ශාස්ත්‍රවේදි සාමාන්‍ය උපාධි පරීක්ෂණය (බාහිර- නව නිර්දේශය) පෙබරවාරි 2022
பொதுக்கலை பட்டப் பரீட்சை (வெளிவாரி-புதிய பாடத்திட்டம்) 300 வது தேர்ச்சி மட்டம்-பெப்ரவரி 2022
BACHELOR OF ARTS (EXTERNAL- NEW SYLLABUS) EXAMINATION 300 LEVEL-FEBRUARY - 2022

Geography-භූගෝලවිද්‍යාව-புவியியல்
(GGYE 301 – Cartography සිතියම් විද්‍යාව படவரைகலை)

Time: Four (04) hours කාලය පැය : හතරයි (04) நேரம்: நான்கு (04) மணித்தியாலங்கள்	Marks will be deducted for illegible hand writing and untidy maps නොපැහැදිලි අත් අකුරු සහ සිතියම්වලට ලකුණු කපනු ලැබේ தெளிவற்ற கையெழுத்துக்களுக்கும் நேர்த்தியற்ற படங்களுக்கும் புள்ளிகள் குறைக்கப்படும்

Answer **FOUR (04)** questions selecting at **least one (01)** question from each part
සෑම කොටසකින්ම අවම වශයෙන් එක් ප්‍රශ්නයක්වත් තෝරා ගෙන ප්‍රශ්න **හතරකට (04)** පිළිතුරු ලියන්න.
ஒவ்வொரு பகுதியிலிருந்தும் ஒரு வினாவையேனும் தெரிவுசெய்து **நான்கு (04)** வினாக்களுக்கு விடையளிக்க.

There are 07 questions in the question paper
මෙම ප්‍රශ්න පත්‍රයේ අඩංගු ප්‍රශ්න සංඛ්‍යාව 07 කි
இந்த வினாப்பத்திரத்தில் 07 வினாக்கள் உள்ளன

Nilgala topographic map, an aerial photograph, outline map of the world, outline map of Indo-Sri Lanka region, district map of Sri Lanka, drawing papers and tracing papers are provided. Nilgala topographic map and aerial photograph should be returned to the examination centre at the end of the examination.
Please indicate your index number in all the maps that you are attaching.
Use of calculator is allowed, however, cellular phones are not allowed.

Part One

(1)   i.   Define the followings;
      a.   Cartography   (02 marks)
      b.   Geographic Information Systems (GIS)   (02 marks)
      c.   Spatial data and non-spatial data   (03 marks)

   ii.   With the aid of illustrations provide a brief account on the contribution (08 marks) of the age of discovery/exploration for the development of cartography.

  iii.   Provide concise notes for the followings;
      a.   Advantages of aerial photograph in comparision with topographic (05 marks) maps.
      b.   Primary data and their collection methods.   (05 marks)

Part Two

(2) i. What are the latitudes and the longitudes of the provided Nilgala (02 marks) topographic (entire) map?

ii. Draw a map in the scale of **1:126,720** to show the road network and (18 marks) settlements located in the South-Western quadrant of the one-inch topographic map of Nilgala (1:63,360) provided.

iii. Using an appropriate quantitative technique, provide a road analysis for the (05 marks) drawn map above and intepret the results.

(3) i. What are the latitudes and the longitudes of the provided Nilgala (02 marks) topographic (entire) map?

ii. Using the Nilgala topographic (entire) map (1:63,360), explain how the (18 marks) physical features of the area have influenced on the distibution pattern of the human activities with suitable sketch maps.

iii. Calcualte the total length of the main roads in miles and kilometers (05 marks) located in the South-Western quadrant of the Nilgala topographic Map.

Part Three

(4) i. Using standard symbols and colours draw an overlay for the aerial (15 marks) photograph provided to show the paddy cultivation.

ii. Describe the distribution pattern of paddy cultivation using the drawn (10 marks) overlay.

(5) Explain the contribution of Remote Sensing (RS) and Global Positioning (25 marks) System (GPS) technology to the development of the modern cartography.

