PARISUTHAM INSTITUTE OF TECHNOLOGY AND SCIENCE (Approved by AICTE, Affiliated to Anna University, Chennai, India) NH 67, Ring Road, Nanjikottai, Thanjavur- 613006, Tamil Nadu

GUIDANCE FOR COMPETITIVE EXAMINATIONS AND CAREER COUNSELLING OFFERED BY THE INSTITUTION ACADEMIC YEAR 2015-2016

GUIDANCE FOR COMPETITIVE EXAMINATIONS

TECHNICAL APTITUDE TRAINING SESSION (TATS)

Goal

The main objectives of conducting TATS in our college are as follows

- To persuade the students to possess a sound technical knowledge in the area of study
- To enhance the programming skills of students
- To train the students in time- bound answering of aptitude tests
- To help students excel in language and communication skills
- To prepare the students for different levels of selection process such as group discussions and one-to- one interviews
- To help boost the students' confidence level through soft skills training
- To inculcate the importance of projecting a smart appearance
- To groom the students to the corporate level
- To ensure that all eligible students are employed by the end of the final year of study.

The Context

TATS are designed to identify suitable candidates for technical roles within the emergency services and engineering jobs.



THE PRACTICE

Coaching

- Provide coaching to ensure the improvement to students' scores.
- Coaching is conveyed by experienced resources in their particular field.
- Coaching is directed for final and pre final year students.
- Weekly around 150 minutes honing is led to final year students in their individual engineering field.

• Weekly around 50 minutes honing is led to pre- final year students in their individual engineering field.

Test

To final year students:

- Objective, detail questions which must be completed in a predefined time.
- Typically have around 50 minutes to complete each test question.
- The time limit and the level of difficulty are defined in such a way that only 1-5% of the population can correctly solve all the test questions inside the time allotment gave.
- Each test question incorporates a scenario and multiple answer options. There is only one correct answer.
- To solve a test question you need to identify one or more logical rules, engineering rules and apply them to identify the next or the 'odd-one-out' shape.
- For detail questions, they need to compose correct clarification.

To pre-final year students:

- Objective questions which must be completed in a predefined time.
- Typically have around 50 minutes to complete each test question.
- The time limit and the level of difficulty are defined in such a way that only 1-5% of the population can correctly solve all the test questions inside the time allotment gave.
- Each test question incorporates a scenario and multiple answer options. There is only one correct answer.
- To solve a test question you need to identify one or more logical rules, engineering rules and apply them to identify the next or the 'oddball' shape.

Answer Key Discussion

- Answer key discussion is coordinated for 50 minutes.
- In this area, clear clarification will be given by experienced assets in their particular field.
- At similar time, questions will be cleared, which helps them to fathom more inquiries in future.



