ශී ලංකා විභාග දෙපාර්තමේන්තුව

<u>රාජෳ හා පළාත් රාජෳ සේවා කාර්මික නිලධාරීන් (සිවිල්/ යාන්නික) සදහා</u> පැවැත්වෙන පුායෝගික පරීක්ෂණය - 2021 (2022)

උක්ත පායෝගික පරීක්ෂණය 2022 පෙබරවාරී මස සිට පැවැත්වීමට නියමිතය. ඒ සඳහා ලිඛිත විහාගය සමත් රාජා හා පළාත් රාජා සේවා කාර්මික නිලධාරීන්ගෙන් අයදුම්පත් කැඳවනු ලැබේ.

2019 ලිබිත විහාගය සමත් අයදුම්කරුවන් වෙත පායෝගික පරීක්ෂණයට අදාළ අයදුම්පත හා විෂය නිර්දේශය තැපැල් මහත් යවා ඇත. පායෝගික පරීක්ෂණයට පෙතී සිටීමට සුදුසුකම් ලබා ඇති අනෙකුත් අයදුම්කරුවන් සදහා වන අයදුම්පත හා විෂය නිර්දේශය ශී ලංකා විහාග දෙපාර්තමේන්තුවේ නිල වෙබ් අඩවියෙන් (<u>www.doenets.lk</u>) බාගත කරගැනීමට පහසුකම් සලසා ඇත.

මෙම පරීක්ෂණය පැරණි හා නව යන විෂය නිර්දේශ යටතේ පැවැත්වෙන අතර අයදුම්පතේ සදහන් විෂය නිර්දේශය පසුව වෙනස් කිරීමට ඉඩදෙනු නොලැබේ.

අයදුම්පත් හාරගත්තා අවසාත දිනය 2022 ජනවාරි මස 31 දින වේ. සම්පූර්ණ කරන ලද අයදුම්පත් එදිනට පෙර ලියාපදිංචි තැපැලෙන් "විභාග කොමසාරිස් ජනරාල්, ආයතනික විභාග සංවිධාන ශාඛාව, ශී ලංකා විභාග දෙපාර්තමේන්තුව, තැ.පෙ. 1503, කොළඹ" යන ලිපිතයට යොමු කළ යුතු අතර අයදුම්පත් බහාලූ කවරයේ වම්පස ඉහළ කෙළවරේ "රාජෳ හා පළාත් රාජෳ සේවා කාර්මික නිලධාරීන් (සිව්ල්/ යාන්තික) සඳහා පැවැත්වෙන පායෝගික පරීක්ෂණය - 2021 (2022) " යනුවෙන් සඳහන් කළ යුතුය.

එල්.එම්.ඩී. ධර්මසේන විහාග කොමසාරිස් ජනරාල්

ආයතනික විහාග සංවිධාන ශාබාව, ශී ලංකා විහාග දෙපාර්තමේන්තුව, පැලවත්ත, බත්තරමුල්ල.

இலங்கைப் பரீட்சைத் திணைக்களம்

அரச மற்றும் மாகாண அரசசேவை தொழில்நுட்ப அலுவலகர்களுக்காக (சிவில்/எந்திரவியல்) நடாத்தப்படும் செயன்முறைப் பரீட்சை 2021 (2022)

மேற்குறித்த பிரயோகப் பரீட்சை 2022 பெப்ரவரி மாதம் தொடக்கம் நடாத்துவதற்கு தொடர்பாக தீர்மானிக்கப்பட்டுள்ளது. அது எழுத்து பரீட்சையில் சித்தியடைந்த அரச மந்நும் மாகாணசேவை தொழில்நுட்ப அலுவலர்கள் விண்ணப்பிக்கமுடியும்.

