

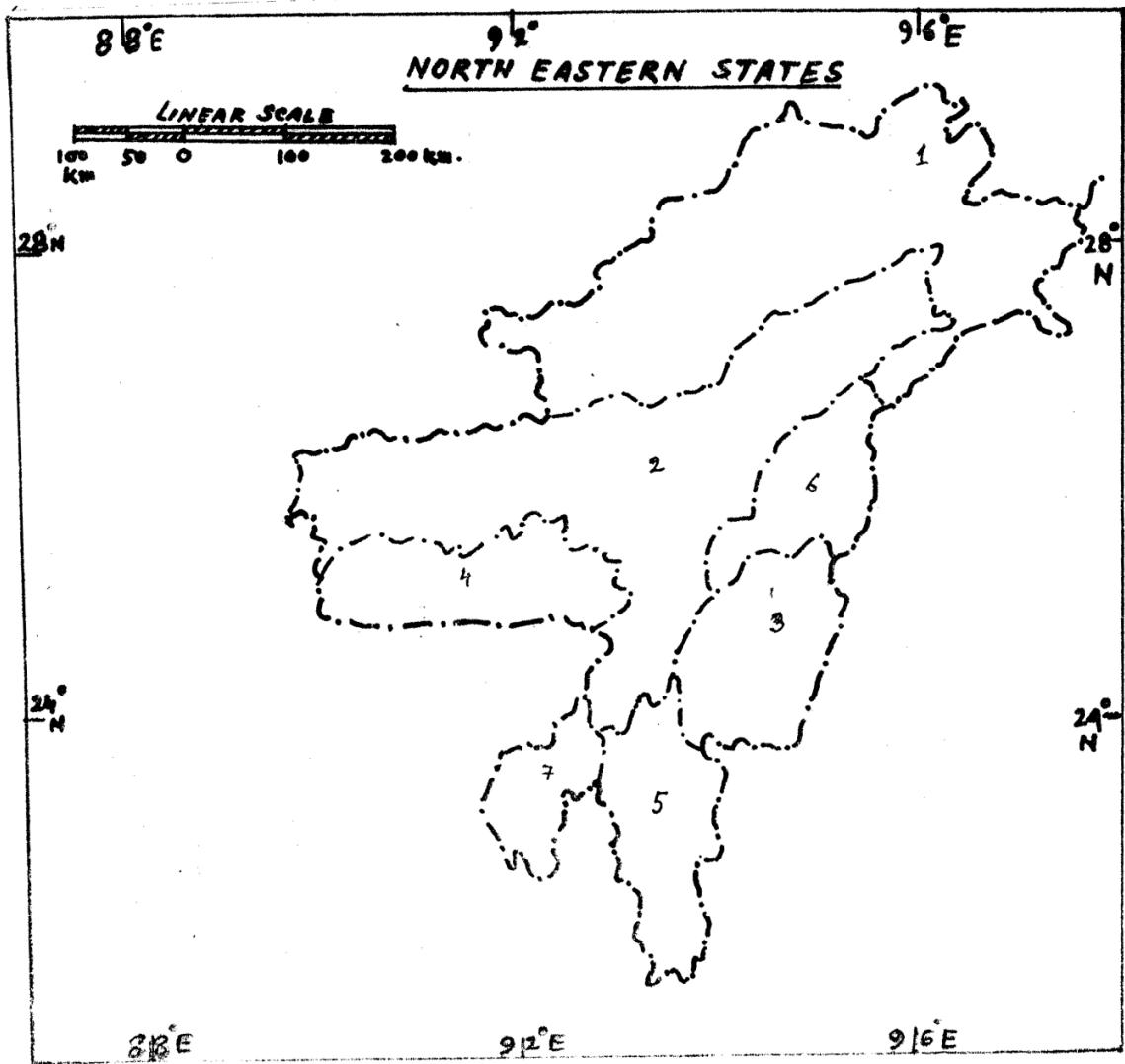
B.Sc. 3rd Semester (Programme) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31928****Course Code : SP/GEO301/C-1C****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40**

*The figures in the right hand side margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.*

SET-II

1. (a) Draw a comparative scale to show 1km/ 1mile primary divisions and 250m/440 yards secondary divisions. Given R.F. 1:100,000. 4
- (b) On the basis of the following data, prepare a map showing high, medium and low density zones of population in North Eastern States by Choropleth method (Map. No. 1) 4

Sl. No.	State	Population (2011)	Area in sq. km
1	Arunachal Pradesh	1,383,727	83,743
2	Assam	31,205,576	78,438
3	Manipur	2,855,794	22,327
4	Meghalaya	2,966,889	22,429
5	Mizoram	1,097,206	21,081
6	Nagaland	1,978,502	16,579
7	Tripura	3,673,917	10,486



2. Draw graticule of Simple Conical Projection with one standard parallel at an interval of 10° for an area extending from 20°N to 60°N and 75°W to 35°W on a scale of 1:80,000,000. 8
3. Answer *any two* of the following: 2×2=4
- (i) What is R.F. Scale?
 - (ii) Why are Zenithal Projections called azimuthal projection?
 - (iii) What are the disadvantages of Prismatic Compass Survey?
4. Lab. Notebook and Viva voce 5+5=10
5. Field report and Viva voce 5+5=10
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B.Sc. 3rd Semester (Programme) Practical Examination, 2019-20

GEOGRAPHY

Course ID : 31928

Course Code : SP/GEO301/C-1C

Course Title: Maps and Diagrams

SET-II

Instruction to the examiners.

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4. An examinee can be interviewed for a minimum of 8 minutes and maximum for 12 minutes.
5. For Q. No. 3: Alternative Questions in case of inclement weather:

The following data has been obtained from the field by Dumpy level Survey:

Station	Distance (m)	Staff readings in m		
		B.S.	I.S.	F.S.
A	0	2.335		
B	5.32		2.055	
C	10.62		1.800	
D	15.58		1.635	
E	20.60	1.795		1.790
F	25.70		1.990	
G	30.80		2.175	
H	35.60		2.340	
I	40.00			2.550

Find out the reduced levels of the stations assuming the reduced level as 100.000m at station D. Show the arithmetic check. Draw a profile along the line of survey.

