C/17/B.Sc./Part-II(H)/3T(O)/Geo.(Prac.)/5(S-2)

OLD

Part II 3-Tier

2017

GEOGRAPHY

(Honours)

PAPER—V (Set-2)

(PRACTICAL)

Full Marks : 100

Time : 6 Hours

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.

Answer *all* questions.

1. (a) Draw a diagonal scale to read 4 miles 6 furlongs 132 yards when the R.F. 1 : 70,000.

(b) A map being the scale 1 : 50,000 is reduced $\frac{1}{9}$ th of its original size. Find out R. F. of the new map.

2. Draw age sex pyramid and indicate the population structure *from the* following data :

Age group	0 - 6	6 - 14	14 - 19	19 - 24	24 - 44	44 - 60	60+
Male Population	402	676	727	553	680	425	130
Female Population	436	614	675	602	703	400	91

3. (a) Draw a choropleth map based on the area and population of C.D. Blocks of Purba Medinipur District and interpret the map.

Sl. No.	*Name of Block*	*Area in Sq. Km*	*Population*
1.	Ramnagar–I	142.2	149267
2.	Ramnagar–II	138.9	140058
3.	Egra–I	192.6	184262
4.	Egra–II	176.5	78002
5.	Contai–I	211.2	214361
6.	Contai–II	217.4	173621
7.	Contai–III	223.1	164912
8.	Khejuri–I	176.7	137615
9.	Khejuri–II	168.2	126920
10.	Patashpur–I	198.6	134271
11.	Patashpur–II	172.4	142946
12.	Bhagabanpur–I	162.3	156215
13.	Bhagabanpur–II	161.4	167295
14.	Nandigram–I	142.3	178295
15.	Nandigram–II	157.6	146025

(b) Draw a suitable diagram of the following data and interpret the relation between types of crop and weather elements.

Month	Average temp ° C	Rainfall (mm)	Major Crops	Cropped Area ('000 hect.)	Cropping Season
Jan.	22.00	25.00			July
Feb.	25.00	4.00	Aman	259.5	to
Mar.	29.00	159.00			October
April	22.00	65.00			Sept.
May	33.50	105.00	Pulses	10.4	to
June	35.00	172.00			Nov.
July	30.00	328.00			Nov.
Aug.	30.00	302.00	Oil Seed	19.00	to
Sept.	30.50	463.00			Jan.
Oct.	29.00	636.00	Fibres	1.7	May to
Nov.	24.50	10.00			Aug.
Dec.	19.50	00.00	Others	7.9	Dec.–Mar.

8+2

4. (a) Draw a graticules for the map of Southern Hemisphere on Polar Zenithal Stereographic Projection at 15 ° interval on a scale 1:160,000,000.

(b) State the properties of Polar Zenithal Stereographic Projection.

(c) What do you mean by constant of the cone and developable surface ? 12+4+4

5. Conduct any one of the following survey to be done alloted by lottery :

(a) Make a closed traverse (anti-clockwise) by Prismatic Compass survey around four stations A, B, C & D given in the field.

(i) Prepare the field book & enter the readings neatly.

(ii) Make necessary correction of the readings.

(iii) Draw the traverse with necessary adjustment by Parallel Meridian Method.

(iv) Calculate the included angles at each of the station.

(v) Calculate the area of the traverse.

8+5+6+2+4

Or

(b) Make a dumpy level survey along a line A B (given in the field) of 30 m. length at 3 m interval, taking two (2) change point at 4th and 8th stations. B M at the 4th station is 20.00 m.

(i) Prepare the field book & enter the readings neatly.

(ii) Calculate the reduced levels of all stations.

(iii) Show the arithmetic check.

(iv) Draw Profile on the basis of the reduced levels.

(v) Calculate the gradient between the highest and lowest points.

(vi) Briefly discuss the types of the Bench Mark.

10+3+3+4+3+2

Or

(c) (i) Prepare a proper field book for determining height of a given object with theodolite (Base inaccesable) and enter the readings taken.

(ii) Calculate the height of the object from the mean sea level (the B. M. of the base of the object is 20.00 m.).

(iii) Plot the data with suitable scale.

(iv) Mention the different source of error of theodolite survey. 8+8+5+4

6. What are the basic principle of GPS. 5

7. Laboratory Note Book and Viva-Voce. 5+5

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