2019 மூலப்பரீட்சையில் சித்தியடைந்த விண்ணப்பதாரிகளுக்கு மூலம் பிரயோகப் எழுத்து பரீட்சைக்குரிய விண்ணப்பப்படிவம் மந்நும் பாடத்திட்டம் என்பன தபால் மூலம் அனுப்பிவைக்கப்பட்டுள்ளது. பிரயோகப் பரீட்சைக்குத் தகைமையுடைய தோற்றுவதற்கு തെയ്ഥ விண்ணப்பதாரிகளுக்கும் விண்ணப்பப்படிவம் மந்நும் பாடத்திட்டம் அனைத்து இலங்கைப் பரீட்சைத்திணைக்களத்தின் உத்தியோகபூர்வ இணையத்தளத்தில் (<u>www.doenest.lk</u>) பதிவிறக்கம் செய்வதற்கான வசதிகள் மேற்கொள்ளப்பட்டுள்ளது.

இந்தப் பரீட்சை பழைய மற்றும் புதிய பாடத்திட்டத்தின் கீழ் நடாத்தப்படுவதுடன் விண்ணப்பப்படிவத்தில் குறிப்பிடப்பட்டுள்ள பாடத்திட்டத்தை பின்னர் மாற்றுவதற்கு இடமளிக்கப்படமாட்டாது.

விண்ணப்பப்படிவங்கள் ஏற்றுக்கொள்ளப்படும் இறுதித்தினம் 2022 ஜனவரி மாதம் 31 ஆம் திகதியாகும். பூரணப்படுத்தப்பட்ட விண்ணப்பப்படிவங்கள் அத்தினத்திற்கு முன்னர் பதிவுத்தபாலில் "பரீட்சை ஆணையாளர் நாயகம், நிறுவனம்சார் பரீட்சைகள் ஒழுங்கமைப்புக் கிளை, இலங்கைப் பரீட்சைத் திணைக்களம், தபால் பெட்டி இலக்கம் 1503, கொழும்பு" என்ற முகவரிக்கு அனுப்பி வைப்பதுடன் விண்ணப்பப்படிவம் அனுப்பும் தபால் உறையின் இடதுபக்க மேல் மூலையில் "அரச மற்றும் மாகாண அரசசேவை தொழில்நுட்ப அலுவலகர்களுக்காக (சிவில்/எந்திரவியல்) நடாத்தப்படும் எழுத்துப் பரீட்சை 2021 (2022)" எனக் குறிப்பிடவும்.

எல்.எம்.டி. தர்மசேன பரீட்சை ஆணையாளர் நாயகம்

நிறுவனம்சார் பரீட்சைகள் ஒழுங்கமைப்புக் கிளை, இலங்கைப் பரீட்சைத் திணைக்களம், பெலவத்த, பத்தரமுல்ல.

DEPARTMENT OF EXAMINATIONS - SRI LANKA

<u>Practical Test for Technical Officers (Civil/Mechanical) in the Public Service and</u> <u>Provincial Public Service - 2021 (2022)</u>

The above practical test will be held from February 2022 onwards. Applications are hereby called from the Technical Officers in the Public and Provincial Public Services who have passed the written examination.

The application and syllabus have been dispatched to the candidates qualified from the written examination held in 2019. Other qualified candidates can download the application and syllabus from the official website (www.doenets.lk) of the Department of Examinations - Sri Lanka.

This test will be held under new and old syllabuses, and the candidates will not be allowed to change the syllabus mentioned in the application.

The closing date of applications is January 31, 2022. Perfected applications should be sent by registered post to reach the "Commissioner General of Examinations, Department of Examinations - Sri Lanka, P.O. Box 1503, Colombo" on or before the closing date of applications. The words "Practical Test for Technical Officers (Civil/Mechanical) in the Public Service and Provincial Public Service – 2021 (2022)" should be marked clearly on the top left hand corner of the envelope enclosing the application.

L.M.D. Dharmasena
Commissioner General of Examinations

Institutional Examinations Organization Branch, Department of Examinations - Sri Lanka, Pelawatta, Battaramulla.

