

**GOVERNMENT OF INDIA
PRESS INFORMATION BUREAU
PRESS NOTE
UNION PUBLIC SERVICE COMMISSION
ENGINEERING SERVICES EXAMINATION, 2021**

Dated: 6th August, 2021

On the basis of the result of the written part of the Engineering Services (Preliminary) Examination, 2021 held by the Union Public Service Commission (U.P.S.C.) on 18th July, 2021, the candidates with the under mentioned Roll Numbers have qualified for the Engineering Services (Main) Examination, 2021.

2. The candidature of these candidates is purely provisional at all the stages of the Examination subject to satisfying the prescribed eligibility conditions. The candidates declared qualified are required to appear at the Engineering Services (Main) Examination, 2021 to be held on 21st November, 2021. The qualified candidates are further advised to refer to the Rules of the Engineering Services Examination, 2021 issued by the Ministry of Railways and the Examination Notice No.07/2021-ENGG. dated 07.04.2021 issued by the Commission, which is available on its Website. The candidates may download their e-Admit Cards from the Commission's Website around 3 weeks before the commencement of the Engineering Services (Main) Examination, 2021. Candidates are also informed that marks and cut-off marks of the Engineering Services (Preliminary) Examination, 2021 will be uploaded on the Commission's website i.e., <https://upsc.gov.in> after the entire process of the Engineering Services Examination, 2021 is over i.e. after the declaration of final result of the Engineering Services Examination, 2021. No request for change of centre/discipline for Engineering Services (Main) Examination, 2021 will be entertained under any circumstances.

3. Union Public Service Commission has a Facilitation Counter at its campus. Candidates may obtain any information/clarification regarding their examination/result on working days between 10.00 A.M. to 5.00 P.M. in person or over Telephone Nos. 23388088, (011)-23385271/23381125/23098543 from this counter.

MOBILE PHONES ARE BANNED IN THE CAMPUS OF UPSC EXAM. HALLS

**UNION PUBLIC SERVICE COMMISSION
NEW DELHI – 110069,**

**Dated: 6th August, 2021.
15, Sravana, Saka 1943**

ENGINEERING SERVICES EXAMINATION,(PRELIMINARY)- 2021

SERVICE:CIVIL ENGINEERING

0100025	0100099	0100106	0100231	0100717	0100876	0101090	0200043	0200065
0200097	0200142	0200150	0200238	0200258	0200270	0200283	0200287	0200289
0200369	0200370	0200461	0200476	0200505	0200509	0200692	0200728	0200768
0200784	0200798	0200817	0200823	0200871	0200890	0200892	0200901	0200955
0201069	0201208	0300530	0301158	0400152	0400218	0400247	0400272	0400309
0400392	0400427	0400496	0400925	0401133	0401181	0401248	0401277	0401283
0401465	0401529	0401561	0401715	0401742	0401963	0402033	0402050	0402220
0402263	0402461	0402473	0402544	0402678	0402713	0402816	0500223	0500370
0500576	0500591	0501028	0501294	0501306	0501326	0501732	0502521	0502597
0502847	0502892	0502998	0503063	0503231	0503832	0503933	0504077	0504202
0504233	0504508	0600005	0600079	0600186	0600224	0601013	0601124	0601620
0700188	0700286	0700396	0700828	0700973	0701033	0800001	0800016	0800026
0800099	0800127	0800149	0800246	0800325	0800367	0800418	0800444	0800770
0800777	0800854	0800938	0800941	0800973	0800980	0801048	0801049	0801076
0801130	0801226	0801238	0801245	0801275	0801294	0801296	0801315	0801328
0801334	0801368	0801414	0801453	0801523	0801525	0801638	0801659	0801667
0801711	0801722	0801732	0801818	0801842	0801850	0801891	0801904	0801921
0802063	0802086	0802113	0802130	0802194	0802206	0802220	0802232	0802310
0802345	0802385	0802445	0802476	0802518	0802527	0802555	0802569	0802574
0802612	0802647	0802688	0802782	0802791	0802855	0802978	0802980	0802993
0803004	0803009	0803017	0803079	0803091	0803108	0803131	0803163	0803184
0803234	0803237	0803260	0803281	0803328	0803352	0803367	0803389	0803402
0803413	0803414	0803503	0803580	0803638	0803672	0803683	0803742	0803831
0803840	0803864	0803948	0804029	0804039	0804091	0804105	0804225	0804242
0804267	0804277	0804291	0804310	0804436	0804469	0804543	0804557	0804577
0804621	0804632	0804649	0804676	0804720	0804724	0804778	0804910	0804946
0805020	0805078	0805082	0805131	0805195	0805239	0805240	0805253	0805333
0805353	0805379	0805384	0805406	0805436	0805458	0805500	0805570	0805599
0805643	0805651	0805656	0805740	0805776	0805809	0805917	0805922	0805967
0805989	0806043	0806049	0806058	0806173	0806181	0806182	0806226	0806227
0806229	0806254	0806328	0806380	0806521	0806541	0806581	0806610	0806631
0806695	0806724	0806786	0806799	0806818	0806827	0806899	0806930	0806937
0806962	0900042	0900132	0900133	0900281	0900297	0900309	0900402	1000095
1000166	1000281	1000317	1000329	1000351	1000401	1000466	1000536	1000639
1000834	1000938	1001247	1001297	1001347	1001612	1001618	1001780	1001886
1002126	1002805	1003051	1003098	1003194	1003349	1003370	1003395	1003617
1003682	1003850	1003900	1003973	1100110	1100129	1100228	1100245	1100261
1100272	1100293	1100349	1100360	1100369	1100474	1100524	1100560	1100671
1100692	1100697	1100739	1100752	1100753	1100796	1100870	1100871	1100902
1101025	1101040	1101041	1101092	1101102	1101105	1101117	1101145	1101168
1101190	1101203	1101280	1101299	1101337	1101342	1101360	1101390	1101435
1101518	1101591	1101598	1101626	1101636	1101637	1101659	1101667	1101688
1101710	1101732	1101733	1101738	1101765	1101843	1101940	1101951	1102214
1102233	1102278	1102291	1102336	1102374	1102407	1102411	1102425	1102479
1102486	1102667	1102670	1102688	1102876	1102966	1103042	1103052	1103060
1103166	1103194	1103221	1103241	1103263	1200601	1201119	1300024	1300385
1300433	1300745	1400130	1400261	1400547	1400762	1400896	1400942	1400993
1500067	1500278	1500413	1500423	1500430	1500466	1500528	1500686	1500760
1500837	1501000	1501135	1501177	1501207	1501429	1501554	1501704	1501707
1501763	1501797	1501840	1501843	1501856	1501891	1501899	1501980	1501994