PARISUTHAM INSTITUTE OF TECHNOLOGY AND SCIENCE

Department of Civil Engineering AY 2015-16 III Year V Sem. EINSTEIN BATCH

TATS - LESSON PLAN

	TATS – LESSON PLAN 1. Building Materials	
Lecture No.	Contents of Lecture	Staff in charge
1	Bricks - Classification - Manufacturing of clay bricks - Tests on bricks - Compressive Strength - Water Absorption - Efflorescence - Bricks for special use -	ži.
2	Cement - Ingredients - Types and Grades - Properties of cement and Cement mortar - Hydration - Compressive strength - Tensile strength - Fineness- Soundness and consistency	Mr. A. Govandan
3	Properties of fresh concrete – Slump – Flow and compaction Factor – Properties of hardened concrete – Compressive, Tensile and shear strength – Modulus of rupture – Tests – Mix specification – Mix proportioning	. * =
	2. Surveying	
4.	Definition- Classifications - Basic principles-Equipment and accessories for ranging and chaining - Methods of ranging -	
5	Errors in linear measurement and their corrections - obstacles - Traversing - Plotting - applications- enlarging the reducing the figures	
. 6	Compass - Basic principles - Types - Bearing - Systems and conversions- Sources of errors - Local attraction - Magnetic declination-Dip-Traversing - Plotting	Mr. A. Govandan
7	Level line - Horizontal line - Datum - Bench marks -Levels and staves - temporary and permanent adjustments - Methods of levelling	
8	- Fly levelling - Check levelling - Procedure in levelling - Booking -Reduction - Curvature and refraction - Reciprocal levelling - Sources of Errors in levelling- Precise levelling - Types of	3 2 2
100	instruments -	
Tone	3. Strength of Materials	
9	Strain energy and strain energy density – strain energy due to axial load, shear, flexure and torsion – Castigliano's theorems –	8 8
10	Concept of Analysis - Propped cantilever and fixed beams-fixed end moments and reactions - Theorem of three moments - analysis of continuous beams	Mr. A. Govandan
11	Euler's theory of long columns - critical loads for prismatic columns with different end conditions; Rankine-Gordon formula for eccentrically loaded columns	2
Jack Tu Beau	4. Structural Design	
12	Limit State philosophy as detailed in IS code - Design of beams and slabs by working stress method.	N. E
13	Analysis and design of singly and doubly reinforced rectangular and flanged beams by limit state method.	
14	Analysis and design of one way, two way and continuous slabs	0

	subjected to uniformly distributed load for various boundary conditions.	
	5. Soil Mechanics	
15	Nature of soil – phase relationships – Soil description and classification for engineering purposes, their significance – Index properties of soils - BIS Classification	
16	system - Soil compaction Theory, comparison of laboratory and field compaction methods - Factors influencing compaction behaviour of soils	
17	Slope failure mechanisms – Types - infinite slopes – finite slopes – Total stress analysis for saturated clay – Fellenius method - Friction circle method –	Mr. A. Govandar
18	Types of footings – Contact pressure distribution: Isolated footing – Combined footings	
19	Types and proportioning – Mat foundation – Types and applications	
20	Proportioning - Floating foundation - Seismic force consideration	
21	Use of stability number	
	6. Concrete Technology	
22	Cement-Different types-Chemical composition and Properties - Tests on cement-IS Specifications	
23	Aggregates-Classification-Mechanical properties and tests as per BIS Grading requirements-	
24	Accelerators-Retarders- Plasticisers- Super plasticizers- Water proofers	
25	Principles of Mix Proportioning-Properties of concrete related to Mix Design-Physical properties of materials required for Mix Design	Mr. A. Govandan
26	Nominal Mix-BIS Method of Mix Design - Mix Design Examples	
27	- Mineral Admixtures like Fly Ash, Silica Fume, Ground Granulated Blast Furnace Slag	
28	Metakaoline -Their effects on concrete properties	r. e
29	Design Mix	
30	Water- Quality of water for use in concrete.	AP N

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Thanjavur - India.



PARISUTHAM INSTITUTE OF TECHNOLOGY & SCIENCE, THANJAVUR DEPARTMENT OF CIVIL ENGINEERING III YEAR V SEMESTER

TATS-3

Hydraulic Engineering

Duration: 50 Mins

Max. Marks: 20

PART-A

Answer the following questions

4 X 5 = 20 Marks

- 1. Calculate the specific weight, mass density, specific gravity and specific volume of oil having a volume of 4.5m3 and weight of 40kN.
- 2. Find the specific weight, mass density, specific volume and specific gravity of oil having a volume of 2 litre of petrol weights 13N.
- 3. Calculate the amount of litre with the equivalent of the 1TMC.
- 4. Calculate the quantity of water in litre with the equivalent of the 10TMC.

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Tomilnadu, India.