GTO/ සිවිල්
2019/ (2022)
පුා යෝගික

කාර්යාලයීය පුයෝජනය සඳහා

රාජා හා පළාත් රාජා සේවා කාර්මික නිලධාරීන් (සිවිල්/යාන්තික) සඳහා පවත්වනු ලබන ලිඛිත විභාගය - 2010 (2019) පායෝගික පරීක්ෂණය සඳහා අයදුම්පත

*@າຝືສ	*විතාගය	*විෂය නිර්දේශය
සිංහල - 2	1 වන විතාගය - 1	පැරණි - 1
දෙමළ - 3	2 වන විතාගය - 2	නව - 2
ඉංගීසි - 4	3 වන විතාගය - 3	
	*(අදාළ අංකය කොටුව තුළ ලියන්	්න.)
ලද උක්ත විතාගයෙනි මැනි ඉදිරියේදී පැවැත්වීමට නිශ අයදුම්කරුවන් විතාග 03ට පෙනීසිටීමට කැමති විෂය අයදුම්කරුවන් විසින් තෝර ජනවාරි මස 31 වැනි දිනට දෙපාර්තමේන්තුව, තැ.පෙ. ඉහළ කෙළවරේ "රාජා තා හ	ග් හා ඩේලි නිවුස් පුවත්පත්වල 2019.02.01 දින බීම හා මට්ටම් ගැනීම පායෝගික පරීක්ෂණය යමිතය. ඒ අනුව පායෝගික පරීක්ෂණය ර අදාළ පැරණි හා නව විෂය නිර්දේශ අධායය නිර්දේශය තෝරාගෙන ආයතන පධානියා ගන්නා ලද විෂය නිර්දේශය පසුව වෙනස් කිරීම පෙර "විතාග කොමසාරීස් ජනරාල්, ආයතනික 1503, කොළඹ.` යන ලිපිනයට යොමු කළ යුතු පළාත් රාජා සේවා කාර්මික නිලධාරීන් (සිවිල්/ ග	පැරණි හා නව විෂය නිර්දේශ යටතේ සඳහා ඉදිරිපත් වීමට අපේක්ෂා කරන නෙය කර පායෝගික පරීක්ෂණය සඳහා න මගින් අයදුම්පත් යොමු කළ යුතුය. මට ඉඩ දෙනු නොලැබේ. අයදුම්පත් 2022 විහාග සංවිධාන ශාඛාව, ශුී ලංකා විහාග හු අතර අයදුම්පත් බහාලූ කවරයේ වම්පස
01. සම්පූර්ණ නම :		
02. පෞද්ගලික ලිපිනය :		
	තය : පුරුෂ - 0, ස්හුී 1 (අදාළ අංකය කො	
05. ජංගම දුරකථන අංකය	:	
06. විදහුත් තැපැල් ලිපිනය	;	
07. ලිඛිත විභාගය සමත් ව	වර්ෂය හා විහාග අංකය :	

* (සැ.යු. I කරුණාකර පැරණි / නව විෂය නිර්දේශ පරීක්ෂාකර බලා ඔබ ඉදිරිපත් වන විෂය නිර්දේශය තෝරා අදාළ අංකය කොටුව තුළ ලියන්න. ලේඛනයේ Current Syllabus යනු පැරණි නිර්දේශය තා Proposed Syllabus යනු නව නිර්දේශය බව කාරුණිකව සලකන්න. අයදුම්පතේ සඳහන් විෂය නිර්දේශය පසුව වෙනස් කිරීමට ඉඩදෙනු නොලැබේ.

II ඉතත 01 තා 02 විස්තර ඉංගීසි කැපිටල් අකුරෙන් පුරවන්න.)

08. రె	භාග ගාස්තු ගෙවීම පි	}ළිබඳ	තොරතුරු :-	
	ගෙවූ මුදල	:	७ ₹. 1200/-	
	තැපැල් කාර්යාලය	:		
	ලදුපත් අංකය	:		
	දිනය	:		
			ලදුපත එක් දාරයකින් මෙහි අලවන්	න.
			(පිටපතක් ළහ තබා ගැනීම සුදුසුය.	.)
සපුරා කරන	අැති බව ද	ාන් ෙ	තාරතුරු සියල්ල සතහ බව ද පායෝගික ප නිර්දේශය යටතේ පායෝගික පරීක් රක් සපයා තිබේ නම් මෙම අයදුම්පත පුති	"ෂණයට ඉදිරිපත් වීම සඳහා මනාපය ප <u>ළ</u>
දිනය	:	••••		අයදුම්කරුගේ අත්සන
පරීක්		අයදු සඳහ	කය : මිකරු මෙම ආයතනයෙහි සේවය කරන බ ා සුදුසුකම් සපුරා ඇති බව ද මෙහි දක්ව	
දිනය	:	••••		 ආයතන පුධානියාගේ අත්සන
				(ආයතන පුධානියාගේ නිල මුදුාව)