IES MASTER

Institute for Engineers (IES/GATE/PSUs)

CE

ME

EE

ECE

Conventional Question Practice Program (CQPP) Online Classes

for

ESE-2021 Mains Exam



Video Lectures
+
Online Test Series

Starts from 9th August

Video Lectures

- Subject wise Practice & Discussion
- Revised, Updated & Exam Oriented Practice questions
- Get conceptual clarity on important topics
- Online Counselling Session on How to Write Answer
- Under Guidance of Subject Experts

Online Test Series

- Classroom Solutions + Discussion
- Improve Question Selection Ability
- Cover all Concepts in Various Topics
- Improve Time Management
- Unique Approach : Test on New & Revision Topics

ENROLL NOW

F-126, Katwaria Sarai, New Delhi - 110016
from 9 am to 8:30 pm

For Query
8010009955
011 4101 3406

ENGINEERING SERVICES EXAMINATION,(PRELIMINARY)- 2021

SERVICE:CIVIL ENGINEERING								
1502046	1502111	1502116	1502169	1502242	1502571	1502778	1502788	1502790
1503093	1503148	1800120	1800124	1900029	1900764	1900884	1901062	2100180
2100183	2100228	2100230	2100237	2100261	2100291	2100440	2100457	2600098
2600109	2600185	2600301	2600306	2600489	2600588	2600766	2600772	2600781
2600796	2600812	2600844	2600939	2600954	2600999	2601148	2601280	2601352
2601397	2601454	2601567	2601617	2601646	2601660	2601731	2601790	2601798
2601955	2602017	2602177	2602464	2602518	2602532	2602554	2602556	2602608
2602680	2602723	2602765	2602766	2602777	2602787	2602793	2603014	2603096
2603354	3400236	3400263	3400298	3500032	3500083	3500145	3500184	3500274
3500307	3500343	3500714	3500795	3500812	3500865	3500892	3500910	3501050
3900255	4000438	4100137	4100292	4100336	4100340	4100357	4100392	4100573
4100731	4100797	4100823	4100835	4100864	4100886	4101092	4101167	4500128
4900007	4900157	4900260	4900268	4900298	4900339	4900496	4900638	4900643
4901025	4901119	4901246	5000181	5000385	5100274	5100337	5100506	5100515
5100607	5100818	5100828	5100900	5101173	5200009	5200090	5200142	5300018
5300040	5400001	5400009	5400019	5400150	5400202	5400214	5400237	5400244
5400368								



IES MASTER

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ESE-2021 Conventional Test Schedule, Civil Engineering

Date	Topic
21st Aug. 2021	N.T. : M-1, M-3, M-4, SM-1, SM-3, SM-6, BM-1, BM-4
	R.T. :
29th Aug. 2021	N.T. : SA-1, SA-2, SA-5, HY-1, HY-4, HY-5, BM-2, BM-3, SM-7
	R.T. : SM-3, M-1
5th Sept. 2021	N.T. : DSS-4, DSS-5, FM-1, FM-4, FM-6, FM-8, EE-7, CPM-1
	R.T. : M-3, SA-1, SA-2, SM-6
12th Sept. 2021	N.T. : SA-3, SA-6, EE-4, EE-5, EE-6, FM-7, CPM-2, CPM-3
	R.T. : BM-2, SM-7, M-1, M-4, HY-1, FM-6
19th Sept. 2021	N.T. : RCC-1, RCC-2, SM-5, HY-2, HY-3, FM-5
	R.T. : BM-3, CPM-1, EE-7, FM-6, SA-1, SA-2, M-3
26th Sept. 2021	N.T. : DSS-1, DSS-2, RCC-3, RCC-4, SM-4, SU-2, FM-2, CPM-4
	R.T. : BM-4, SM-3, SA-5, FM-4, FM-5, EE-5
3rd Oct. 2021	N.T. : RCC-5, RCC-6, SU-3, SU-5, SM-2, M-2, EE-1
	R.T. : EE-6, FM-7, HY-1, RCC-1, RCC-2, HY-5
10th Oct. 2021	N.T. : TF-1, TF-2, IR-1, IR-2, FM-3, SM-8, DSS-3
	R.T. : BM-2, SM-1, SM-7, DSS-1, DSS-2, M-3, M-4, SA-1, FM-8
17th Oct. 2021	N.T. : TF-3, TF-4, IR-3, IR-4, SU-4, M-5, Rail-1
	R.T. : BM-3, CPM-4, RCC-3, EE-1, EE-6, EE-7, RCC-5, SM-4, M-1, HY-4
24th Oct. 2021	N.T. : Rail-2, Airport, EE-2, EE-3, SA-4, DSS-6
	R.T. : CPM-1, SM-5, SM-6, FM-1, EE-5, TF-1, TF-2, SA-3, SU-3, M-2, Rail-1
31st Oct. 2021	N.T. : Port & Harbour, Tunnel, SU-1
	R.T. : CPM-3, RCC-4, RCC-6, IR-1, IR-2, FM-6, FM-7, FM-8, DSS-1, DSS-4, DSS-6, SA-2, SA-3, SA-6, SA-5, EE-4, SU-4, SU-5, M-3, SM-1
5th Nov. 2021	Full Length-1 (Test Paper-1 + Test Paper-2)
9th Nov. 2021	Full Length-2 (Test Paper-1 + Test Paper-2)
14th Nov. 2021	Full Length-3 (Test Paper-1 + Test Paper-2)

Test Type

Timing

Day

Conventional Test	_____	10:00 A.M. to 1:00 P.M.	_____	Sunday
Conventional Full Length Test Paper-1	_____	10:00 A.M. to 1:00 P.M.	_____	Sunday
Conventional Full Length Test Paper-2	_____	02:00 P.M. to 5:00 P.M.	_____	Sunday

Note : The timing of the test may change on certain dates. Prior information will be given in this regard.