LIST OF STUDENTS WITH MARKS

S.No.	Register Number	r Name of the Candidate	TI	T2	T3	T4	T5	Т6	
1,			10	55		70	70	80	75
2.			10	55	•	60	55	80	80
3.	821313103003		13	75		85	AB	65	85
4.	821313103004	DINESH.S	AB	60		50	65	70	75
5.	821313103005	GANESHKUMAR K.L.	AB	AB		55	75	70	70
6.	821313103006		AB	AB		65	AB	AB	70
7.	821313103007	HEMANANDHANI.S	AB	55		75	85	70	AB
8.	821313103008	JAYARAMKUMAR.V	06	15		55	AB	AB	AB
9.	821313103009		10	60		70	80	75	80
10	821313103010	JOYCE.J	AB	80		75	AB	75	80
11	821313103011	KATHIRESAN.K	AB	70		50	80	80	AB
12	821313103012	KAVIPRIYA.R	11	65		AB	75	80	75
13	821313103013	LAKSHMIGANTH.A	AB	40		AB	70	75	75
	821313103014	LAKSHMIPRIYA.U	11	AB		50	85	85	85
15	821313103015	MANIKANDAN.A	AB	60		50	55	50	AB
16	821313103016	MARUDHUPANDIYA	10	70	•	55	AB	T 15500000 11	AB
17	821313103017	MOHAMED SHEIK	08	AB		60	90	65 AB	AB
	821313103019	NIVETHITHA.N.S	11	55		AB	75		AB
	821313103020	PAVATHARINI.P	11	50		70	AB	65	AB
	821313103021	PRANCHANAMARY.A	10	65		65	80	75 80	80
21	821313103022	PRATHEEBA.V	AB	65		65	75		80
22	821313103023	RAGHUL.P	09	20		60	50	85	AB
23	821313103024	RAJESH.R	12	65		60	70	70	75
24	821313103025	RAJKUMAR.K.S	AB	65	•	65	95		AB
25 8	821313103026	REVANTH.K	14	AB	•	60	90	AB AB	75
	821313103027	SABARINATHAN.R	10	35		70	50	AB	75
27 8	321313103028	SANTHOSH	10	70		AB	AB		AB
	321313103029	SARATHI.P	10	50		55	70	AB AB	85
	321313103030	SASIDHARAN.B	07	70	•	60	80	80	80
4.0	321313103032	SUDHAKARAN.G	АВ	75		60	AB	AB	80
	21313103033	TAMIZHARASAN.P.S	10	35		50	AB	75	85
	21313103034	VEERAPANDIYAN.R	10	85		65	AB	75	80
_	21313103035	VETRISELVAN.K	AB	65	•	55	85	70	AB
	21313103036	VIMALRAJ.M.R	AB	65		55	85	AB	85
	21313103301	GOVINDHA RAJ.P	05	30	•	55	85	55	75
	21313103701	KAVIYA.K	12	60		70	70	2333	75
37 8	21313103702	ABARNA.P	AB	AB		AB	AB	75 60	75

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Tamilnadu, India

ATTENDANCE AND ASSESSMENT RECORD

(Theory Course)



PARISUTHAM INSTITUTE OF TECHNOLOGY AND SCIENCE

THANJAVUR - 613 006

Name & Department

of the Staff

A- GOVANDAN /AP

Subject

TATS

Branch

: _ CIVIL

Semester

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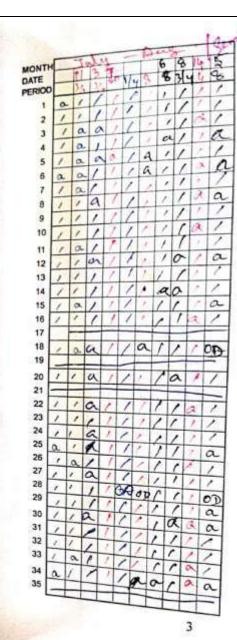
Acad. Year

: - 2015 - 2016

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Subject	Subject : TAT Branch : CIVIL		- E	Code: Total student: 3	À		Name of t Semester	he staff :	C 6	Name of the staff : A Govoron	7
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Attendance Particulars