4+1+3=8

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as far as practicable.*

SET-III**Section-A**

1. (a) What do you mean by R.F.? What are the uses of age-sex pyramid? 2+2=4
(b) Draw a linear scale to read 18km when the given R.F. is 1:3,00,000. 6
2. (a) What is map projection? Mention two properties of Cylindrical Equal-area Projection. 2+2=4
(b) Calculate the reduced levels of the following stations with any suitable method: 6

Stations	Distance (m)	BS	IS	FS	Height of Collimation	Remarks
A	0	2.554			52.554	RL = 50m
B	14.990		1.783			
C	29.105		0.926			
D	48.490		1.963			
E	63.540			3.587		

3. Notebook 5

Section-B

4. Field report evaluation 10
5. Viva voce 5

SH-III/GEO-304/GE-3(P)/19

B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40**

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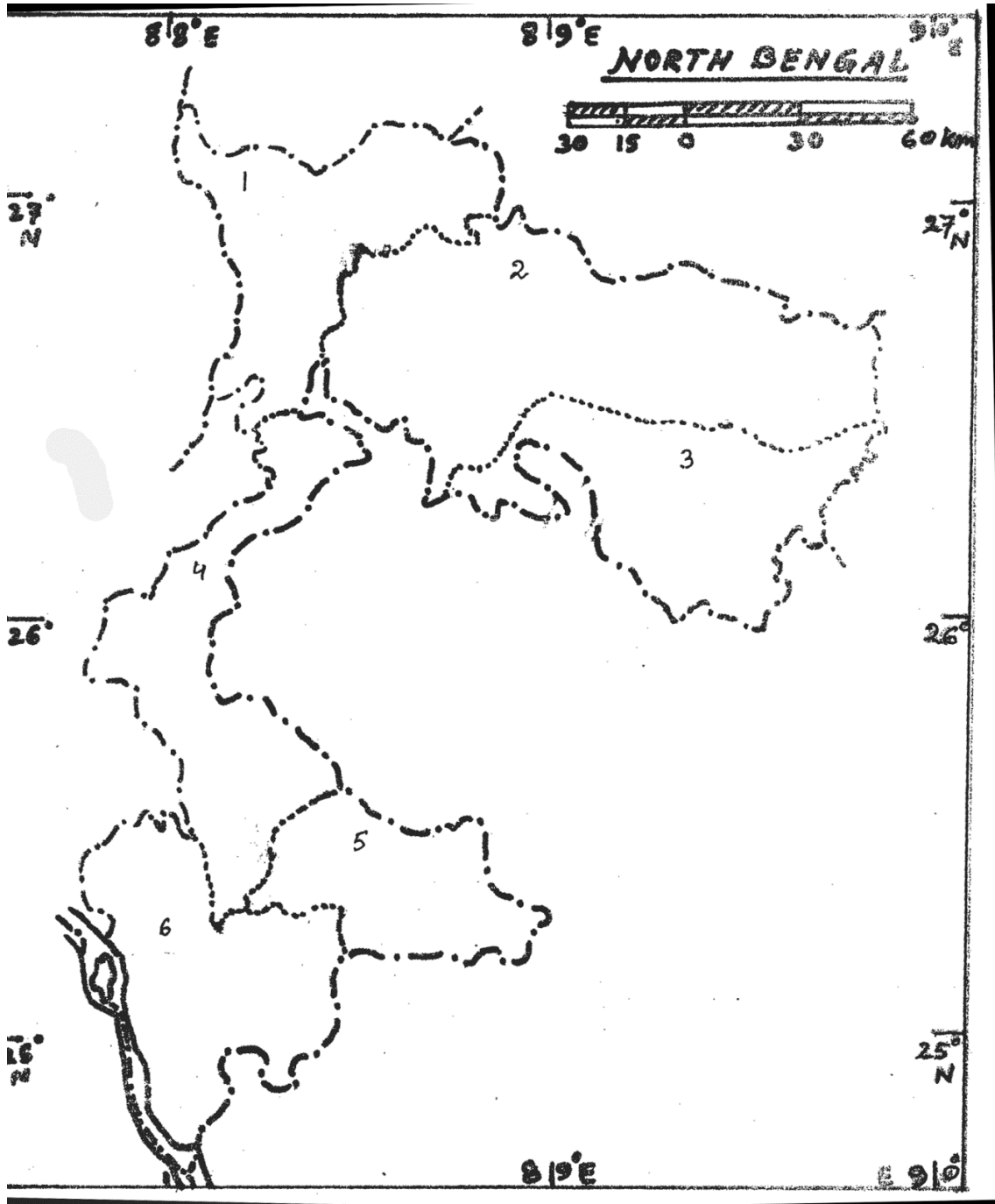
Set-I

1. (a) The scale of a map is 4 cm to 1 km. Draw a linear scale to read kilometres and metres. What is the R.F.? 3+1=4
- (b) On the basis of the following data prepare a map showing very high, high, medium and low density zones of North Bengal by choropleth method: (map-1) 4

Sl. No.	District	Area in sq. km.	Total population (2011)
1	Darjeeling	3149	18,42,034
2	Jalpaiguri	2844	21,72,846
3	Coachbehar	3387	28,22,780
4	Uttar Dinajpur	3140	30,00,849
5	Dakshin Dinajpur	2219	16,70,931
6	Maldah	3733	39,97,970

2. Draw graticule of cylindrical Equal Area Projection at an interval of 10° for an area extending from 30°N to 20°S latitude and 20°W to 40°E longitude on a scale of 1:60,000,000. 8
3. Write short notes on *any two* of the following: 2×2=4
- (i) Total dependency ratio.
- (ii) Type of map projection based on preserved qualities.
- (iii) Advantages of prismatic compass survey.
4. Lab. Note Book and viva-voce. 5+5=10
5. Field book and viva-voce. 5+5=10

Map-I/Set-I/Q.1(b)



SH-III/GEO-304/GE-3(PI)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Set-I*****Instructions to the examiners.***

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3. The examiners are advised to give credit to correctness and neatness in Lab. Note Book and field report only signed by the teachers.
4. An examinee can be interviewed for a minimum of 8 minutes and a maximum for 12 minutes.
5. For Q.No.3: Alternative question for inclement weather:

(a) Compute the entries marked (×) from the level book page given below:

Stn.	B. S.	I. S.	F. S.	R.L. (mm)
1	1·816			33·500
2		×		34·105
3		×		34·372
4	×		×	35·024
5		0·917		35·668
6		1·312		×
7			1·184	×

- (b) Draw a topographic profile taking into consideration that all the stations are on a straight line and are 4m away from each other. 4+4=8

SH-III/GEO-304/GE-3(P)(S2)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40**

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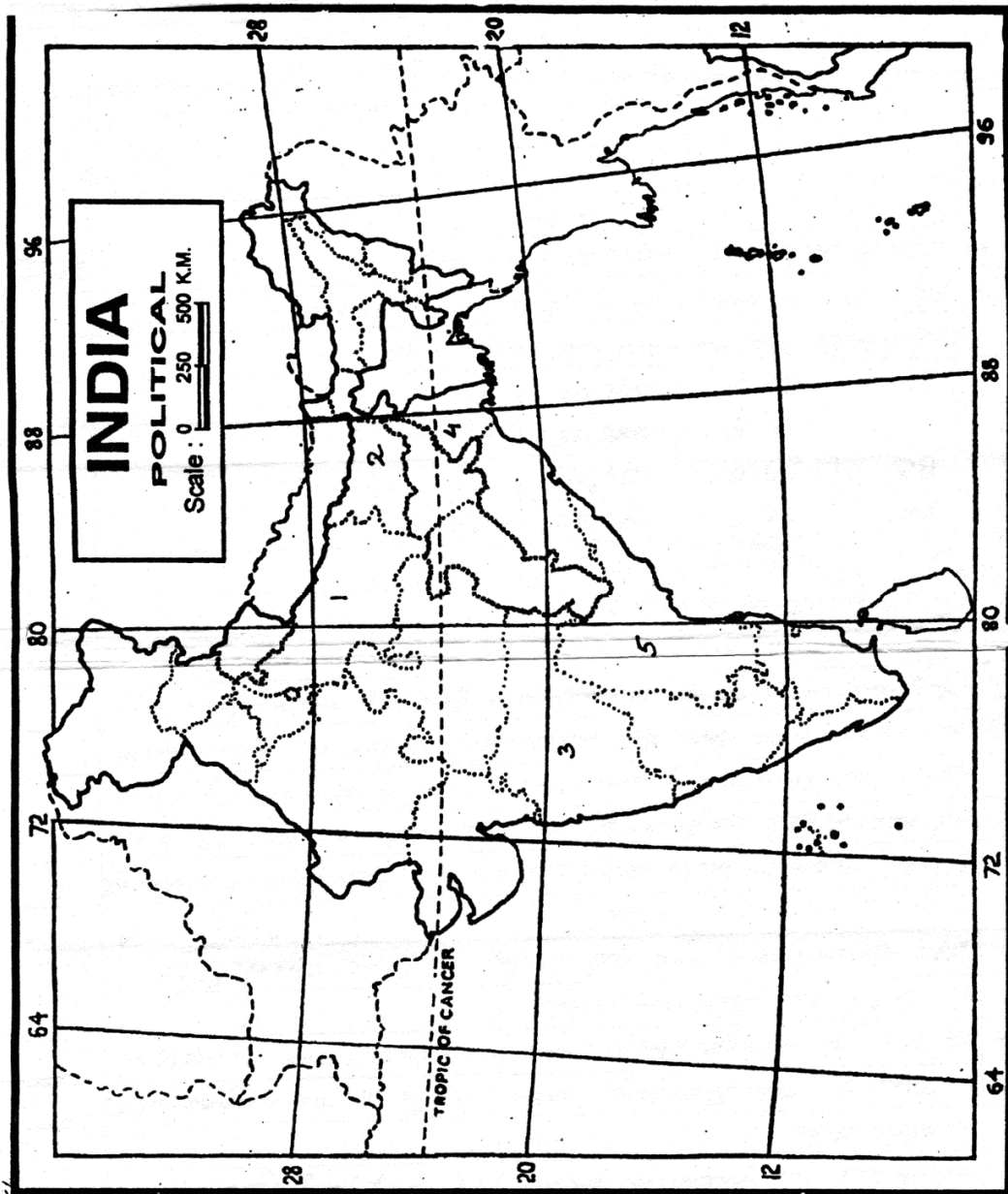
Set-II

1. (a) Draw a linear Scale of a map to read kilometres and metres. The R. F. is 1:100,000. 4
(b) Based on the following data draw proportional circles for different states of India on map No.1. 4

Sl. No.	State	Total Population in '000 (2011)
1	Uttar Pradesh	199812.3
2	Bihar	104099.5
3	Maharashtra	96878.6
4	West Bengal	91276.1
5	Andhra Pradesh	76210.0

2. Draw graticule of simple conical projection with one standard parallel at an interval of 10° on scale of 1:80,000,000. Extension: 10° S to 50°S and 130°W to 70°W. 8
3. Answer *any two* of the following: 2×2=4
(i) What is age sex pyramid?
(ii) What do you mean by generating globe?
(iii) What is Bench Mark?
4. Lab. Note Book and Viva voce. 5+5=10
5. Field Report and Viva voce. 5+5=10

Map-I/Set-II



SH-III/GEO-304/GE-3(PI)(S2)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Set-II*****Instructions to the examiners.***

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4. An examinee can be interviewed for a minimum of 8 minutes and a maximum for 12 minutes.
5. For Q.No.3: Alternative question for inclement weather:

Line	Distance (m)	F. B.	B. B.
AB	24.5	86°00'	265°00'
BC	59.0	134°15'	313°00'
CD	64.5	286°15'	108°30'
DA	20.5	346°00'	165°15'

- Calculate the corrected bearings.
- Plot the Traverse on a suitable scale.
- Find out the included angles.