*N.T. : New Topic. *R.T. : Revision Topic

Call us : 8010009955, 011-41013406 or Mail us : info@iesmaster.org

Subject Code Details

Structural Analysis (SA)	SA-1	SA-2	SA-3	SA-4	SA-5			SA-6		
	Slope Deflection Method	Moment Distribution Method	Truss, Cables, Arches	Force Method	Influence Load Diagram / Moving Load, Determinacy / Indeterminacy			Stiffness Matrix, Flexible Matrix, Structure Dynamics, Misc.		
SOM (M)	M-1	M-2	M-3				M-4	M-5		
	Concept of Stress and Strain	Shear Force & Bending Moment, Deflection of Beams	Transformation of Stress & Strains, Theory of Failure, Combined Bending & Torsion/ Combined bending & Transverse shear stress/ combined bending & Axial stress, Torsion				Bending Stress, Shear Stress	Columns, Springs, Thick & Thin Shells, Moment of inertia		
RCC & PSC (RCC)	RCC-1		RCC-2	RCC-3	RCC-4	RCC-5	RCC-6			
	Working stress Method, Limit State Method		Earthquake, Beams (LSM/WSM), Lintels	Slab (1-way/2-way), Staircase	Column, Water Tanks	Footing, Retaining walls	Pre stressed Concrete, Cement & Concrete, Masonary Structure			
Design of Steel Structure (DSS)	DSS-1	DSS-2	DSS-3	DSS-4		DSS-5		DSS-6		
	Compression member	Plastic Analysis	Beams	Connections (Direct, Eccentric)		Tension Members		Plate girders, Industrial building, Misc.		
Pert & CPM (CPM)	CPM-1		CPM-2		CPM-3		CPM-4			
	Network analysis, Pert, CPM		Crashing, Updating & Resource Allocation, Rate Analysis, Engineering Economy		Construction Equipment, Equipment Costing		Project Management, Tendering Process & Contract, Quality Control, Land Equisition, Estimation and Project Costing			
Building Material (BM)	BM-1	BM-2		BM-3			BM-4			
	Cement, Timber	Concrete, Agregate, Stones		Brick, Masonry, Lime, Mortar			Steel, Aluminium, Ceramics, Glass, Plastics, FRP, Misc.			
Environmental (EE)	EE-1		EE-2	EE-3	EE-4	EE-5	EE-6	EE-7		
	Characteristics of water, Treatment of water		Distribution of water, Water Demand, Water Souces & Conveyance	Characteristics of Sewage	Disposal of Sewage	Sewer design	Treatment of Sewage	Air Pollution, Noise Pollution, Solid Waste Management		
Fluid Mechanics (FM)	FM-1		FM-2	FM-3	FM-4		FM-5	FM-6	FM-7	FM-8
	Fluid properties, Hydrostatic Pressure, Liquid in relative equilibrium, Buoyancy & Flotation		Fluid Kinematics	Fluid Dynamics, Weirs & Notches	Laminar flow, Turbulent flow, Boundary layer theory, Drag & lift		Flow through Pipes	Open channel flow	Hydraulic Machines	Modal Analysis / Dimensional Analysis
Soil Mechanics (SM)	SM-1		SM-2	SM-3	SM-4	SM-5	SM-6	SM-7	SM-8	
	Soil Water Relationship, Soil Classification, Index Properties, Compaction of Soil		Effective stress, Seepage, Permeability	Consolidation	Shear Stress/ Vertical Stress	Earth Pressure, Stability of Slopes	Shallow Foundation	Deep foundation	Exploration of Soil, Expansive Soil, Geosynthetics, Ground Modification Techniques	
Transportation (TF)	TF-1	TF-2	TF-3					TF-4		
	Geometric Design	Pavement Design	Materials, Construction, Maintenance, Hill roads					Traffic Engineering		
Surveying (SU)	SU-1			SU-2	SU-3		SU-4		SU-5	
	Scale/ Accuracy, Measurements of horizontal distances, Theory of Errors			Angular Measurements, Theodolite	Levelling, Contouring, Curve setting, Measurement of Area & Volume		Triangulation & Traversing, Plane table, Geology		Field Astronomy, GPS, GIS, Photogrammetry, Remote Sensing	
Irrigation (IR)	IR-1			IR-2	IR-3	IR-4				
	Irrigation Methods, Soil Moisture & Plants Relationships, Water Requirements of Crops & Canal Irrigation, Water logging and Soil Reclamation			Canal Design	Gravity dams	Canal Regulation Work, Canal Head Works & Seepage Theory, River Engineering, Cross Drainage Works, Energy Dissipators, Spillways				
Hydrology (HY)	HY-1	HY-2	HY-3	HY-4		HY-5				
	Hydrographs	Flood & Flood Routing	Ground Water	Evapo-Transpiration, Surface Runoff		Abstract from Precipitation, Hydrological Cycle, Precipitation & Measurement, Stream Flow Measurement				
Railways (RAIL)	Rail-1				Rail-2					
	Geometric Design of Track, Traction & Tractive Resistance				Rails, Rail Joints, Sleepers, Fasteners, Ballast, Creep, Point & Crossing, Track Junction, Signalling, Station Yards, Miscellaneous					
Airports / Ports & Harbours / Tunneling										