GTO/ CIVIL
2019/ (2022)
Practical

For office use

Written Examination for the Technical Officers (Civil/ Mechanical) in Public and Provincial Public Service -2010 (2019) Application for Practical Test

		Application for P	ractical 16	est	
*Medium		*Examinatio	n		*Syllabus
Sinhala -2 Tamil – 3 English – 4		1 st Examinat 2 nd Examina 3 rd Examinat	tion – 2		Old – 1 New – 2
		*(Write the applicab	ole number i	in the box)	
examination In News on 01.0 the practical of the old and new test. Applicant sent to the Organization before 31st Jashould be me	neld as per the p 02.2019 is sched test should sub- ew syllabuses of its are not perm "Commission in Branch, Depa anuary 2022. The	ying and leveling for aper advertisement produled to be held in durant applications through 603 examinations and itted to change the selection of Examination of Examination to left hand corned ical Test for Technicice – 2021 (2022)".	ublished in Interest of the head selecting producted syllab aminations ions, Sri Lawr of the enverse to the control of the con	Dinamina, Thing the applicants of the instituted of the instituted syllaborated syllaborated and the containing	wish to appear for ation having learnt us for the practical ications should be al Examinations a 1503, Colombo" ang the application
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9.	Declaration of the applicant: I hereby declare that the foregoing details provide the eligibility to appear for the practical to practical test under	est and declare consent to appear for the d I will be subjected to the rejection of my
	Date:	Signature of the applicant
10	Certification of the Head of the Institution: I hereby certify that the above name mention and has fulfilled the qualifications to appear and further certify that the index number and are correct.	for the practical test as per the result sheet
	Date	Signature of the Head of the Institution
		(Official stamp of the Head of the Institution)

GTO/சிவில்	
2019/(2022)	
பிரயோகம்	

*மொமி

அலுவக	 ъ

*பாடக்கிட்டம்

அரச மற்றும் மாகாண அரசசேவை தொழில்நுட்ப அலுவலகர்களுக்காக (சிவில்/எந்திரவியல்) நடாத்தப்படும் எழுத்துப் பரீட்சை 2010 (2019)