SH-III/GEO-304/GE-3(P)(S3)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40**

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as far as practicable.*

Set-III

1. (a) Scale of a given map is 1cm equal to 1·3 km. Draw a linear scale to read 4km. in the primary scale and 400 metres in the secondary parts of the scale. Mention the R. F. 3+1=4
- (b) Draw proportional pie graph to show the occupational pattern of the working population of the given towns: 4

Town	Occupational Pattern (in %)			Total workers
	Primary	Secondary	Tertiary	
A	20·60	46·40	33·00	34,257
B	15·50	60·00	24·50	1,09,402
C	12·80	50·70	36·50	12,725
D	10·60	30·40	59·00	68,800
E	4·60	35·40	60·00	85,625

2. Draw graticule of polar Zenithal stereographic projection for a map of Antarctica on a scale of 1:40,000,000 at an interval of 10°. Extension: 90°S to 60°S and 0° to 180° E & W. 8
3. Write short notes on *any two* of the following: 2×2=4
- (i) Significance of age sex pyramid
- (ii) Standard Parallel
- (iii) Traverses Survey
4. Lab. Notebook and viva-voce 5+5=10
5. Field book and viva voce 5+5=10

SH-III/GEO-304/GE-3(PI)(S3)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Set-III*****Instructions to the examiners.***

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4. An examinee can be interviewed for a minimum of 8 minutes and a maximum for 12 minutes.

5. For Q.No.3: Alternative question in case of inclement weather:

- (a) Calculate the reduced level of the stations on the basis of the following data obtained from the field:

Station	Distance in m.	Staff readings in m			Reduced level
		B. S.	I. S.	F. S.	
A	0	2·365			
B	5·6		3·210		
C	9·8		3·525		
D	16·3		2·960		118·250m
E	21·5	2·220		2·125	
F	26·1		2·735		
G	30·0			1·985	

- (b) Draw a longitudinal profile along the line of survey AG.

4+4=8

SH-III/GEO-304/GE-3(P)(S4)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40**

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as far as practicable.*

Set-IV

1. (a) Draw a linear scale with R.F. 1:35 so that 1 yard and 1 foot marks on the primary and secondary divisions can be read out respectively. 4
- (b) Calculate the radii of the spheres and draw them on the plain paper to show the population of the following cities of India assuming 1cm for 2 million persons: 4

Cities	Population, 2011
Greater Mumbai	18,414,288
Delhi	16,314,838
Kolkata	14,112,536
Chennai	8,696,010

2. Draw graticule of cylindrical Equal Area Projection for a map of Africa on a scale of 1: 70,000,000 at an interval of 10°. Extension: 40° N — 40° S and 20° W to 60° E. 8
3. Write short notes on *any two* of the following: 2×2=4
- (i) Disadvantages of Choropleth map
- (ii) Homolographic projection
- (iii) Collimation method
4. Lab. Notebook and viva-voce 5+5=10
5. Field Report and Viva-voce 5+5=10

SH-III/GEO-304/GE-3(PI)(S4)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Set-IV*****Instructions to the examiners.***

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4. An examinee can be interviewed for a minimum of 8 minutes and maximum for 12 minutes.
5. For Q.No.3: Alternative question in case of inclement weather:

Station	Line	Distance (m)	F. B.	B. B.
A	AB	32.5	309°45'	129°00'
B	BC	34.6	205°30'	26°45'
C	CA	33.2	88°30'	268°15'

- (i) Find out the corrected bearings.
- (ii) Draw the closed traverse on a suitable scale with necessary correction.
- (iii) Find out the included angles.

2+4+2=8

SH-III/GEO-304/GE-3(P)(S-5)/19**B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20****GEOGRAPHY****Course ID : 31924****Course Code : SH/GEO-304/GE-3****Course Title: Maps and Diagrams****Time: 3 Hours****Full Marks: 40***The figures in the right hand side margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.***Set-V****Section-A**

1. (a) What is scale? Mention the use of pie diagram. 2+2=4
- (b) Prepare a choropleth map to represent the following data: 6

Table-1

District wise population density of West Bengal, 2011*

Districts	Population density
Bankura	523
Barddhaman	1100
Birbhum	771
Coochbehar	833
Dakshin Dinajpur	753
Darjilleng	585
Hooara	3300
Hugli	1753
Jalpaiguri	621
Malda	1071
Murshidabad	1334
Nadia	1316
North 24 Parganas	2463
Paschim Medinipur	636
Purba Medinipur	1076
Purulia	468
South 24 Parganas	819
Uttar Dinajpur	956

* Kolkata not included in the list Source: Census of India, 2011.

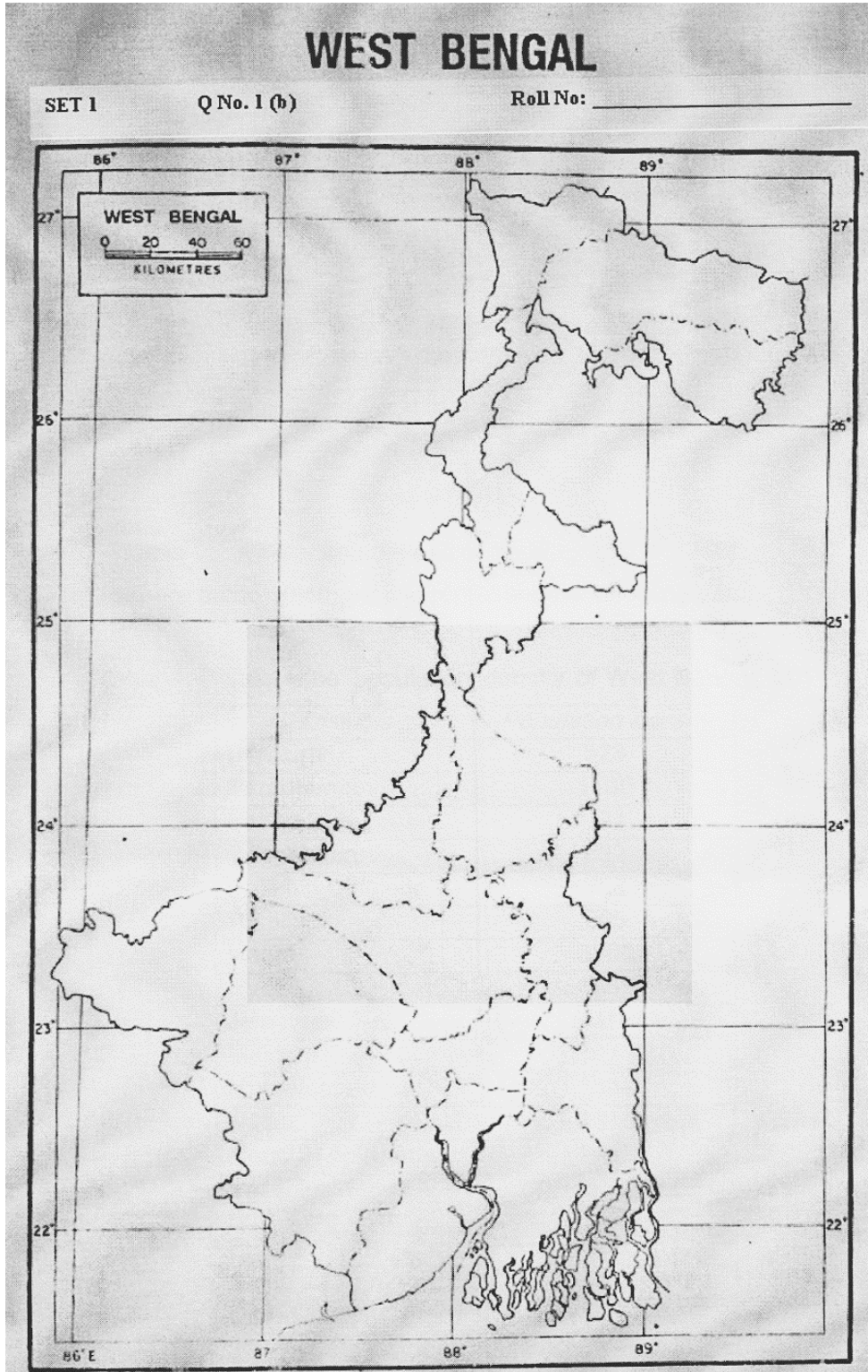
SH-III/GEO-304/GE-3(P)(S-5)/19 (2)