For Any Query Regarding The Program

Call us : 09711853908, 011-41013406 or Mail us : cqpp.iesmaster@gmail.com

ENGINEERING SERVICES EXAMINATION,(PRELIMINARY)- 2021

SERVICE:MECHANICAL ENGINEERING

0101639	0101736	0101876	0102334	0102409	0102426	0201399	0201498	0201750
0403053	0403063	0403154	0403368	0403800	0403822	0403839	0404161	0404274
0404449	0404475	0404564	0404600	0504667	0504688	0505091	0505310	0506152
0506387	0506945	0507741	0508012	0601950	0602005	0602447	0602528	0701303
0701623	0701699	0807004	0807064	0807065	0807191	0807259	0807324	0807380
0807432	0807443	0807447	0807514	0807515	0807580	0807663	0807752	0807819
0807887	0807926	0807980	0808026	0808037	0808128	0808147	0808174	0808191
0808198	0808326	0808368	0808410	0808467	0808621	0808818	0808897	0809065
0809172	0809363	0809447	0809546	0809640	0809700	0809716	0809750	0809827
0809938	0809971	0809986	0810084	0810215	0810323	0810350	0810397	0810482
0810539	0810546	0810643	0810644	0810717	0810817	0810860	0810876	0810877
0810953	0811000	0811019	0811088	0811153	0811174	0811204	0811235	0811441
0811444	0811459	0811493	0811551	0811582	0811751	0811756	0811855	0811877
0811926	0811996	0812116	0812153	0812206	0812215	0900520	0900603	1003997
1004358	1004443	1004624	1004743	1004919	1005086	1005238	1005531	1005709
1005809	1006312	1103384	1103425	1103431	1103437	1103614	1103833	1104034
1104092	1104122	1104166	1104179	1104191	1104203	1104260	1104270	1104437
1104454	1104461	1104463	1104477	1104502	1104558	1104652	1104660	1104756
1104777	1201831	1202477	1202483	1202756	1202795	1203072	1203635	1302009
1302095	1303000	1401070	1401180	1401213	1401281	1401287	1401462	1401587
1503634	1503748	1503814	1503939	1504021	1504141	1504170	1505140	1505374
1700431	1902250	2100548	2100703	2100706	2401406	2401487	2402262	2603600
2603645	2603762	2604107	2604178	2604262	2604528	2604617	2604643	2604649
2604740	2604824	2604846	2604959	2604986	2605023	2605063	2605085	2605508
2605544	2605596	2605598	2605622	2605624	2605673	2605716	2605733	3501225
3501257	3501516	3501819	3600285	3600321	3900572	4001233	4101372	4101612
4101927	4102048	4600101	4901631	4901973	4902077	4902127	4902190	4902293
5101536	5101625	5101741	5101902	5102040	5102419	5300235	5400414	5400473
5400621								



IES MASTER

Institute for Engineers (IES/GATE/PSUs)

ESE-2021 Conventional Test Schedule, Mechanical Engineering

Date	Topic
21st Aug. 2021	N.T. : TH-1, TH-2, HT-1, RAC-1, MS-1, MS-2 R.T. :
29th Aug. 2021	N.T. : FMM-1, RAC-2, IE-2, RSE-1 R.T. : TH-2, MS-1, HT-1
5th Sept. 2021	N.T. : MECH-1, MECH-2, HT-2, RE-1 R.T. : RAC-1, RAC-2, MS-2
12th Sept. 2021	N.T. : FMM-2, PPE-1, RSE-2 R.T. : HT-1, HT-2, TH-1, FMM-1, IE-2
19th Sept. 2021	N.T. : ICE-1, ToM-2, MR-1 R.T. : FMM-2, RSE-1, RSE-2, PPE-1
26th Sept. 2021	N.T. : ToM-1, MR-2, PROD-1 R.T. : MS-1, MECH-1, MECH-2, TH-1
3rd Oct. 2021	N.T. : IE-1, PPE-2, FMM-3, R.T. : PPE-1, MS-2, HT-1, PROD-1, ToM-1, ICE-1
10th Oct. 2021	N.T. : PPE-3, PROD-2 R.T. : RAC-1, RAC-2, RE-1, IE-1, MR-1, MECH-1
17th Oct. 2021	N.T. : ToM-3, ICE-2 R.T. : MR-2, RSE-1, RSE-2, HT-1, HT-2, FMM-2
24th Oct. 2021	N.T. : RE-2, MD-1 R.T. : PPE-1, PPE-2, FMM-3, ToM-2, ToM-3
31st Oct. 2021	N.T. : Mech-3, MD-2 R.T. : FMM-1, FMM-2, PROD-1, PROD-2, MECH-1, ICE-2, MD-1
5th Nov. 2021	Full Length-1 (Test Paper-1 + Test Paper-2)
9th Nov. 2021	Full Length-2 (Test Paper-1 + Test Paper-2)
14th Nov. 2021	Full Length-3 (Test Paper-1 + Test Paper-2)

Test Type

Timing

Conventional Test _____ 10:00 A.M. to 1:00 P.M.

Conventional Full Length Test Paper-1 ____ 10:00 A.M. to 1:00 P.M.

Conventional Full Length Test Paper-2 ____ 02:00 P.M. to 5:00 P.M.

Note : The timing of the test may change on certain dates. Prior information will be given in this regard.

