Kerala Public Enterprises (Selection and Recruitment)Board
Opposite KELTRON, Vellayambalam, Thiruvananthapuram
Website: kpesrb.kerala.gov.in, Email: kpesrb@gmail.com
Tel: 0471 - 2995042

Version: A

Name of Examination: Mechanical Engineering **Date: 13/09/2026**

Written examination for:
047-2025 Senior Engineer - Maintenance (Executive Trainee -Mechanical) -Travancore Cochin Chemicals Limited

FINAL ANSWER KEY

Sl No		Answer
1	B	Zero
2	C	Top and bottom points
3	A	Law of energy conservation
4	A	2300
5	B	Total cost = Total revenue
6	B	Scheduling and control
7	B	Continuous improvement
8	A	Symmetrical
9	A	Annual consumption value
10	C	Zero
11	B	Increase in compression ratio
12	A	Parabolic
13	C	Brayton
14	C	Area and Δ {T}
15	A	In nozzle
16	A	Calorimeter
17	Cancelled*	
18	A	Speed and tool life
19	A	Economic Order Quantity
20	Cancelled*	

Published on 17/11/2026

21	Cancelled*	
22	B	Poisson’s ratio
23	B	Stress
24	B	Chromium
25	B	Heating below melting point
26	B	Jominy test
27	B	Ratio of last to first gear teeth
28	C	Roller bearing
29	B	Fatigue life
30	B	Eliminate waste
31	A	Delay without affecting project completion
32	B	$4.9m/s^2$
33	B	L^2
34	A	$N \cdot s/m^2$
35	B	Parabolic
36	B	Pressure increases in direction of flow
37	A	k/pCp
38	C	Z=1
39	A	All pressure drop occurs in nozzle
40	B	Thin-walled cups
41	C	Oxidizing flame
42	B	Complex geometry fabrication
43	B	Laser interferometry and probing
44	B	Satisfy non-negativity and constraints
45	B	0.4
46	C	Principal stresses and maximum shear
47	D	twisting moment is 1/3 greator than that for full load
48	A	E=2G(1+v)
49	B	pD/2t
50	C	Double the static stress
51	C	Polymers

SELECTION GRADE RECRUITMENT BOARD

52	B	shaft speed equals natural frequency of lateral vibration
53	B	Only planar mechanisms
54	B	Proximity to raw materials
55	B	Minimizes flow time
56	B	Optimize transport and transfer between plants
57	A	Symmetrical
58	C	Cellular layout
59	B	Constant selling price
60	B	Smaller processing times
61	B	Force and displacement
62	B	Darcy-Weisbach equation
63	C	Greater than unity
64	A	Pattern
65	C	Deburring
66	B	Centre
67	B	Copper and Zinc
68	B	Control speed
69	B	Vibration
70	A	It moves with constant velocity
71	C	Sudden increase in strain without increase in stress
72	C	Transient conduction
73	B	Strip speed > roll speed
74	B	Tool change
75	C	Al-Mg-Si alloys
76	C	Impact loading
77	A	Decrease in notch radius
78	B	Process variability
79	A	Brittle
80	B	Pitot tube
81	C	Zero
82	C	Analytical dynamics

KERALA PUBLIC ENTERPRISES

Published on 17/11/2026

83	C	Hoop stress
84	C	Equally in all directions
85	B	Increase surface area for convection
86	C	Average temperature of heat addition is higher
87	B	Increase accuracy and productivity
88	B	Source and sink temperatures
89	A	Pressure falls below vapour pressure
90	A	Negligible
91	A	Feed molten metal during solidification
92	A	Hungarian method
93	C	0.3
94	A	{bd}^3/12
95	B	Polycarbonate
96	D	2.0-4.0%
97	A	1 degree of freedom
98	A	Engage and disengage power
99	A	Eliminate random fluctuations
100	A	Waste elimination

*1 (one) mark each will be given for Question Nos. 17, 20, 21 to all candidates who attended thewritten examination.

This Final Answer Key is published on the basis of expert opinion on valid complaints received within the stipulated time.

