	$N \cdot s/m^2$
85	B	Parabolic
86	B	Pressure increases in direction of flow
87	A	k/pC_p
88	C	$Z=1$
89	A	All pressure drop occurs in nozzle
90	B	Thin-walled cups
91	C	Oxidizing flame
92	B	Complex geometry fabrication
93	B	Laser interferometry and probing
94	B	Satisfy non-negativity and constraints
95	B	0.4
96	C	Principal stresses and maximum shear
97	D	twisting moment is 1/3 greater than that for full load
98	A	$E=2G(1+\nu)$
99	B	$pD/2t$
100	C	Double the static stress

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