*N.T. : New Topic. *R.T. : Revision Topic

Call us : 8010009955, 011-41013406 or Mail us : info@iesmaster.org

Subject Code Details

Thermodynamic	TH-1		TH-2	
	Thermodynamic systems and processes; Zeroth, First and Second Laws of Thermodynamics. properties of pure substance.		Entropy, Irreversibility and availability; Real and Ideal gases; compressibility factor; Gas mixtures.	
Heat Transfer	HT-1		HT-2	
	Mode of Heat Transfer, Steady and unsteady heat conduction, Thermal Resistance, Fins, Radiative heat transfer.		Free and forced convection, boiling and condensation, Heat exchanger Performance Analysis.	
IC Engines	ICE-1		ICE-2	
	SI and CI Engines, Engine Systems and Components, Fuels.		Performance characteristics and testing of IC Engines; Emissions and Emission Control. Otto, Diesel and Dual Cycles.	
Refrigeration Air Conditioning	RAC-1		RAC-2	
	Vapour compression refrigeration, Refrigerants, Compressors, Other types of refrigeration systems like Vapour Absorption, Vapour jet, thermo electric and Vortex tube refrigeration and Heat pump.		Psychometric properties and processes, Comfort chart, Comfort and industrial air conditioning, Load calculations and Condensers, Evaporators and Expansion devices.	
Fluid Mechanics and Machinery	FMM-1		FMM-2	FMM-3
	Basic Concepts and Properties of Fluids, Manometry, Fluid Statics, Buoyancy, Equations of Motion such as velocity potential, Stream Function.		Bernoulli's equation and applications, Viscous flow of incompressible fluids, Laminar and Turbulent flows, Flow through pipes and head losses in pipes.	Reciprocating and Centrifugal pumps, Pelton wheel, Kaplan and Francis Turbines and other hydraulic machines.
Power Plant Engineering	PPE-1		PPE-2	PPE-3
	Steam and Gas Turbines, Rankine and Brayton cycles with regeneration and reheat.		Fuels and their properties, Flue gas analysis, Theory of Jet Propulsion – Pulse jet and Ram Jet Engines, Reciprocating and Rotary Compressors.	Boilers, power plant components like condensers, air ejectors, Electrostatic precipitators and cooling towers – their theory and design, types and applications
Renewable Sources of Energy	RSE-1		RSE-2	
	Solar Radiation, Solar Thermal Energy collection - Flat Plate and focusing collectors their materials and performance. Solar Thermal Energy Storage, Applications – heating, cooling and Power Generation.		Solar Photovoltaic Conversion; Harnessing of Wind Energy, Bio-mass and Tidal Energy – Methods and Applications, Working principles of Fuel Cells.	
Engineering Mechanics (SoM)	Mech-1		Mech-2	Mech-3
	Analysis of System of Forces, Friction, Centroid and Centre of Gravity, Dynamics.		Stresses and Strains-Compound Stresses and Strains, Bending Moment and Shear Force Diagrams.	Theory of Bending Stresses-Slope and deflection-Torsion, Thin and thick Cylinders, Spheres.
Engineering Materials	MS-1		MS-2	
	Basic Crystallography, Alloys and Phase diagrams, Heat Treatment.		Ferrous and Non Ferrous Metals, Non metallic materials, Basics of Nano-materials, Mechanical Properties and Testing, Corrosion prevention and control.	
Mechanisms and Machines	TOM-1		TOM-2	TOM-3
	Type of kinematics pair, Mobility, Inversions, Kinematic Analysis, Velocity and Acceleration analysis of Planar Mechanisms. CAMs with uniform acceleration and retardation, cycloidal motion, oscillating followers; Effect of Gyroscopic couple on automobiles, ships and aircrafts. Governors.		Vibrations –Free and forced vibration of undamped and damped SDOF systems, Transmissibility Ratio, Vibration Isolation, Critical Speed of Shafts.	Geometry of tooth profiles, Law of gearing, Interference, Helical, Spiral and Worm Gears, Gear Trains- Simple, compound and Epicyclic. Slider crank mechanisms, Balancing of revolving and reciprocating masses.
Design of Machine Elements	MD-1		MD-2	
	Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as riveted, welded and bolted joints.		Shafts, Spur gears, rolling and sliding contact bearings, Brakes and clutches, flywheels.	
Manufacturing, Industrial and Maintenance Engineering	PROD-1		IE-1	RE-1
	Metal casting-Metal forming, Metal Joining, computer Integrated manufacturing, FMS.		Production planning and Control, Inventory control	Failure concepts and characteristics-Reliability, Failure analysis, Machine Vibration, Data acquisition, Fault Detection, Vibration Monitoring.
	PROD-2		IE-2	RE-2
	Machining and machine tool operations, Limits, fits and tolerances, Metrology and inspection.		Operations research - CPM-PERT	Field Balancing of Rotors, Noise Monitoring, Wear and Debris Analysis, Signature Analysis, NDT Techniques in Condition Monitoring.
Mechatronics and Robotics	MR-1		MR-2	
	Microprocessors and Micro controllers: Architecture, programming, I/O, Computer interfacing, Programmable logic controller. Sensors and actuators, Piezoelectric accelerometer, Hall effect sensor, Optical Encoder, Resolver, Inductosyn, Pneumatic and Hydraulic actuators, stepper motor, Control Systems- Mathematical modeling of Physical systems, control signals, controllability and observability		Robotics, Robot Classification, Robot Specification, notation; Direct and Inverse Kinematics; Homogeneous Coordinates and Arm Equation of four Axis SCARA Robot.	

ENGINEERING SERVICES EXAMINATION,(PRELIMINARY)- 2021

SERVICE:**ELECTRICAL ENGINEERING**

0102591	0102595	0103024	0103059	0202600	0202683	0202703	0202711	0202805
0202901	0202917	0203018	0203087	0203172	0203308	0203319	0203341	0302811
0302820	0302987	0302992	0303166	0303224	0303285	0303374	0303380	0303395
0303399	0303480	0303576	0303637	0404680	0404712	0404718	0404778	0404784
0404813	0404826	0405164	0405428	0405487	0405548	0405605	0508488	0508560
0508562	0508571	0508597	0508715	0508730	0508814	0508909	0508947	0509127
0509250	0509686	0509818	0509879	0509902	0509905	0509912	0509922	0602936
0603024	0603062	0603363	0603609	0603669	0603715	0603736	0603821	0702135
0702240	0702692	0812238	0812272	0812367	0812377	0812397	0812404	0812420
0812426	0812506	0812524	0812577	0812578	0812609	0812625	0812656	0812658
0812674	0812688	0812774	0812777	0812910	0812942	0812944	0812962	0812974
0812976	0812984	0813068	0813091	0813100	0813146	0813177	0813190	0813203
0813233	0813240	0813301	0813314	0813318	0813324	0813338	0813354	0813412
0813515	0813522	0813557	0813587	0813645	0813717	0813746	0813773	0813787
0813801	0813837	0813841	0813860	0813887	0813902	0813972	0814053	0814145
0814158	0814173	0814193	0814201	0814224	0814312	0814338	0814378	0814402
0814465	0814490	0814544	0814663	0814713	0814744	0814809	0814832	0814848
0814857	0814859	0814860	0814903	0814921	0814943	0814992	0814997	0815020
0815022	0815128	0815136	0815207	0815228	0815245	0815285	0815293	0815315
0815329	0815337	0815359	0815398	0815408	0815409	0815432	0815440	0815483
0815497	0815554	0815578	0815642	0815713	0815720	0815739	0815741	0815780
0815788	0815797	0815840	0900766	1006882	1006904	1006941	1007055	1007077
1007102	1007431	1007434	1007552	1007558	1007749	1007805	1007825	1008003
1008053	1008074	1008131	1008165	1008475	1008575	1008598	1008698	1008754
1008967	1009223	1009372	1009413	1009414	1009537	1009550	1009717	1104974
1105026	1105086	1105187	1105241	1105249	1105250	1105277	1105286	1105346
1105432	1105485	1105491	1105537	1105601	1105627	1105649	1105665	1105671
1105713	1105746	1105778	1105912	1106005	1106008	1106073	1106093	1106106
1106112	1106115	1106133	1106143	1106164	1106174	1106205	1106250	1106284
1106316	1106348	1106397	1106432	1106507	1106520	1106521	1106570	1106577
1106606	1106608	1106627	1106652	1106663	1106675	1106694	1106697	1106742
1106788	1106816	1106874	1106893	1106915	1106978	1106979	1107003	1107054
1107068	1107096	1107144	1107168	1107236	1204677	1204819	1303261	1303352
1303798	1303814	1303905	1401663	1401874	1401986	1402016	1505452	1505492
1505524	1505706	1505873	1506033	1506040	1506093	1506127	1506209	1506299
1506383	1506412	1506452	1506459	1506469	1506523	1506566	1506625	1506860
1506939	1506942	1506976	1507074	1507090	1507100	1507112	1507156	1902406
1902536	2100862	2100866	2100886	2100956	2100976	2101005	2402390	2402718
2402719	2605800	2605839	2605893	2605940	2605955	2605964	2606038	2606234
2606283	2606326	2606372	2606373	2606415	2606708	2606752	2606840	2606890
2606909	2606920	2606965	2606976	2607003	2607030	2607076	3400718	3502029
3502037	3502066	3502086	3502314	3502357	3900744	4102342	4102368	4102396
4102486	4102513	4102526	4102593	4102596	4102700	4102735	4103001	4103049
4500223	4902413	4902430	4902548	4902730	4902884	4902894	4902898	4902900
4902903	5001064	5001184	5001321	5001421	5102507	5102554	5102653	5103023
5103056	5103126	5103295	5103305	5103389	5200405	5300402	5400804	5400831
5400869	5400879	5400882	5400900					