Shine A Haq
Secretary

Published on 17/11/2026

Kerala Public Enterprises (Selection and Recruitment)Board
Opposite KELTRON, Vellayambalam, Thiruvananthapuram
Website: kpesrb.kerala.gov.in, Email: kpesrb@gmail.com
Tel: 0471 - 2995042

Version: B

Name of Examination: Mechanical Engineering **Date: 13/09/2026**

Written examination for:
047-2025 Senior Engineer - Maintenance (Executive Trainee -Mechanical) -Travancore Cochin Chemicals Limited

FINAL ANSWER KEY

Sl No		Answer
1	A	Waste elimination
2	A	Eliminate random fluctuations
3	A	Engage and disengage power
4	A	1 degree of freedom
5	D	2.0-4.0%
6	B	Polycarbonate
7	A	{bd}^3/12
8	C	0.3
9	A	Hungarian method
10	A	Feed molten metal during solidification
11	A	Negligible
12	A	Pressure falls below vapour pressure
13	B	Source and sink temperatures
14	B	Increase accuracy and productivity
15	C	Average temperature of heat addition is higher
16	B	Increase surface area for convection
17	C	Equally in all directions
18	C	Hoop stress
19	C	Analytical dynamics
20	C	Zero

Published on 17/11/2026

21	B	Pitot tube
22	A	Brittle
23	B	Process variability
24	A	Decrease in notch radius
25	C	Impact loading
26	C	Al-Mg-Si alloys
27	B	Tool change
28	B	Strip speed > roll speed
29	C	Transient conduction
30	C	Sudden increase in strain without increase in stress
31	A	It moves with constant velocity
32	B	Vibration
33	B	Control speed
34	B	Copper and Zinc
35	B	Centre
36	C	Deburring
37	A	Pattern
38	C	Greater than unity
39	B	Darcy-Weisbach equation
40	B	Force and displacement
41	B	Smaller processing times
42	B	Constant selling price
43	C	Cellular layout
44	A	Symmetrical
45	B	Optimize transport and transfer between plants
46	B	Minimizes flow time
47	B	Proximity to raw materials
48	B	Only planar mechanisms
49	B	shaft speed equals natural frequency of lateral vibration
50	C	Polymers
51	C	Double the static stress

SELECTION & RECRUITMENT BOARD

Published on 17/11/2026

52	B	pD/2t
53	A	E=2G(1+v)
54	D	twisting moment is 1/3 greator than that for full load
55	C	Principal stresses and maximum shear
56	B	0.4
57	B	Satisfy non-negativity and constraints
58	B	Laser interferometry and probing
59	B	Complex geometry fabrication
60	C	Oxidizing flame
61	B	Thin-walled cups
62	A	All pressure drop occurs in nozzle
63	C	Z=1
64	A	k/pCp
65	B	Pressure increases in direction of flow
66	B	Parabolic
67	A	$N \cdot s/m^2$
68	B	L^2
69	B	$4.9m/s^2$
70	A	Delay without affecting project completion
71	B	Eliminate waste
72	B	Fatigue life
73	C	Roller bearing
74	B	Ratio of last to first gear teeth
75	B	Jominy test
76	B	Heating below melting point
77	B	Chromium
78	B	Stress
79	B	Poisson’s ratio
80	Cancelled*	
81	Cancelled*	
82	A	Economic Order Quantity

KERALA PUBLIC ENTERPRISES

83	A	Speed and tool life
84	Cancelled*	
85	A	Calorimeter
86	A	In nozzle
87	C	Area and Δ {T}
88	C	Brayton
89	A	Parabolic
90	B	Increase in compression ratio
91	C	Zero
92	A	Annual consumption value
93	A	Symmetrical
94	B	Continuous improvement
95	B	Scheduling and control
96	B	Total cost = Total revenue
97	A	2300
98	A	Law of energy conservation
99	C	Top and bottom points
100	B	Zero

*1 (one) mark each will be given for Question Nos. 17, 20, 21 to all candidates who attended thewritten examination.

This Final Answer Key is published on the basis of expert opinion on valid complaints received within the stipulated time.

Shine A Haq
Secretary

Published on 17/11/2026

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

FINAL 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

Published on 17/11/2026

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

SELECTION & RECRUITMENT BOARD

Published on 17/11/2026

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 Δ {T}
65	A	In nozzle
66	A	Calorimeter
67	Cancelled*	
68	A	Speed and tool life
69	A	Economic Order Quantity
70	Cancelled*	
71	Cancelled*	
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	$4.9 m/s^2$

KERALA PUBLIC ENTERPRISES SELECTION & RECRUITMENT BOARD

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/pCp
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 greator than that for full load
98	A	E=2G(1+v)
99	B	pD/2t
100	C	Double the static stress

*1 (one) mark each will be given for Question Nos. 17, 20, 21 to all candidates who attended thewritten examination.

