

Notification NO. 23/2016 Objections - Decision of commission on Mechanical Engineering paper dated

S.no	Question ID	Description of the Question	Answer as per key as published	Final Key	Decision of the Commission
1	7984078741	Bulk modulus 'K' in terms of modulus of elasticity 'E' and Poisson's ratio ' μ ' is given as	3	1	Correct Option is 1 i:e $E/3(1 - 2\mu)$
2	7984078777	Spinning operation is carried out on the following machine	1	3	Correct Option is 3 i:e Lathe
3	7984078790	Gantt chart provides information about the	4	1	Correct Option is 1 i:e Material handling
4	7984078793	Queuing theory deals with problems of	3	2	Correct Option is 2 i:e Reducing the waiting time or idle time
5	7984078811	Which of the following is independent of sales forecast?	4	1	Correct Option is 1 i:e Productivity
6	7984078818	In PERT analysis a critical activity has	4	3	Correct Option is 3 i:e Zero float
7	7984078820	Positive slack on a PERT indicates that project is	3	1	Correct Option is 1 i:e Ahead of schedule
8	7984078824	Which of the following memories must be refreshed many times per second?	1	2	Correct Option is 2 i:e Dynamic RAM
9	7984078835	Specific fuel combustion is defined as	4	2 & 4	Correct Option is 2 & 4 i:e Fuel combustion per hour per IHP & Fuel combustion per hour per BHP
10	7984078837	Which of the following is not an internal combustion engine?	4	3 & 4	Correct Option is 3 & 4 i:e Gas turbine & Steam turbine
11	7984078839	Which of the following is the reason for supercharging in any engine is to?	2	3	Correct Option is 3 i:e Increase power
12	7984078842	The self-ignition of temperature of diesel oil as compared to petrol is	1	2	Correct Option is 2 i:e Lower
13	7984078848	A slow speed diesel engine theoretically operates on the principle of	1	4	Correct Option is 4 i:e Heat addition at constant volume and heat rejection at constant pressure
14	7984078849	if T_1 and T_2 are the highest and lowest absolute temperatures encountered in a refrigeration Cycle working on a reversed carnot cycle, then the COP is equal to	1	2	Correct Option is 2 i:e $T_2 / T_1 - T_2$
15	7984078850	Which of the following refrigerants has lowest freezing point?	1	4	Correct Option is 4 i:e Freon-22
16	7984078862	Which of the following type of impeller vanes are most commonly used in centrifugal compressor?	3	2	Correct Option is 2 i:e Radial

17	7984078759	Austempering is the heat treatment process used to obtain	2	3	Correct Option is 3 i:e High toughness
18	7984078731	If the controlling force of a governor increases with increase in speed, the governor is said to be	2	1	Correct Option is 1 i:e Sensitive
19	7984078729	A flywheel of M.I 9.8 kg-m ² , rotates by 30 rpm for a fluctuation energy of 1936 J. The mean speed of the flywheel is	1	0	Insufficient data Hence Question is deleted
20	7984078800	Which of the following statement is not correct for the TQC?	3	2	Correct Option is 2 i:e It is restricted to product quality
21	7984078802	A universal dividing head is used to perform a milling operation by	4	0	Out of Syllabus Hence question is deleted
22	7984078789	Which of the following cost elements are considered while determining the Economic lot Size for purchase? 1. Inventory carrying cost 2. Procurement cost 3. Set up cost	3	2	Correct Option is 2 i:e 1 and 2
Note: All other objections are untenable, After deleting 2 question , the marks would be scaled from 148 to 150					

Notification NO. 23/2016 Objections - Decision of commission on Chemical Engineering paper dated

S.no	Question ID	Description of the Question	Answer as per key as published	Final Key	Decision of the Commission
1	7984078476	Two iron pipes of the same nominal diameter but different schedule numbers will have the same_____	1	0	Question is Ambiguous, Hence Question Deleted
2	7984078529	For isothermal gas phase reaction A , the fractional change in the volume of the system between no conversion and complete conversion is	3	0	Question is Ambiguous, Hence Question Deleted
3					
Note: All other objections are untenable, After deleting 2 question , the marks would be scaled from 148 to 150					

Notification NO. 23/2016 Objections - Decision of commission on Electrical Engineering paper dated

S.no	Question ID	Description of the Question	Answer as per key as published	Final Key	Decision of the Commission
1	7984078578	In the given network, the phaser current i is	1	2	Correct option is 2 i:e $173.2 \angle -60^\circ$
2	7984078587	When reading is taken at half scale in the instrument, the error is	3	4	Correct option is 4 i:e more than full scale error
3	7984078592	Which of the following A/D converter is used in a digital storage oscilloscope?	1	4	Correct option is 4 i:e successive approximation type
4	7984078612	A 220V, dc machine has an armature resistance of 1Ω . If load current is 20A, the difference in the induced voltages when the machine is running as a motor and as a generator is	2	3	Correct option is 3 i:e 40 V
5	7984078629	A 500KVA, 1100V, 50Hz, 3 Φ , star connected alternator has stator resistance of $0.1\Omega/\text{ph}$ and synchronous reactance of $1.5\Omega/\text{ph}$. The alternator is supplying full load at unity power factor. The induced emf per phase for this condition is	1	2	correct option is 2 i:e 769 V
6	7984078631	An alternator connected to an infinite bar, for a given excitation, will develop maximum electromagnetic power when the power angle δ and internal angle θ are related as	1	2	correct option is 2 i:e $\delta=\theta$
7	7984078656	The largest size of steam turbine installed in India is	3	4	Correct option is 4 i:e 1000 MW
8	7984078675	For an AC transmission line of length not exceeding 80 km, it is usual to lump the line capacitance at	2	0	No Answer in given options Hence question deleted
9	7984078680	Shunt compensation in an EHV lines is used to improve	3	2	Correct option is 2 i:e fault level and voltage profile
10	7984078681	For a fault at the terminals of synchronous generator, the fault current is maximum for	3	1	Correct option is 1 i:e 3 Φ fault
11	7984078696	The type of braking used in electric traction is	3	4	Correct option is 4 i:e mechanical and electro pneumatic braking
12	7984078708	A travelling wave 400/1/50 means crest value of	3	0	No Answer in given options Hence question deleted
13	7984078715	A 75 MVA, 10KV Synchronous generator has $X_d = 0.4$ p.u. The X_d value (in p.u) to a base of 100 MVA, 11 KV is	4	0	No Answer in given options Hence question deleted
<p>Note : All other objections are untenable, After deleting 3 question , the marks would be scaled from 147 to 150</p>					