IES MASTER

Institute for Engineers (IES/GATE/PSUs)

ESE-2021 Conventional Test Schedule, Electrical Engineering

Date	Topic
21st Aug. 2021	N.T. : ECF-1, MC-1, MC-2, ADE-2
	R.T. :
29th Aug. 2021	N.T. : ECF-2, MI-1, CS-1, CS-2
	R.T. : ECF-1, MC-1, MC-2, ADE-2
5th Sept. 2021	N.T. : ECF-3, MI-2, MC-3, MC-4
	R.T. : ECF-2, MI-1, CS-1, CS-2
12th Sept. 2021	N.T. : BEX-1, ADE-1, ADE-3
	R.T. : ECF-3, MI-2, MC-3, MC-4
19th Sept. 2021	N.T. : EM-1, MATH-1, PS-1, SSP-1
	R.T. : BEX-1, ADE-1, ADE-3
26th Sept. 2021	N.T. : CF-1, MATH-2, PS-2, PE-1
	R.T. : EM-1, MATH-1, PS-1, SSP-1
3rd Oct. 2021	N.T. : BEX-2, MI-3, CS-3, SSP-2
	R.T. : CF-1, MATH-2, PS-2, PE-1
10th Oct. 2021	N.T. : EM-2, PS-3
	R.T. : BEX-2, MI-1, MI-3, CS-3, SSP-2, ADE-3, MC-1, MC-2
17th Oct. 2021	N.T. : CF-2, PE-2
	R.T. : EM-2, ECF-1, ECF-3, MI-2, PS-2, PS-3, ADE-2, CS-2
24th Oct. 2021	N.T. : CF-3, MATH-3
	R.T. : CF-2, ECF-2, MI-1, BEX-1, EM-1, CS-1, MI-3, CS-3, ADE-3, PE-2, SSP-1
31st Oct. 2021	N.T. :
	R.T. : MATH-1, MATH-3, EM-1, EM-2, ECF-1, BEX-2, CF-3, ADE-2, CS-2, PS-1, PS-3, PE-1, SSP-2
5th Nov. 2021	Full Length-1 (Test Paper-1 + Test Paper-2)
9th Nov. 2021	Full Length-2 (Test Paper-1 + Test Paper-2)
14th Nov. 2021	Full Length-3 (Test Paper-1 + Test Paper-2)

Test Type

Timing

Day

Conventional Test	10:00 A.M. to 1:00 P.M.	Sunday
Conventional Full Length Test Paper-1	10:00 A.M. to 1:00 P.M.	Sunday
Conventional Full Length Test Paper-2	02:00 P.M. to 5:00 P.M.	Sunday

Note : The timing of the test may change on certain dates. Prior information will be given in this regard.