Part Four

(6)   Using the data given in the **Table 01** and Indo-Sri Lanka weather station outline map provided;

    i.   Mark the synoptic weather characteristics prevailing over each meteorological station with appropriate colours and symbols.   (10 marks)

    ii.   Draw isobars at **4mb** intervals.   (10 marks)

    iii.   Briefly explain the prevailing weather condition in the region.   (05 marks)

(7)   Using the data given in the **Table 2** and the district outline map of Sri Lanka;

    i.   Construct a suitable statistical map to show the district-wise average students (20 marks) per a government school.

    ii.   Comment on the results.   (05 marks)

INDO – SRI – LANKA OUTLINE MAP
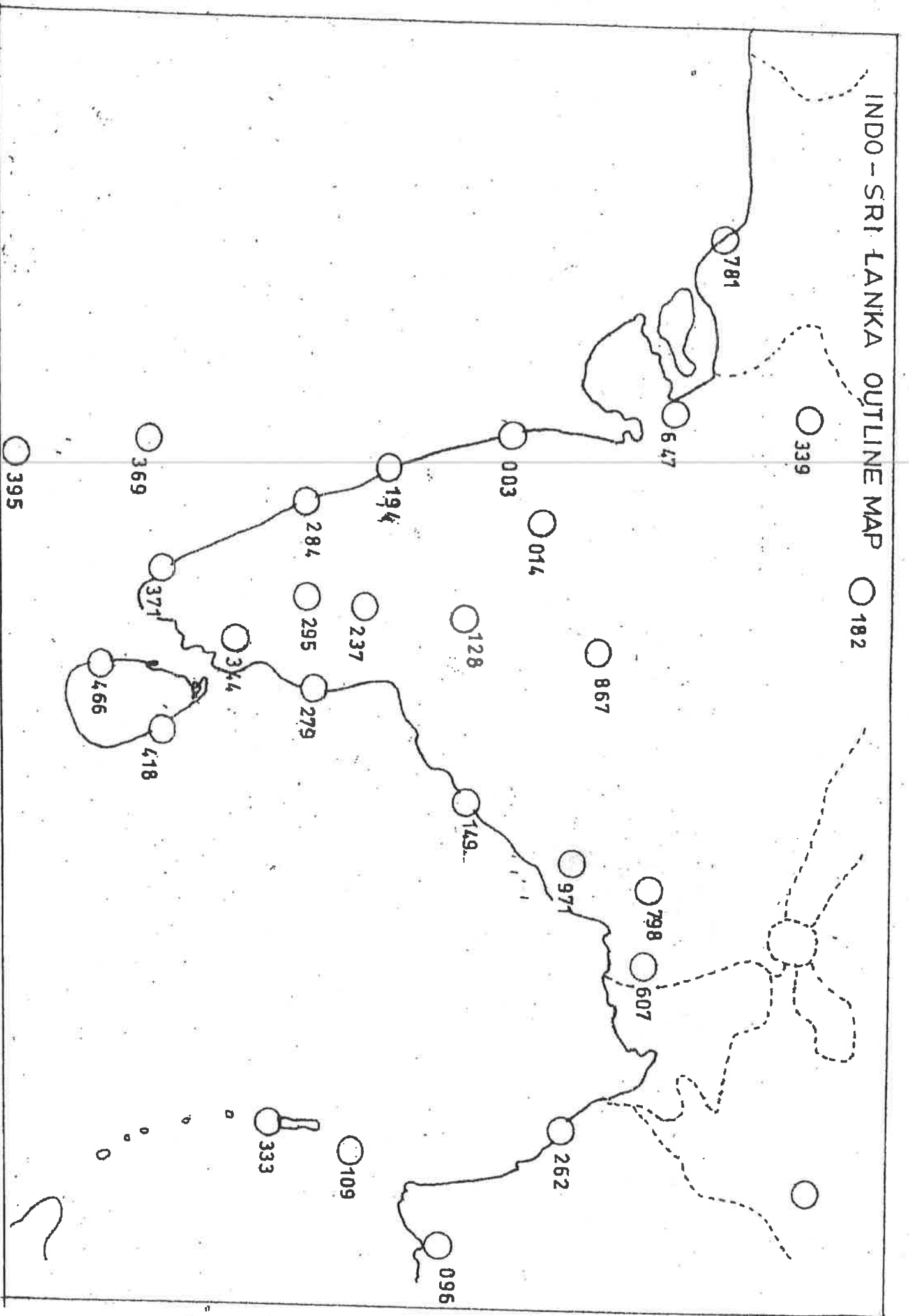
Table 02 වගු අංක 02 அட்டவணை 02

Government Schools By District in Sri Lanka -2020
ශ්‍රී ලංකාවේ දිස්ත්‍රික්ක අනුව රජයේ පාසල් -2020
இலங்கையின் மாவட்ட ரீதியான அரச பாடசாலைகள் -2020