S. No.	D. No	Name
1	5501	ABIRAMI . S
2	5502	ANBUSELVAN . G
3	5503	BEOSHA . B
4	550A	DINESH - S
5	5505	GANESH KUMAR . K.
6	5506	HEMA . E
7	5501	HEMANANDHANI . S
8	5508	JAYARAMKUMAR
9	5509	JENIFER · A
10	5510	JOYCE J
11	5511	KATHIRESAN
12	5512	KAYIPKIYA - R
13	5515	LAKSHMIGANTH.
14	5514	LAKSHMIPRIYA . U
15	5515	MANIKANDAN - A
16	551b	MARUDHUPANDIYAN - R
17		THE STITLING TYRIN . B
18	5518	MONAMED SHEIR ARDULLA
19	1	TRANSPORTER PRODUCES !
20	5520	NIVETHILHA . N.S
21		4 400
22	5522	PAVATHARINI . P
23	5523	PRALICHANAMAKY - A
24	5534	PRATHEEBA .V
25	5525	BAGHUL - R
26	55 2 T	RAJKUMAR. K.S
27	5526	RAJESH .S
28	5528	REVANTH . K
29	5529	SAEARINATHAN
30	5530	SANTHOSH KUMHR.
31	5531	SARATHI P
32	5532	SASIDHARAN - B
33	5533	SUDHAKRAN.
34	5534	TAMIZ HARASAN.
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D. No	Name	11/7/11	10 C	2 14	
5501	ABIRAMI. S	10	-	8/9	
5502		10	55	70	75
5503	BEOSHA-B	13	55	- 00	-
5504	DINESH,S	The Real Property lies	75	65	-
5505	GIANESH KUMAR. K.L.	a	90	50	- 10
5506	HEMA.E	a	a	- 22	- II
5507	HEMA NANDHANI.S	a	a	65	1
5508	JAYARAMKUMAR.V	a	55	75	-15
5509	JENIFER A	06	75	57	
5510		10	60	-10	-
5511		a	80	15	1
5512	KAVIPRIYA - R	a	70	570	8
5513	LAKSHMIGIANTH.	11	65	- 0	5
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5515	MANIKANDAN A	11	0-	- 50	3
5516	MARUDHUPANDIYAN R	a	60	50	-
5518	MOHAMED SHEIK ARDULLA N	10	OF	- 55	
5520	NIVETHITHA . N. S	30	a	60	9
	PAVATHARINI-P	11	55	P	
5523	PRANCHANA MARY, A	11	50	70	A
	PRATHEEBA.V	10	65	- 65	
5525	RAGHUL. R	a	65	65	13
5526	RAJESH. B	09	20	60	70
	RAJKUMAR-K-S	12 a	10	60	95
5528	REVANTH.K	-	45	65	90
5529		14	0	70	50
	SANTHOSH KUMAR.R	10	35	P	A
5531	SARATHI-P	10	SO	57	10
5532	SASIDHARAN, B	07	70	60	10
5533	SUDHAKARAN	10	75	60	A
5534		10	35	50	A
	VEERA PANDIYAN. S	10	85	65	A
5537	VETRISELVAN	a	64	S	85
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5561	THE KING OF	a	20	55	85
	GOVINDHA RAJIP	05		70	70
5563	KAVIYA-K ABARNA-P 18	12	60	٨	1