*N.T. : New Topic. *R.T. : Revision Topic

Call us : 8010009955, 011-41013406 or Mail us : info@iesmaster.org

Subject Code Details

Engineering Mathematics (MATH)	MATH-1		MATH-2		MATH-3	
	♦ Linear Algebra ♦ Complex Variables ♦ Transform Theory		♦ Calculus ♦ Differential Equations		♦ Probability and Statistics ♦ Numerical Methods	
Electrical Materials (EM)	EM-1			EM-2		
	♦ Crystal Structures & Solid State ♦ Band Theory ♦ Dielectrics ♦ Magnetic materials			♦ Conductive materials ♦ Photo conductivity ♦ Nano materials ♦ Superconductors		
Electric Circuits & Fields (ECF)	ECF-1		ECF-2		ECF-3	
	♦ Circuit Elements ♦ 3-phase Circuits ♦ Network Graphs ♦ Transient and steady state Response		♦ Magnetically Coupled Circuits ♦ Network Theorems ♦ Two-port networks ♦ Resonance ♦ Basic Filters		♦ Electrostatics and Magneto statics ♦ Time varying fields & Maxwell's Equations	
Electrical & Electronic Measurements	MI-1		MI-2		MI-3	
	♦ Errors, Units, Dimensions & standards ♦ Galvanometers ♦ Types of Instruments ♦ Measurement of Power		♦ Measurement of Energy ♦ Measurement of resistance ♦ Potentiometers ♦ AC bridges ♦ CRO ♦ Q-meter		♦ Electronic Instrumentation ♦ Data Acquisition System ♦ Transducers	
Computer Fundamentals (CF)	CF-1		CF-2		CF-3	
	♦ Architecture, CPU, I/O, Memory, Peripheral devices ♦ Boolean algebra ♦ Number system arithmetic functions		♦ Basic of OS, Virtual memory ♦ File system ♦ Networking		♦ Data Representation and Programming, Programming languages	
Basic Electronics Engineering (BEX)	BEX-1			BEX-2		
	♦ Basics of diodes, BJT, FET, MOSFET			♦ Transistor amplifiers – equivalent circuits & frequency response ♦ Oscillators, Feedback amplifiers		
Analog Digital Electronics (ADE)	ADE-1		ADE-2		ADE-3	
	♦ OPAMP ♦ Multivibrator, Sample and Hold circuits ♦ Filters		♦ Digital Electronics ♦ Microprocessors		♦ Communications	
Systems and Signal Processing (SSP)	SSP-1			SSP-2		
	♦ Continuous & discrete-time signals ♦ Shifting and scaling ♦ Linear, time-invariant and causal system ♦ Laplace & Z-transform			♦ Fourier series ♦ Discrete Fourier Transform ♦ FFT ♦ FIR and IIR Filters ♦ Bilinear Transformation		
Control System (CS)	CS-1		CS-2		CS-3	
	♦ Basics ♦ Block diagram Algebra ♦ Signal flow ♦ Mathematical Modeling		♦ Time Response Analysis ♦ Stability ♦ Root Locus		♦ Controllers & Compensators ♦ State Variable Analysis ♦ Frequency Response & its stability	
Electrical Machines (MC)	MC-1	MC-2		MC-3		MC-4
	♦ Transformers ♦ Basic concepts of Rotating Machines	♦ Polyphase Induction Machines ♦ Single Phase motors		♦ DC Machines		♦ Synchronous Machines
Power System (PS)	PS-1		PS-2		PS-3	
	♦ Electric Power Sources-Thermal, Hydro Nuclear, Wind & Solar ♦ Performance of lines & cables ♦ HVDC & Corona ♦ Smart Grid; Environment Implications		♦ Symmetrical Components & Fault Analysis ♦ Power System stability & dynamics ♦ Load flow; Matrix Representation		♦ Economic Load Dispatch & Power Economics ♦ Load Frequency control ♦ Voltage Control & Compensation ♦ FACTS ♦ Power System Protection ♦ Solid state Relays	
Power Electronics and Drivers (PE)	PE-1			PE-2		
	♦ Power Semiconductor Devices ♦ High Frequency Inductors & transformers ♦ Diode Rectifiers ♦ Phase Controlled Rectifiers			♦ Choppers; DC-DC switched mode converters ♦ Inverters; DC-AC switched mode converters ♦ AC Voltage Controllers ♦ Cycloconverters ♦ Electric Drives ♦ Resonant Converters		

ENGINEERING SERVICES EXAMINATION,(PRELIMINARY)- 2021

SERVICE:**ELECTRONICS AND TELECOM ENGINEERING**

0103338	0103453	0103500	0103535	0103543	0103584	0203548	0203551	0203666
0203714	0203774	0203789	0304000	0304086	0304134	0304290	0304345	0304628
0405893	0405909	0405932	0406062	0406244	0406307	0406338	0406392	0510043
0510123	0510263	0510615	0510801	0510813	0510822	0510827	0511032	0511128
0511191	0511228	0511610	0604230	0604592	0604880	0604892	0605004	0702909
0815899	0815920	0815928	0815938	0815963	0816045	0816055	0816056	0816057
0816059	0816088	0816122	0816128	0816139	0816201	0816242	0816269	0816272
0816273	0816291	0816395	0816419	0816453	0816468	0816624	0816670	0816672
0816755	0816773	0816797	0816801	0816854	0816860	0816944	0816970	0817038
0817042	0817068	0817082	0817100	0817116	0817143	0817212	0817269	0817402
0817480	0817502	0817518	0817540	0817572	0817603	0817604	0817656	0817733
0817885	0817943	0817944	0817990	0817992	0818007	0818012	0818018	0818076
0818085	0818111	0818135	0818165	0818205	0818207	0818333	0818344	0818365
0818480	0818534	0818542	0818584	0818590	0818629	0818635	0818663	0818669
0818672	0818702	0818726	0818746	0818818	0818984	0818993	0819064	0819100
0900981	0901007	0901198	1009942	1010039	1010097	1010144	1010229	1010302
1010343	1010468	1010499	1010581	1010720	1010736	1010845	1011067	1011076
1011207	1011269	1011344	1011352	1011413	1011433	1011657	1011703	1011811
1011979	1012014	1012024	1012126	1012293	1012318	1107313	1107421	1107433
1107473	1107482	1107513	1107516	1107519	1107536	1107546	1107554	1107610
1107620	1107645	1107662	1107692	1107725	1107804	1107819	1107881	1107911
1107958	1107960	1108016	1204854	1204966	1205325	1205597	1205641	1205685
1304345	1304548	1304686	1304736	1304840	1402059	1402070	1402152	1507223
1507340	1507363	1507501	1507567	1507624	1507628	1507711	1507725	1507770
1507778	1507920	1508090	1903174	1903183	1903212	1903579	2101105	2403676
2404087	2607307	2607317	2607382	2607656	2607692	2607694	2607722	2607852
2607915	2608117	2608197	2608313	2608360	2608372	2608381	3400830	3400854
3400891	3502486	3502615	3502766	3502789	3502861	4002140	4002265	4103068
4103075	4103252	4103269	4103369	4103456	5001476	5001573	5001589	5001669
5001700	5001728	5103495	5103499	5103922	5103949	5104027	5104082	5200594
5300529	5401041	5401107						

CONCLUDED

UNION PUBLIC SERVICE COMMISSION

NEW DELHI - 110 069 -

6th August,2021 / 15 Sravana, Saka 1943.



IES MASTER

Institute for Engineers (IES/GATE/PSUs)

ESE-2021 Conventional Test Schedule, Electronics & Telecomm. Eng.