பிரயோகப் பரீட்சையின் திருத்தப்பட்ட பாடத்திட்டம் தொடர்பான தெரிவினைக் குறிப்பிடல்

*பரீட்சை

3	,	~ ~	
சிங்களம் - 2	1 ஆவது பரீட்சை - 1	பழைய - 1	
தமிழ் - 3	2 ஆவது பரீட்சை - 2	புதிய - 2	
ஆங்கிலம் - 4	3 ஆவது பரீட்சை - 3		
	*(உர்	ய இலக்கத்தினை கூட்டினுஎ்	எழுதவும்)
தினமின, தினகரன் மற்றும் பிரசுரிக்கப்பட்டதற்கமைய நடாத்த பழைய மற்றும் புதிய பாடத்திட் தெரிவுப் பரீட்சை தொடர்பாக வில பாடத்திட்டத்தை கவனத்தில் கொ தலைவரினூடாக விண்ணப்பப்படி எடுக்கப்படும் பாடத்திட்டம் பின்ன மாதம் 31 ஆம் திகதிக்கு முன்ன கிளை, இலங்கைப் பரீட்சைத் தி	ப்பட்ட குறித்த பரீட்சையின் ப டத்தின் கீழ் நடாத்துவதற்கு ன்ணப்பிக்கும் விண்ணப்பதாரி ண்டு தோற்றுவதற்கு விருப்பட வத்தினை முன்வைக்க வே ர் மாற்றுவதற்கு இடமளிக்கட் ார் (பரீட்சை ஆணையாளர் ர	தீர்மானிக்கப்பட்டுள்ளது. உ கள் 03 பரீட்சைகளுக்குமான மான பாடத்திட்டத்தை தெரிவு ண்டும். விண்ணப்பப்பத்திரங்க படமாட்டாது. விண்ணப்பப்படி நாயகம், நிறுவனம்சார் பரீட்ை	யாக தெரிவுப் பரீட்சை அதற்கமைய பிரயோக பழைய மற்றும் புதிய செய்து திணைக்களத் வின் மூலம் தேர்ந்து வங்கள் 2022 ஜனவரி சகள் ஒழுங்கமைப்புக்
வைப்பதுடன் விண்ணப்பப்படிவம் . அரசசேவை தொழில்நுட்ப அலுக் (2022)] எனக் குறிப்பிடவும்.			
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும்.	யல்கர்களுக்காக (சிவில்/எந் ₂	நிரவியல்) நடாத்தப்படும் எழு	ஓத்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர்	பலகர்களுக்காக (சிவில்/எந்	റ്റെബിധல்) நடாத்தப்படும் எழு	ழத்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர்	பலகர்களுக்காக (சிவில்/எந்	நிரவியல்) நடாத்தப்படும் எழு	ழத்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர்	வலகர்களுக்காக (சிவில்/எந்ડி -	റ്റെബിധல்) நடாத்தப்படும் எழு	ஓத்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலும் (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர் 02. தனிப்பட்ட முகவரி 03. தேசிய அடையாள அட்	வலகர்களுக்காக (சிவில்/எந் - 	நிரவியல்) நடாத்தப்படும் எ <u>ட</u> ு	ழத்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர் 02. தனிப்பட்ட முகவரி 03. தேசிய அடையாள அட்	வலகர்களுக்காக (சிவில்/எந்த - - - நட இலக்கம் : - ஆண் - 0,	நி ரவியல்) நடாத்தப்படும் எ ழு பெண் - 1 (உரிய கூட்டினுள்	ஓ த்துப் பரீட்சை 2021
அரசசேவை தொழில்நுட்ப அலு (2022)] எனக் குறிப்பிடவும். 01. முழுப் பெயர் 02. தனிப்பட்ட முகவரி 03. தேசிய அடையாள அட் எ 04. பால் ஆண்/பெண் 05. தொலைபேசி இலக்கம்	வலகர்களுக்காக (சிவில்/எந் - 	நி ரவியல்) நடாத்தப்படும் எ ழு பெண் - 1 (உரிய கூட்டினுள்	ஓ த்துப் பரீட்சை 2021

*(மு.கு. I தயவுசெய்து பழைய / புதிய பாடத்திட்டத்தினை பரீட்சித்து நீங்கள் விண்ணப்பிக்கும் பாடத்திட்டத்தினை தெரிவு செய்து உரிய கூட்டினுள் எழுதவும். அட்டவணையில் Current Syllabus பழைய பாடத்திட்டம் மற்றும் Proposed Syllabus என்பது புதிய பாடத்திட்டம் என்பதனை நிரப்புவதற்கு தயவுசெய்து தெரிந்து கொள்ளவும். விண்ணப்ப படிவத்தில் குறிப்பிடப்பட்டுள்ள பாடத்திட்டம் பின்னர் மாற்றுவதற்கு இடமளிக்கப்பட மாட்டாது.

II மேலே குறிப்பிட்ட 1 ஆம் 2 ஆம் தகவல்களை ஆங்கில பெரிய எழுத்தில் நிரப்பவும்)

08. பரீட்சை கட்டணம் செலுத்தியது தொடர்பான தகவல் :-		
செலுத்திய பணம்	:- ரூபா 1200/-	
அஞ்சல் அலுவலகம்	÷	
பற்றுச்சீட்டு இலக்கம்	÷	
திகதி	÷	
பற்றுச் சீட்டை இங்கே ஒட்டவும்		
(பிரதியென்றை உங்கள் கைவசம் வைத்துக் கொள்க)		
தகைமைகள் உள்ளது எனவும் . பரீட்சைக்கு விண்ணப்பிப்பதற்கான டெ	அனைத்தும் உண்மையானதாகவும் பிரயோகப்பரீட்சைக்கு விண்ணப்பிப்பதற்கு சான்றுப்படுத்தலின் கீழ் பிரயோகட் தரிவினைக் குறிப்பிடுவதுடன் பொய்யான தகவல் வழங்கியிருப்பின் இந்த ந இணங்குகிறேன் என்பதனையும் இத்தால் மூலம் உறுதிப்படுத்துகிறேன்.	
10. திணைக்களத் தலைவரின் சான்று	ரை :-	
மேற் குறிப்பிட்ட பெயருடைய விண்ணப்பதாரி இந்தத் திணைக்களத்தில் சேவையாற்றுகிறார் எனவும் பெறுபேற்ற அட்டவணைக்கேற்ப பிரயோகப் பரீட்சைக்கு விண்ணப்பிப்பதற்கு தகைமையுடையவர் எனவும் இதில் குறிப்பிட்ட பரீட்சை சுட்டெண் மற்றும் பரீட்சை வருடம் என்பன சரியானவை எனவும் சான்றுபடுத்துகிறேன்.		
திகதி :	(திணைக்களத் தலைவரின் கையொப்பம்)	