This Final Answer Key is published on the basis of expert opinion on valid complaints received within the stipulated time.

Shine A Haq
Secretary

Published on 17/11/2026

Kerala Public Enterprises (Selection and Recruitment)Board
Opposite KELTRON, Vellayambalam, Thiruvananthapuram
Website: kpesrb.kerala.gov.in, Email: kpesrb@gmail.com
Tel: 0471 - 2995042

Version: D

Name of Examination: Mechanical Engineering **Date: 13/09/2026**

Written examination for:
047-2025 Senior Engineer - Maintenance (Executive Trainee -Mechanical) -Travancore Cochin Chemicals Limited

FINAL ANSWER KEY

Sl No		Answer
1	D	k/pCp
2	D	Satisfy non-negativity and constraints
3	D	Speed and tool life
4	B	It moves with constant velocity
5	A	Minimizes flow time
6	A	0.4
7	A	Proximity to raw materials
8	Cancelled*	
9	D	Fatigue life
10	D	Source and sink temperatures
11	D	pD/2t
12	C	Roller bearing
13	B	Decrease in notch radius
14	B	Symmetrical
15	B	Sudden increase in strain without increase in stress
16	B	Pressure falls below vapour pressure
17	A	Increase accuracy and productivity
18	C	Force and displacement
19	C	2300
20	A	Transient conduction

Published on 17/11/2026

21	D	Copper and Zinc
22	D	Engage and disengage power
23	B	Zero
24	C	Constant selling price
25	D	Top and bottom points
26	D	Brittle
27	A	Principal stresses and maximum shear
28	Cancelled*	
29	D	Hoop stress
30	C	Centre
31	D	Darcy-Weisbach equation
32	A	Greater than unity
33	A	Double the static stress
34	C	Heating below melting point
35	D	twisting moment is 1/3 greator than that for full load
36	A	Z=1
37	D	Control speed
38	A	Parabolic
39	D	Average temperature of heat addition is higher
40	C	In nozzle
41	B	Annual consumption value
42	B	Oxidizing flame
43	C	Delay without affecting project completion
44	C	Optimize transport and transfer between plants
45	C	1 degree of freedom
46	A	Increase surface area for convection
47	B	Feed molten metal during solidification
48	D	Continuous improvement
49	A	Deburring
50	A	Parabolic
51	D	Thin-walled cups

SELECTION & RECRUITMENT BOARD

Published on 17/11/2026

52	B	Stress
53	A	Pattern
54	D	Impact loading
55	C	Ratio of last to first gear teeth
56	C	Pressure increases in direction of flow
57	A	0.3
58	A	Increase in compression ratio
59	C	Tool change
60	B	Analytical dynamics
61	A	shaft speed equals natural frequency of lateral vibration
62	C	Process variability
63	A	Pitot tube
64	B	Total cost = Total revenue
65	A	Brayton
66	A	Strip speed > roll speed
67	C	Chromium
68	B	$N \cdot s/m^2$
69	B	$4.9 m/s^2$
70	D	Vibration
71	A	Cellular layout
72	D	Smaller processing times
73	D	Scheduling and control
74	A	Only planar mechanisms
75	D	All pressure drop occurs in nozzle
76	A	Negligible
77	D	Complex geometry fabrication
78	B	2.0-4.0%
79	D	L^2
80	A	Al-Mg-Si alloys
81	D	Eliminate random fluctuations
82	B	Symmetrical

KERALA PUBLIC ENTERPRISES

Published on 17/11/2026

83	D	E=2G(1+v)
84	D	Polycarbonate
85	A	Equally in all directions
86	D	Zero
87	D	Calorimeter
88	B	Economic Order Quantity
89	C	Area and Δ {T}
90	A	Poisson's ratio
91	C	Waste elimination
92	Cancelled*	
93	D	Hungarian method
94	D	Zero
95	B	Laser interferometry and probing
96	D	Polymers
97	A	Eliminate waste
98	B	{bd}^3/12
99	B	Jominy test
100	D	Law of energy conservation

*1 (one) mark each will be given for Question Nos. 17, 20, 21 to all candidates who attended thewritten examination.

This Final Answer Key is published on the basis of expert opinion on valid complaints received within the stipulated time.

Shine A Haq
Secretary

Published on 17/11/2026