2. (a) What do you mean by traversing? What is a dumpy level used for? 2+2
- (b) Draw the graticules of a Cylindrical Equal Area Projection at 30° interval on a scale of 1:300,000,000 for the whole globe. 6
3. Note book 5

Section-B

4. Field report evaluation 10
5. Viva-voce. 5

[Enclose: Map of West Bengal]



B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31923****Course Code : SH/GEO/303/C-7**

Course Title: Statistical Methods in Geography

Time: 3 Hours**Full Marks: 40***The figures in the right hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.***SET-I****Section-A**

1. What is random sampling? What is a normal frequency distribution? The percentage share of urban population to total population in eight districts of West Bengal during 2001 and 2011 are given below (Table-1). Calculate the standard deviation for both years and which year shows greater variability. 2+2+6=10

Table-1

Sl. No.	District	Percentage Share of Urban Population	
		2001	2011
1	Burdwan	36.94	39.89
2	Birbhum	8.57	12.83
3	Bankura	7.37	8.33
4	Hoogly	33.47	38.57
5	Purulia	10.07	12.47
6	Howrah	50.36	63.38
7	Nadia	21.27	27.84
8	Murshidabad	12.49	19.72

2. Differentiate between correlation with regression. The following table shows the literacy rate and work force participation rate for ten districts of West Bengal in 2011. Calculate the coefficient of correlation and interpret the result. 2+6+2=10

Table-2

Sl. No.	District	Literacy Rate (%)	Work Participation Rate (%)
1	Burdwan	76.21	35.5
2	Bankura	70.26	44.7
3	Birbhum	70.68	37.4
4	Purulia	64.48	44.5
5	Kolkata	86.31	37.6
6	Howrah	83.31	33.7
7	Maldah	61.73	40.7
8	Murshidabad	66.59	34.2
9	Cooch Behar	74.78	39.0
10	Darjeeling	79.56	35.4

3. Laboratory Notebook. 5

Section-B

4. What is scatter diagram? Draw histogram, frequency curve and ogive on the basis of following frequency distribution using MS Excel. Find out the mean from the drawing. 2+2+2+2+2=10

Table-3

Age Group	16-21	22-27	28-33	34-41	42-47	48-53	54-59	60-65	66-71	72-77	78-83	84-89	90-95	96-101	102-107
No. of Students	13	11	15	09	17	12	13	08	19	11	13	15	12	11	17

5. Viva voce 5

B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31923****Course Code : SH/GEO/303/C-7**

Course Title: Statistical Methods in Geography

Time: 3 Hours**Full Marks: 40***The figures in the right hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.***SET-II****Section-A**

1. Define variable. Differentiate attribute from spatial data. The annual rainfall of 10 stations are given below. Find out the mean deviation of rainfall and interpret the same. 1+2+6+1=10

Table-1

Station Name	A	B	C	D	E	F	G	H	I	J
Annual Rainfall (cm)	97	103	93	82	113	119	101	102	87	91

2. How from scatter diagram, the nature of data distribution can be obtained? Here, the sales of a 08 Motor bike companies are given below, find out the 3 years average of sales of those companies and interpret the result. 2+6+2=10

Table-2

Name of Companies	Honda	Hero	Enfield	Jawa	Yamaha	Bajaj	Davidson	Trumph
Annual Sales (0,00)	120	153	93	51	83	93	41	23

3. Laboratory Notebook.

5

Section-B

4. Differentiate ogive from frequency curve. Arrange the following data in ascending order in Excel. Find out mean, median and standard deviation from the arranged data using Excel.

2+2+2+2+2=10

Table-3

Roll No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Marks obtained in Examination	358	411	503	434	541	355	541	453	493	521	333	409	491	501	533

5. Viva voce

B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31923****Course Code : SH/GEO/303/C-7**

Course Title: Statistical Methods in Geography

Time: 3 Hours**Full Marks: 40***The figures in the right hand margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.***SET-III***Answer all questions.***Section-A**

1. What do you mean by Poison distribution? Differentiate between Discrete and continuous variables. In a class test of Under Graduate courses the obtained marks of 28 students have been given. Arrange the marks in six equal classes in a frequency table and find out the Standard Deviation of obtained marks. 2+2+6=10

Table-1

53	91	42	51	46	51	92
47	73	63	87	57	63	58
63	41	71	67	66	81	44
51	29	69	71	73	87	84

2. What do you understand by positive correlation? The following table shows the Annual rainfall and crop production of different parts of India. Find out the trend of crop production using Regression line of X on Y. Interpret the result. 2+7+1=10

Table-2

Name of Place	Bihar	Jharkhand	West Bengal	Orissa	Gujrat	U.P.	A.P.
Annual Rainfall (cm)	100	109	190	180	130	115	209
Crop Production (in 000 Q)	110	102	270	230	100	90	108

3. Laboratory Notebook.

5

Section-B

4. What do you mean by Frequency Polygon? Draw a histogram and Ogive (More than and Less than type) from the given data after arranging in ascending order in MS Excel.