(திணைக்களத் தலைவரின் பதவி முத்திரை)

DEPARTMENTAL EXAMINATION FOR

S.L.T.S. OFFICERS (CIVIL) / (MECHANICAL) IN PROVINCIAL PUBLIC SERVICE FIRST AND SECOND EXAMINATIONS.

SYLLABUS

로마 있다면 모든 사람이 다른 보다 하는 말했다고 하게 되고 있게 그 보스용으로 대표했다면 보면, 경험에 가는 사람들이 없다고 하다고 있다고 하다.		
Current Syllabus	Proposed Syllabus	
First Examination	<u>First Examination</u>	
1.3 Surveying and leveling (Lower Paper) The subject will be confined to chain surveying leveling and the use of Road Tracer, Abney Level and Dumpy	1.3 Surveying and leveling (Lower Paper) The subject will be confined to chain surveying and leveling. Practical use of chain, tapes, hand clinometers.	

Chain Surveying

Level.

Instruments used in chain surveying, ranging out straight lines on uniform ground and over ridges and hollows, measurement of distances with chain or steel bands on tevel and sloping ground.

Method of obtaining horizontal distance on sloping ground principal source of error and their corrections, method of fixing points in relation to a survey line by means of offsets and ties. Method of booking survey lines details, plotting such as fences and boundaries, roads and railways, buildings of various kinds and land. Special problems such as setting out a right angle, dropping a perpendicular from a point on to a chain line, chaining past and inaccessible area, chaining past obstacles, finding distance across river surveying from side of river, etc.

Leveling

This shall comprise all leveling with the exclusion of precise leveling and include the following:-

The essential elements of construction of Engineer's level and staff, and the methods of using them, the temporary adjustment of the level computing the levels by the "Rice and Fall" and "Instrument Height" methods, various errors and their corrections taking of longitudinal and cross sections, contouring, taking out quantities from plan; leveling problems and devices.

Abney level – The principals of operations and use of the instrument there will be three papers as follows:

- (a) Set paper surveying and leveling (3 hours)
- (b) Field work and plotting chain survey (1 day)
- (c) Field work and plotting levels etc. (1 day)

Chain Surveying

and Engineer's Level.

Instruments used in chain surveying, ranging out straight lines on uniform ground and over ridges and hollows, measurement of distances with chain or steel bands on level and sloping ground.

Method of obtaining horizontal distance on sloping ground principal source of error and their corrections, method of fixing points in relation to a survey line by means of offsets and ties. Method of booking survey lines details, plotting such as fences and boundaries, roads and railways, buildings of various kinds and land. Special problems such as setting out a right angle, dropping a perpendicular from a point on to a chain line, chaining past and inaccessible area, chaining past obstacles, finding distance across river surveying from side of river, etc.