Date	Topic
21st Aug. 2021	N.T. : ACT-1, ADC-1, ADC-3
	R.T. :
29th Aug. 2021	N.T. : NT-1, MI-1, CS-2
	R.T. : ACT-1, ADC-1, ADC-3
5th Sept. 2021	N.T. : EMT-1, MI-2, BEE-1
	R.T. : NT-1, CS-2, ADC-1
12th Sept. 2021	N.T. : BEX-1, COMM-1, COMM-2
	R.T. : EMT-1, MI-2, BEE-1
19th Sept. 2021	N.T. : MAT-1, AET-1, CS-1
	R.T. : BEX-1, COMM-1, COMM-2, MI-1
26th Sept. 2021	N.T. : CO-1, AET-2, BEX-3
	R.T. : MAT-1, CS-1, ADC-3
3rd Oct. 2021	N.T. : BEX-2, MI-3, CS-3
	R.T. : CO-1, AET-1, BEX-3
10th Oct. 2021	N.T. : MAT-2, BEE-2, NT-2
	R.T. : BEX-2, MI-3, CS-3, AET-2
17th Oct. 2021	N.T. : CO-2, ADC-4, EMT-2
	R.T. : MAT-2, BEE-2, NT-2, AET-1, BEX-3
24th Oct. 2021	N.T. : ADC-2, ACT-2, EMT-3
	R.T. : CO-2, ADC-4, BEX-2, MI-3, CS-3
31st Oct. 2021	N.T. : NT-3, COMM-3
	R.T. : BEX-1, BEX-3, CS-2, EMT-3, ACT-2, ADC-2
5th Nov. 2021	Full Length-1 (Test Paper-1 + Test Paper-2)
9th Nov. 2021	Full Length-2 (Test Paper-1 + Test Paper-2)
14th Nov. 2021	Full Length-3 (Test Paper-1 + Test Paper-2)

Test Type

Timing

Day

Conventional Test	10:00 A.M. to 1:00 P.M.	Sunday
Conventional Full Length Test Paper-1	10:00 A.M. to 1:00 P.M.	Tuesday
Conventional Full Length Test Paper-2	02:00 P.M. to 5:00 P.M.	Tuesday

Note : The timing of the test may change on certain dates. Prior information will be given in this regard.

*N.T. : New Topic. *R.T. : Revision Topic

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Subject Code Details

Basic Electronics Engineering (BEX)	BEX-1		BEX-2		BEX-3	
	♦ Basics of Semiconductors ♦ Diode : Basics, Characteristics & its types ♦ BJT, JFET, MOSFET-Basic Structure & Characteristics		♦ Transistor Amplifiers ♦ Oscillators & Other circuits ♦ Basic of Linear ICs ♦ Operational Amplifier & their applications		♦ Basics of ICs; Bipolar, MOS & CMOS ICs ♦ Optical Sources / Detectors ♦ Basics of Optoelectronics & Applications	
Basic Electrical Engineering (BEE)	BEE-1			BEE-2		
	♦ Single Phase AC circuits ♦ Transformer ♦ DC Machine			♦ Induction Machine ♦ Synchronous Machine ♦ Electrical Power Sources, Basics of Batteries & its uses		
Material Science (MAT)	MAT-1			MAT-2		
	♦ Crystalline Structure ♦ Dielectric properties of matter ♦ Ceramic materials ♦ Magnetic properties of materials			♦ Insulating laminates for electronics ♦ Conductors & Superconductors ♦ Semiconductor & Optical materials ♦ Nano materials Nano-optical / Magnetic / Electronic materials		
Electronic Measurement and Instrumentation (MI)	MI-1		MI-2		MI-3	
	♦ Error analysis & basics of measurement ♦ Basic measuring instruments		♦ Measurement of Resistance ♦ AC Bridges ♦ Potentiometer ♦ Cathode Ray Oscilloscope (CRO) ♦ Q-meter		♦ Basics of electronic measurements ♦ Digital & electronic voltmeter ♦ Digital frequency meter ♦ Transducers & Displays ♦ Basics of Telemetry ♦ Data Acquisition System	
Network Theory (NT)	NT-1		NT-2		NT-3	
	♦ Network elements ♦ Network theorems ♦ 2-port networks		♦ Transient and Steady State Response ♦ Steady State Sinusoidal analysis ♦ Resonance		♦ Network Functions ♦ Magnetically Coupled Circuits ♦ Graph Theory ♦ Filters ♦ State equations for networks	
Analog and Digital Circuits (ADC)	ADC-1	ADC-2		ADC-3		ADC-4
	♦ Small Signal equivalent of Diodes, BJTs and FETs ♦ Different Diode Circuits ♦ Biasing and Stability of BJTs & JFET amplifier circuits	♦ Analysis / Design of amplifiers signal & multi-stage ♦ Feedback & its uses ♦ Active filters, timers, multipliers, wave shaping		♦ Boolean Algebra & Logic Gates ♦ Combinational circuits : Design & Applications		♦ Sequential circuits: Design & Applications ♦ Design IC Logic families ♦ A/D & D/A converters
Analog and Digital Communication (COMM)	COMM-1		COMM-2		COMM-3	
	♦ Analog Communication Systems		♦ Digital Communication Systems		♦ Random Signals and Noise ♦ Information & Probability Theory ♦ Multiple Access-TDMA, FDMA, CDMA	
Control Systems (CS)	CS-1		CS-2		CS-3	
	♦ Signals and Systems ♦ System Realization ♦ Transforms & their Applications		♦ Basics of Control Systems ♦ Block Diagram & Signal Flow Graphs ♦ Time Response Analysis ♦ Routh Hurwitz criteria & Root Locus Technique		♦ Frequency Response Analysis ♦ Stability in Frequency Domain ♦ Controllers and compensators ♦ State Space Analysis	
Computer Organization and Architecture (CO)	CO-1			CO-2		
	♦ Basics of Computer Organization ♦ Operating Systems			♦ Database Management Systems ♦ Data Structure and Programming		
Electromagnetics (EMT)	EMT-1		EMT-2		EMT-3	
	♦ Elements of Vector Calculus ♦ Electrostatics ♦ Magnetostatics		♦ Maxwell's Equations ♦ Electromagnetic Wave propagation through different media ♦ Transmission Lines		♦ Waveguides ♦ antenna Theory	
Advanced Electronics Topics (AET)	AET-1			AET-2		
	♦ VLSI Technology ♦ VLSI Design ♦ Mealy and Moore circuit design ♦ Pipeline concept and functions ♦ Designs for testability and examples			♦ Digital Signals Processing ♦ Digital Filters ♦ Speech / Audio / Radar Signal Processing ♦ Microprocessors and Microcontrollers ♦ Embedded Systems		
Advanced communication Topics (ACT)	ACT-1			ACT-2		
	♦ Communication Networks : Principles / Practices / Technologies / Uses / OSI Model / Security ♦ Basic packet multiplexed streams / scheduling ♦ Protocols (TCP / TCP-IP) ♦ Cellular Networks : Types, Analysis			♦ Microwave & Satellite Communication ♦ Fiber Optic Communication		