2+2+3+3=10

Table-3

Class Limit	100- 200	201- 300	301- 400	401- 500	501- 600	601- 700	701- 800	801- 900	901- 1000
Frequency	17	22	16	31	15	11	19	21	29

5. Viva voce

5

SH-III/GEO/301/C-5/19

B.Sc. 3rd Semester (Honours) Examination, 2019-20

GEOGRAPHY

Course ID : 31911

Course Code : SH/GEO/301/C-5

Course Title: Climatology

Time: 2 Hours

Full Marks: 40

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Candidates are required to give their answers in their own words
as far as practicable.*

*দক্ষিণ প্রান্তস্থ সংখ্যাগুলি প্রশ্নের পূর্ণমানের নির্দেশক।
পরীক্ষার্থীদের যথাসম্ভব নিজের ভাষায় উত্তর দিতে হবে।*

Section–A

1. Answer *any five* questions in all, selecting *at least one* but not more than two from each unit. 2×5=10
প্রতিটি একক থেকে কমপক্ষে একটি কিন্তু অনধিক দুটি প্রশ্নের উত্তরসহ মোট পাঁচটি প্রশ্নের উত্তর দাও।

Unit–I

(Structure and Composition of Atmosphere)

- (a) Why is diurnal range of temperature is greater at higher elevations?
অধিক উচ্চতায় তাপমাত্রার দৈর্ঘ্যের পরিসর কেন বেশি হয়?
- (b) Define ‘Baroclinic instability’.
‘ব্যারোক্লিনিক অস্থিরতা’র সংজ্ঞা দাও।
- (c) What do you mean by normal laps rate of temperature.
উষ্ণতার স্বাভাবিক হ্রাসের হার বলতে কী বোঝো?

Unit–II

(Atmospheric Circulation)

- (d) What factors control the vertical motion of air?
বায়ুর উল্লম্ব গতির নিয়ন্ত্রক কী কী?
- (e) Why does geostrophic wind blow parallel to isobars?
জিওস্ট্রফিক বায়ু সমচাপ রেখার সমান্তরালে প্রবাহিত হয় কেন?
- (f) What is ‘MONEX-79’?
‘MONEX-79’ কী?

Unit-III

(Extreme Events and Climatic Classification)

- (g) What do you mean by thermodynamic modification of airmass?
বায়ুপুঞ্জের তাপগতিশীল পরিবর্তন বলতে কী বোঝো?
- (h) What are the salient features of 'Am' climate under Koppen's scheme?
কোপেন কথিত 'Am' জলবায়ুর মূল বৈশিষ্ট্যগুলি কী কী?
- (i) Mention four geomorphological evidences of climate change.
জলবায়ু পরিবর্তনের চারটি ভূমিরূপগত প্রমাণ উল্লেখ করো।

Section-B

2. Answer *five* questions taking *at least one* but not more than two from any unit. 4×5=20
প্রতিটি একক থেকে কমপক্ষে একটি প্রশ্নের উত্তরসহ মোট চারটি প্রশ্নের উত্তর দাও।

Unit-I

(Structure and Composition of Atmosphere)

- (a) Write down a short note on the Heat Budget of the Earth.
ভূপৃষ্ঠে আগত মোট সৌরশক্তির হিসাব নিকাশ (Heat Budget) সংক্ষিপ্তাকারে লেখো।
- (b) Where and how does inversion of temperature occurs due to large subsidence of air masses take place?
বিস্তৃত অঞ্চল জুড়ে বায়ুপুঞ্জের অবনমনের জন্য কোথায় এবং কিভাবে বিপরীত তাপক্রম দেখা যায়?
- (c) Briefly discuss about major forms of condensation.
ঘনীভবনের প্রধান রূপগুলি সংক্ষেপে সংক্ষিপ্ত বিবরণ দাও।

Unit-II

(Atmospheric Circulation)

- (d) 'The Coriolis force is maximum over the poles and minimum over the equator'— Explain.
কোরিওলিস বল মেরু অঞ্চলে সব থেকে বেশি ও নিরক্ষীয় অঞ্চলে সব থেকে কম' — ব্যাখ্যা করো।
- (e) How do Jet streams influence weather conditions in the lower troposphere?
জেট স্ট্রিম কীভাবে নিম্ন ট্রোপোস্ফিয়ারের আবহাওয়াকে প্রভাবিত করে?
- (f) State the relationship between El Nino-Southern Oscillation (ENSO) with Indian Summer Monsoon.
এল নিনো-সাওদার্ন অস্‌সিলেশন এবং ভারতীয় গ্রীষ্মকালীন মৌসুমী বায়ুর সম্পর্ক উল্লেখ করো।

Unit-III**(Extreme Events and Climatic Classification)**

- (g) What are the probable causes of recurvature of the path of a tropical cyclone?
ত্রাস্তীয় ঘূর্ণাবাতের পথের পুনর্গঠন সহায়ক সম্ভাব্য কারণগুলি কী কী?
- (h) Explain the basis of Thornthwaite's classification of climate.
থর্নথোয়েটের জলবায়ুর শ্রেণিবিভাগের ভিত্তি ব্যাখ্যা করো।
- (i) How are the past climate changes determined?
অতীত জলবায়ু পরিবর্তন কীভাবে নির্ধারণ করা যায়?

Section-C

Answer any one question.