Leveling

This shall comprise all leveling with the exclusion of precise leveling and include the following:-

The essential elements of construction of Engineer's level and staff, and the methods of using them, the temporary adjustment of the level computing the levels by the "Rice and Fall" and "Instrument Height" methods, various errors and their corrections taking of longitudinal and cross sections, contouring, taking out quantities from plan; leveling problems and devices. Engineer's level – The principals of operations and use of the instrument there will be three papers as follows:

- (a) Set paper surveying and leveling (3 hours)
- (b) Field work and plotting chain survey (1 day)
- (c) Field work and plotting levels etc. (1 day)

<u>Current Syllabus</u>	<u>Proposed Syllabus</u>
Second Examination	Second Examination
2.3 Surveying and leveling (Higher paper)	2.3 Surveying and leveling (Higher paper)
Higher paper as in 1.3 with the addition of the following:- Surveying, traversing with Theodolite, elementary principles of the construction of the Theodolite and its use running a traverse, correction of angles, plotting of a closed traverse and correction of closing error by graphical means. The candidates will be tested in (a) Set paper 3 hours – Surveying and Leveling (b) Field work and plotting – Surveying (1 day) and Leveling (1 day)	following:- Surveying, traversing with Theodolite, elementary principles of the construction of the Theodolite and its use running a traverse, correction of angles, plotting of a closed traverse and correction of dosing error by graphical means. The candidates will be tested in
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Current Syllabus

Proposed Syllabus

Third Examination

3.7 (a) Surveying and leveling (one paper of 3 hours)

The instruments used chain surveying, ranging out straight lines on all kinds of ground. Measurement of distances with chain or steel hands on level or sloping ground. Method of obtaining Horizontal distances on sloping ground.

Principal sources of error and their correction. Method of fixing points in relation to a survey line by <u>name</u> of offsets and ties. Method of booking survey lines and details.

Plotting survey. Scales and conventional method of representing various natural and artificial features. Special problems such as setting out a right angle, dropping a perpending from a point on to a chain line. Chaining past an inaccessible area, chaining past obstacles, finding distance across rivers, surveying from side of a river, use of road tracer. Etc.

Transverse surveys with Theodolite. Graphical method of plotting survey and graphical correction for closing error. Co-ordinates method of plotting transverse survey. Calculation of latitudes, departures and co-ordinates. Adjustment of angular errors. Adjustment of latitudes and departures. Elementary Tachometry.

Dumpy, 'Y', Abney Level — their construction and adjustment. Computing level by the "Rice and Fall" and "Instrument Height" methods. Sources of error in leveling including curvature. Refraction and other natural factors affecting accuracy. Correction of errors permissible error in leveling. Taking of longitudinal and cross sections. Contouring and taking out quantities from contoured plan. Laying out building areas from contoured leveling problems and devices. Setting out engineering works e.g. by triangulation from a carefully measured base line, curve ranging, setting out buildings, sewers, water mains, roads, profile, tunnels, etc.

(b) Surveying and leveling 11

A field test of two days on practical surveying using the Theodolite and Dumpy, Y levels and plotting.

Third Examination

3.7 (a) Surveying and leveling (one paper of 3 hours)

The instruments used chain surveying, ranging out straight lines on all kinds of ground. Measurement of distances with chain on level or sloping ground. Method of obtaining Horizontal distances on sloping ground.

Principal sources of error and their correction. Method of fixing points in relation to a survey line by means of offsets and ties. Method of booking survey lines and details.

Plotting survey. Scales and conventional method of representing various natural and artificial features. Special problems such as setting out a right angle, dropping a perpending from a point on to a chain line. Chaining past an inaccessible area, chaining past obstacles, finding distance across rivers, surveying from side of a river.

The construction and adjustment of the theodolite. Transverse survey with Theodolite. Graphical method of plotting survey and graphical correction for closing error. Co-ordinates method of plotting transverse survey. Calculation of latitudes, departures and co-ordinates. Adjustment of angular errors. Adjustment of latitudes and departures. Elementary Tachometry.

Engineer's Level — their construction and adjustment. Computing level by the "Rice and Fall" and "Instrument Height" methods. Sources of error in leveling including curvature, refraction and other natural factors affecting accuracy. Correction of errors permissible error in leveling. Taking of longitudinal and cross sections. Contouring and taking out quantities from contoured plan. Laying out building areas from contoured leveling problems and devices. Setting out engineering works e.g. by triangulation from a carefully measured base line, curve ranging, setting out buildings, sewers, water mains, roads, profile, tunnels, etc.

(b) Surveying and leveling 11

A field test of two days on practical surveying using the Theodolite, Engineer's Level /Dumpy Level and plotting.