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80	15	-			



PARISUTHAM INSTITUTE OF TECHNOLOGY AND SCIENCE Department of Civil Engineering

AY 2015-16 III Year VI Sem. EINSTEIN BATCH <u>TATS - LESSON PLAN</u>

	1.APLIED MECHANICS	
Lecture No.	Contents of Lecture	Staff in charg
1	Introduction - Units and Dimensions - Laws of Mechanics - Lami's theorem, Parallelogram and triangular Law of forces - Vectorial representation of forces - Vector operations of forces - additions, subtraction, dot product, cross product -	
2	Centroids and centre of mass— Centroids of lines and areas - Rectangular, circular, triangular areas by integration — T section, I section,	Mr. A.
3	Angle section, Hollow section by using standard formula — Theorems of Pappus - Area moments of inertia of plane areas — Rectangular, circular, triangular areas by integration —	Govandan
4	Displacements, Velocity and acceleration, their relationship — Relative motion — Curvilinear motion - Newton's laws of motion — Work Energy Equation— Impulse and Momentum — Impact of elastic bodies.	
	2. Steel Structure Design	
5	Properties of steel - Structural steel sections - Limit State Design Concepts - Loads on Structures - Connections using rivets, welding, bolting - Design of bolted and welded joints - Eccentric connections - Efficiency of joints.	
6	Types of sections - Net area - Net effective sections for angles and Tee in tension - Design of connections in tension members - Use of lug angles - Design of tension splice - Concept of shear lag UNIT	Mr. A. Govandan
7	Types of compression members - Theory of columns - Basis of current codal provision for compression member design -	
8	Slenderness ratio – Design of single section and compound section compression members – Design of laced and battened type columns – Design of column bases – Gusseted base	
1.	3. Building Construction	
9	Introduction - Overview of construction practices, theory and methods. Subsurface Investigation-Objectives, methods of boring like wash boring, percussion etc., Shallow Foundations-Necessity, types, setting out, excavation, construction, failures of foundation and remedial measures.	
10	Stone masonary - Technical terms, lifting appliances, joints, types - random (un-coursed) rubble, coursed rubble, dry rubble masonry, Ashlar masonry- Ashlar fine, chamfered fine. Brick masonary	Mr. A. Govandan
11	- Technical terms, bonds in brick work- English bond, single & double Flemish bond, garden wall bond, raking bond, Dutch bond. Composite masonary-Stone facing with brick backing, brick	

	facing with concrete backing. Plain and Reinforced Concrete Construction: Pre-cast and cast-in-situ Construction	
12	Doors: Location, technical terms, size, types, construction, suitability - Windows: Factors affecting selection of size, shape, location and no. of windows, types, construction - suitability, fixtures and fastenings.	
13	Ventilators: Ventilators combined with window, fan light - Stairs and Staircases - Definition, technical terms, requirements of good stair, fixing of going and rise of a step, types of steps, classification, example - stair planning, elevators, escalators.	Mr. A. Govandan
	4. Hydraulics	
14	Fluid – definition, distinction between solid and fluid - Units and dimensions - Properties of fluids - density, specific weight, specific volume, specific gravity, viscosity, compressibility, vapour pressure, capillarity and surface tension	Mr. A.
15	-Euler's equation along a streamline - Bernoulli's equation - applications - venturi meter, orifice meter and Pitot tube	Govandan
16	Fundamental dimensions - dimensional homogeneity - Rayleigh's method and Buckingham Pitheorem	
	5. Construction Management	
17	Modern scientific management(Contribution by Fayol, F.W. Taylor, Mayo), Management Functions, Management Styles, SWOT Analysis in construction	
18	Basic forms of organization with emphasis on Project and matrix structures; project life cycle	
19	Planning for achieving time, cost, quality, project feasibility reports based on socio – techno -	
20	Economic environmental impact analysis, project clearance procedures and necessary documentation for major works like dams, multistoried structures, ports, tunnels	Mr. A. Govandan
21	Construction Scheduling. Work break down structure, activity cost and time estimation in CPM, PERT, RPM (Repetitive Project Modeling) techniques. LOB technique, Mass haul diagrams	
22	Precedence Network Analysis, software in Construction scheduling (MSP, primavera, Construction manager).	3 .0 2

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PARISUTHAM INSTITUTE OF TECHNOLOGY & SCIENCE, THANJAVUR DEPARTMENT OF CIVIL ENGINEERING III YEAR VI SEMESTER TATS-2

STRENGTH OF MATERIALS

Duration: 50 Mins

Max. Marks: 20

PART-A

Answer the following questions

4 X 5 = 20 Marks

- A Cantilever of length 3m carries udl of 1kN/m run over a length of 2.5m from free end. Draw the shear force and bending moment diagram for the cantilever.
- A Cantilever beam of length 5m carries udl of IkN/m run over a whole length of 5m and a point load of 3kN at free end. Draw the shear force and bending moment diagram for the cantilever.
- A Cantilever of length 5m carries udl of 1kN/m run over a length of 2m from 0.5m of free end with a
 point load of 2.5 and 3kN at free end and 4m from free end respectively. Draw the shear force and
 bending moment diagram for the cantilever.
- A simply supported beam of length 6m carries a point load of 3kN and 6kN at 2m and 4m from left end. Draw the shear force and bending moment diagram for the beam.