10×1=10

যে কোনো একটি প্রশ্নের উত্তর দাও।

3. Discuss the causes and effects of atmospheric depletion of solar radiation.
বায়ুমণ্ডলে সৌর বিকিরণের হ্রাসের কারণ ও ফলাফল ব্যাখ্যা করো।
4. Elaborate the tricellular model of general circulation of the atmosphere.
বায়ুমণ্ডলের সাধারণ সঞ্চালনের তিন-কোষীয় মডেল সম্বন্ধে আলোচনা করো।
5. Explain in brief the theories of long-term climate change in the Earth.
পৃথিবীর দীর্ঘমেয়াদী জলবায়ু পরিবর্তনের তত্ত্বগুলির সংক্ষিপ্ত বিবরণ দাও।
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SH-III/GEO/302/C-6/19

B.Sc. 3rd Semester (Honours) Examination, 2019-20

GEOGRAPHY

Course ID : 31912

Course Code : SH/GEO/302/C-6

Course Title: Geography of India

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

*দক্ষিণ প্রান্তস্থ সংখ্যাগুলি প্রশ্নের পূর্ণমানের নির্দেশক।
পরীক্ষার্থীদের যথাসম্ভব নিজের ভাষায় উত্তর দিতে হবে।*

Section–A

1. Answer *any five* questions in all, selecting at least one but not more than two from each unit. 2×5=10
প্রতিটি একক থেকে কমপক্ষে একটি কিন্তু অনধিক দুটি প্রশ্নের উত্তরসহ মোট পাঁচটি প্রশ্নের উত্তর দাও।

Unit–I

(Physical Setting)

- (a) Define Karewa.
কারেওয়া কী?
- (b) Name two tributories of Indus River.
সিন্ধু নদের দুটি উপনদীর নাম লেখো।
- (c) Mention three mountain passes of Western Himalaya.
পশ্চিম হিমালয়ের তিনটি গিরিপথের উল্লেখ করো।

Unit–II

(Culture and Economic Setting)

- (d) What do you understand by ‘Sick Industries’?
‘রুগ্ন শিল্প’ বলতে কী বোঝো?
- (e) Mention any four threats of ethnic culture in India.
ভারতবর্ষের জাতিসত্ত্বা সংস্কৃতির চারটি প্রধান সমস্যার উল্লেখ করো।
- (f) Give two examples of tertiary coal fields in India.
ভারতের দুটি Tertiary কয়লা বলয়ের উদাহরণ দাও।

Unit-III

(Geography of West Bengal)

(g) Define 'Rarh Region'

রাঢ় অঞ্চলের সংজ্ঞা দাও।

(h) Why Teesta is called the river of terror?

তিস্তাকে ত্রাসের নদী বলা হয় কেন?

(i) Mention the name of four tribes found in the western part of West Bengal.

পশ্চিমবঙ্গের পশ্চিম অংশে চারটি উপজাতির নাম লেখো।

Section-B

2. Answer *five* questions selecting at least one from each unit.

4×5=20

প্রতিটি একক থেকে কমপক্ষে *একটি* প্রশ্নের উত্তরসহ মোট *চারটি* প্রশ্নের উত্তর দাও।

Unit-I

(Physical Setting)

(a) Write a short note on Regur and Black Soil.

রেগুর ও কৃষ্ণমৃত্তিকা সম্পর্কে সংক্ষিপ্ত বর্ণনা দাও।

(b) Mention the major problems of coal mining in India.

ভারতে কয়লা খননের প্রধান সমস্যাগুলি আলোচনা করো।

(c) Write a short note on Mangrove forest in India.

ভারতের ম্যানগ্রোভ বনভূমির সম্পর্কে টীকা লেখো।

Unit-II

(Culture and Economic Setting)

(d) Briefly discuss the negatives of the Green Revolution in India.

ভারতে সবুজ বিপ্লবের কুফলগুলি সংক্ষেপে বর্ণনা করো।

(e) Discuss the major problems of Automobiles Industry in present day India.

বর্তমান ভারতে অটোমোবাইল শিল্পের প্রধান সমস্যাগুলি বর্ণনা করো।

(f) Mention major characteristics of caste based social system in India.

ভারতের জাতভিত্তিক সমাজ ব্যবস্থার মূল বৈশিষ্ট্যগুলি লেখো।

Unit-III**(Geography of West Bengal)**

(g) Write a short notes on rivers of South Bengal.

দক্ষিণবঙ্গের নদীগুলির সংক্ষিপ্ত বর্ণনা দাও।

(h) What are the main regional problems of Darjeeling Hills region?

দার্জিলিং পার্বত্য অঞ্চলের প্রধান সমস্যাগুলি কী কী?

(i) Mention major problems of subsistence basis in West Bengal.

পশ্চিমবঙ্গের জীবিকাসত্তাভিত্তিক কৃষির মুখ্য সমস্যাগুলি লেখো।

Section-C

Answer *any one* question.

10×1=10

যেকোনো *একটি* প্রশ্নের উত্তর দাও

3. Briefly discuss the distribution of soil region in India with suitable examples.

উপযুক্ত উদাহরণসহ ভারতের মৃত্তিকা অঞ্চলগুলির সংক্ষিপ্ত বিবরণ দাও।

4. Elaborate different population policy adapted by Govt. of India.

ভারত সরকার দ্বারা গৃহীত জনসংখ্যা নীতির সংক্ষিপ্ত আলোচনা করো।

5. Discuss the physiographic division of West Bengal with suitable diagram.

উপযুক্ত মানচিত্র সহযোগে পশ্চিমবঙ্গের ভূ-প্রাকৃতিক বিভাগগুলি আলোচনা করো।

B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31925****Course Code : SH/GEO305/SEC-1**

Course Title: Computer Basic and Computer Applications

Time: 4 Hours**Full Marks: 40**

*The figures in the right hand side margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.*

SET-II

1. (a) Explain the steps used in MS-Excel to represent data with charts. 6
(b) How many save as types are available in MS-Excel? Name some of them. 2+2=4
2. Calculate all values of Central Tendency and Standard Deviation from the following data in Table No. 1 using MS-Excel. 6+4=10

Table No. 1: Literacy Rate in India: 1961-2011

Census Year	Literary Rate
1961	28.30
1971	34.45
1981	43.57
1991	52.21
2001	64.83
2011	74.04

3. The following Table No. 2 shows the relationship between Rainfall and Runoff. Using MS-Excel, draw a scatter diagram and also draw a best fit linear trend line. 5+5=10

Table No. 2												
Months	J	F	M	A	M	J	J	A	S	O	N	D
Rainfall (mm)	25	51	63	80	140	260	290	270	190	150	40	17
Runoff (cumec)	70	85	132	155	210	345	410	350	270	230	90	59

4. Laboratory Notebook and Viva voce 5+5=10

B.Sc. 3rd Semester (Honours) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31925****Course Code : SH/GEO305/SEC-1**

Course Title: Computer Basic and Applications

Time: 4 Hours**Full Marks: 40**

*The figures in the right hand side margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.*

SET-I

Candidates are required to show proper steps of calculation and the diagrammatic representation should be clear and neatly labelled.