District දිස්ත්‍රික්ක மாவட்டம்	Number of Schools පාසල් සංඛ්‍යාව பாடசாலை எண்ணிக்கை	Number of Students සිසුන් සංඛ්‍යාව மாணவர் எண்ணிக்கை
Colombo කොළඹ கொழும்பு	399	358,427
Gampaha ගම්පහ கம்பஹா	536	346,669
Kalutara කළුතර களுத்துறை	420	222,781
Kandy නුවර கண்டி	651	274,937
Matale මාතලේ மாத்தளை	317	102,983
Nuwara-Eliya නුවර-එළිය நுவரெலியா	550	160,053
Galle ගාල්ල காலி	429	216,139
Matara මාතර மாத்தறை	358	163,111
Hambantota හම්බන්තොට அம்பாந்தோட்டை	320	138,147
Jaffna යාපනය யாழ்ப்பாணம்	448	103,412
Mannar මන්නාරම மன்னார்	133	26,358
Vavuniya වව්නියාව வவுனியா	173	36,043
Mullaitivu මුලතිව් முல்லைத்தீவு	127	27,220
Kilinochchi කිලිනොච්චිය கிளிநொச்சி	104	30,300
Batticaloa මඩකලපුව மட்டக்களப்பு	362	123,448
Ampara අම්පාර அம்பாறை	440	159,760
Trincomalee ත්‍රිකුණාමලය திருகோணமலை	313	95,593
Kurunegala කුරුණෑගල குருநாகல்	873	337,873
Puttalam පුත්තලම புத்தளம்	372	165,280
Anuradhapura අනුරාධපුරය அனுராதபுரம்	562	206,063
Polonnaruwa පොළොන්නරුව பொலன்னறுவை	253	91,668
Badulla බදුල්ල பதுளை	605	179,344
Monaragala මොණරාගල மொனராகலை	291	108,479
Ratnapura රත්නපුර ,ரத்தினபுரி	598	224,134
Kegalle කෑගල්ල கேகாலை	521	165,423
Total එකතුව மொத்தம்	10,155	4,063,685

Source: Ministry of Education, Sri Lanka 2020

Table 1 පිළි පුසු 1 අட்டவணை 1

SYNOPTIC WEATHER IN INDO-SRI LANKA REGION
ඉන්දු - ශ්‍රී ලංකා පුදේශයේ සංයුක්ත කාලගුණික රටාව
இந்திய-இலங்கைப் பிரதேச வானிலைச் சுருக்க விபரம்

Station No.	Temperature TT (C°)	Pressure PPP (mb)	Cloud Amount N (0-8) Oktas	Cloud Types Low (cl)	Medium (cm)	High (Ch)	Wind Direction dd	Wind Velocity ff-Knots	Weather Present	Past
003	27	1025	3	cb	AS	ci	NW	10	D	D
014	30	1022	4	cb	AS	ci	WNW	15	-	R
109	30	1022	3	cu	AS	ci	NE	15	R	D
128	29	1012	6	cb	AS	ci	SSW	25	R	R
149	23	1000	8	cu	AS	ci	SW	65	R&T	R
182	33	1028	1	cb	-	-	NE	10	-	-
194	30	1016	4	cb	AS	-	WSW	35	D	-
237	27	1012	8	cb	-	-	SSW	25	R&T	T
262	33	1028	2	cu	AS	ci	NE	20	-	-
279	26	1004	8	cb	AS	ci	SSW	55	CR & F	R&T
284	28	1013	6	cb	-	ci	WSW	30	F	D
295	27	1016	7	cb	-	ci	SSW	45	CR & T	R&T
333	30	1020	3	cb	AS	ci	SSE	20	-	-
339	32	1026	1	cb	AS	-	NW	10	-	-
344	27	1011	6	cb	-	ci	SW	45	CR	R
369	30	1016	6	cb	AS	-	SW	25	-	D
371	28	1016	6	cb	-	-	NE	25	R	R
395	30	1020	2	cu	-	ci	WSW	30	-	-
418	28	1016	5	cu	AS	-	SW	25	R	D
466	30	1019	4	cu	AS	-	SW	20	-	D
607	31	1020	2	cb	AS	ci	NE	15	-	-
647	32	1026	3	cu	-	-	NW	05	-	-
781	34	1030	1	cb	-	-	NW	05	-	-
867	28	1016	4	cb	AS	ci	NNW	25	D	D
971	26	1010	6	cu	AS	ci	SW	30	R&T	R&T

D – ලෙළ වැස්ස– Drizzle– தூறல்
R – වැස්ස– Rain– மழை
T – හිණිදුම– Thunder– இடி
CR – අඛණ්ඩව වැස්ස– Continues rain – தொடர்பயான மழை
HR - තද වැස්ස -Heavy rain – கடும் மழை
F - Fog - මීදුම - மூடுபனி

MR GGYE 301