TATS CO-ORDINATOR

Purisuthan Institute of Technology & Scient Thanjavur - 613 006, Tamilnadu, India.

LIST OF STUDENTS WITH MARKS

S.No.	Register Number	Name of the Candidate	TI	T2	Т3	T4	T5	Т6
l.	821313103001	ABIRAMI.S	72	72		68	62	40
2.	821313103002	ANBUSELVAN.G	36	40		38	50	18
3.	821313103003	BEOSHA.B	32	68		40	62	12
4.	821313103004	DINESH.S	68	72		60	72	60
5.	821313103005	GANESHKUMAR K.L.	30	24		28	40	32
6.	821313103006	НЕМА.Е	80	68		52	82	80
7.	821313103007	HEMANANDHANI.S	14	AB		AB	6	22
8.	821313103008	JAYARAMKUMAR.V	70	20		. 54	62	22
9.	821313103009	JENIFER.A	48	64		20	54	32
10	821313103010	JOYCE.J	64	60		70	60	32
11	821313103011	KATHIRESAN.K	16	16		40	68	AB
12	821313103012	KAVIPRIYA.R	60	62		60	42	68
13	821313103013	LAKSHMIGANTH,A	54	44		AB	42	AB
14	821313103014	LAKSHMIPRIYA.U	62	AB		60	72	68
15	821313103015	MANIKANDAN.A	30	32		64	60	AB
16	821313103016	MARUDHUPANDIYAN	60	68		AB	76	52
17	821313103017	MOHAMED SHEIK	16	10		8	30	18
18	821313103019	NIVETHITHA.N.S	64	68		50	60	55
19	821313103020	PAVATHARINI.P	60	24	1	42	36	40
20	821313103021	PRANCHANAMARY.A	56	36		48	AB	AB
21	821313103022	PRATHEEBA.V	60	44		56	AB	68
22	821313103023	RAGHUL.P	36	36	N	34	34	AB
23	821313103024	RAJESH.R	76	38		46	48	AB
24	821313103025	RAJKUMAR.K.S	48	56		54	66	28
25	821313103026	REVANTH.K	36	36		84	64	76
26	821313103027	SABARINATHAN.R	70	52	(1 .6)	64	62	68
27	821313103028	SANTHOSH KUMAR.R	52	44		50	60	56
28	821313103029	SARATHI.P	52	50	•	48	64	52
29	821313103030	SASIDHARAN.B	52 .	24	•	48	66	72
30	821313103032	SUDHAKARAN.G	72	40		56	70	52
31	821313103033	TAMIZHARASAN.P.S	56	60	•	AB	72	AB
32	821313103034	VEERAPANDIYAN.R	60	68		56	60	AB
33	821313103035	VETRISELVAN K	64	42	(*/)	48	34	AB
34	821313103036	VIMALRAJ.M.R	56	50	•	34	52	24
35	821313103301	GOVINDHA RAJ.P	48	54	•	AB	46	48
36	821313103701	KAVIYA.K	34	16	•	38	48	48
37	821313103702	ABARNA.P	Α	Α	90	85	70	75

CAREER GUIDANCE PROGRAMME OFFERED BY THE INSTITUTION

ACADEMIC YEAR 2015-2016



Practical Placement Training Session on September 1st & 2nd - "Career Development Technique" by Dr.N.Shiva Kumar of Shivas Foundation, Chennai -.



Mr.Srivathsan, HR - HCL Talent care addressed students regarding the recruitment procedure of HCL and about the Basic employable skills needed for Engineers



Technical Training sessions for Aptitude Cracking is organized from 29th to 30th June 2015, which is handled by FACE Academy, Coimbatore (Focus Academy for Carrier Enhancement).