1. Some spot— Height given below:

Height in (m) : 6·5, 25·9, 30·1, 60·2, 39·4, 70·6, 60·1, 8·9, 79·02, 89·0, 91·0, 40·2, 25·6, 15·4, 19·01, 10·1, 11·2, 80·7, 53·9, 97·2, 47·0, 61·8, 23·4, 95·0, 44·0, 58·1, 83·7, 71·0, 36·2, 47·7, 67·1, 77·7.

- Prepare a frequency table with 20 class interval, using Excel.
- Represent the data with a suitable graph, in Excel.
- What are the importances of Histogram? 6+6+3=15

2. The following table shows female literacy rate and life expectancy at birth of the selected states/UTs in India.

- Compute the mean life expectancy at birth, using Excel.
- Represent the data set with the scatter diagram and fit a regression line on it, in Excel.
- Interpret the pattern of relationship between the two variables. 6+7+2=15

Table-1, Female Literacy and Life Expectancy at birth in India

States/ UTs	Female Literacy (%), 2011	Life Expectancy at birth (Yrs.), 2011-2015
Andhra Pradesh	59·7	69
Assam	67·3	64·7
Bihar	53·3	68·4
Chhattisgarh	60·6	65·2
Gujarat	70·7	69·1
Haryana	66·8	69·1
Himachal Pradesh	76·6	72
Jammu & Kashmir	58	73·2
Jharkhand	56·2	67·2
Karnataka	68·1	69
Kerala	92	75·2
Madhya Pradesh	60	64·8
Maharashtra	75·5	72

NCT of Delhi	80·9	73·8
Orissa	64·4	66·9
Punjab	71·3	72·1
Rajasthan	52·7	67·9
Tamil Nadu	73·9	71
Uttar Pradesh	59·3	64·5
West Bengal	71·2	70·5

Source: Census of India and SRS Based life table.

3. Lab. Notebook and Viva Voce

5+5=10

B.Sc. 3rd Semester (Honours) Examination, 2019-20**GEOGRAPHY****Course ID : 31925****Course Code : SH/GEO305/SEC-1**

Course Title: Computer Basics and Computer Applications

Time: 4 Hours**Full Marks: 40***The figures in the right hand side margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.**Answer all questions.***SET-III**

1. (a) What is the difference between operating software and application software? 2
- (b) Define Binary number system. 2
- (c) Convert binary 101101 into decimal and decimal number 39 into binary number. 2
- (d) What do you mean by Spread sheet? 2
- (e) What do you know about cloud computing? 2
2. (a) Marks obtained by 20 students in Geography paper are given in the following table. Find out the GRADE of each student with the help of the mentioned scale using Microsoft Excel. 6

Roll No.	Marks Obtained	Roll No.	Marks Obtained	Roll No.	Marks Obtained	Roll No.	Marks Obtained	GRADE SCALE
01	81	06	69	11	72	16	78	$\geq 90 = A$
02	77	07	85	12	87	17	62	$< 90 - \geq 80 = B$
03	92	08	74	13	91	18	74	$< 80 - \geq 70 = C$
04	78	09	66	14	63	19	69	$< 70 - \geq 60 = D$
05	62	10	52	15	77	20	74	$< 60 - \geq 50 = E$

- (b) Table shows the decadal changes of population of India from 1901-2011 census. Draw a time series graph from the given data.

Census Year	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
Population (in Million)	238	252	251	278	318	361	439	548	683	846	1024	1208

Also draw a trend line in the same graph.

4

3. The following table shows the area and population of the C.D.Blocks of Bankura District (10 selected blocks).

Sl. No.	Name of the C.D. Blocks	Population	Area (Sq. Km)
1.	Indus	132344	255·10
2.	Bishnupur	171414	419·01
3.	Ranibandh	93748	428·40
4.	Barjora	159060	393·40
5.	Onda	191078	502·20
6.	Simlapal	111308	309·20
7.	Bankura-I	199313	186·70
8.	Mejia	69297	162·90
9.	Chatna	156147	441·00
10.	Taldangra	111573	349·70

Bases on the given data using excel—

- (a) Calculate Population Density of the given districts. 2
 - (b) Rank Population Density data from highest (1) to lowest (10). 2
 - (c) Calculate Mean, Median, Mode and Standard deviation from the population density data. 4
 - (d) Arrange the district names in alphabetical order. 2
4. Laboratory Notebook 5
5. Viva voice 5
-

B.Sc. 3rd Semester (Programme) Practical Examination, 2019-20**GEOGRAPHY****Course ID : 31928****Course Code : SP/GEO301/C-1C**

Course Title: Maps and Diagrams and Cartographic Techniques

Time: 3 Hours**Full Marks: 40**

*The figures in the right hand side margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.*

SET-I**Section-A**

1. Differentiate between pie graphs and proportional circles. Illustrate the age group wise rural and urban sex ratio of India with two age-sex pyramids and interpret, using the data given in the following table: 1+6+1=8

Sex Ratio in 5 year Age Group (2011)

Age group (in years)	Rural	Urban
00-04	928	912
05-09	921	895
10-14	917	897
15-19	882	887
20-24	936	933
25-29	980	967
30-34	1,001	951
35-39	993	966
40-44	937	915
45-49	950	919
50-54	908	882
55-59	1,063	920
60-64	1,033	971
65-69	1,054	1,018
70-74	979	1,020
75-79	1,050	1,069
80+	1,096	1,236

2. Which character of the map is preserved by the cylindrical projection and why? Draw neat graticules of Polar Zenithal Stereographic Projection for the extension of 80°N to 10°N and 40°W to 40°E at an interval of 10°. The given R.F. 1:60000000 1+5=6
3. Conduct a traverse survey with the help of a Prismatic Compass for the following lines. AB=20m, BC=15m, CA=18m. Take the readings in a proper field-book and plot the survey with a suitable scale. 3+3=6

SP-III/GEO-301/C-1C(P)/19

(2)

4. Notebook

5

Section-B

5. Evaluation of field report

10

6. Viva voce

5
