

WEST BENGAL STATE UNIVERSITY

B.A./B.Sc. Honours 2nd Semester Examination, 2022

GEOACOR04T-GEOGRAPHY (CC4)

Time Allotted: 2 Hours

The figures in the margin indicate full marks. Candidates should answer in their own words and adhere to the word limit as practicable. All symbols are of usual significance.

GROUP-A

Answer any one question from the following

 Determine the Reduced Level and Height of Collimation from the given readings where Bench Mark is at station A i.e. 10.00 m. and change points are D and J. Stations — A, B, C, D, E, F, G, H, I, J, K Staff readings — 4.870, 4.680, 4.500, 4.300, 5.280, 5.130, 5.452, 4.95, 4.900, 4.800, 4.700, 4.955, 4.855

Stations are situated at 5.00 m. interval.

2. Explain the construction principle and method of Choropleth Map. Distinguish 7+3 = 10 between Choropleth and Isopleths.

GROUP-B

Answer any *four* **questions from the following** $5 \times 4 = 20$

- 3. Find out the scientific notation for 0.0000000578 and anti-log value of 2.5463
- 4. Distinguish between whole circle bearing and Reduced bearing.
- 5. Determine the height of a object (A) from the base (B) when the height of the instrument at station of observation (X) is 1.30 m. and the distance between X and B is 20.00 m. The vertical circle readings obtained by a theodolite from station of observation are 18°20' and 18°30' on left and right face respectively.
- 6. Describe the types and uses of socio-economic maps.
- 7. Calculate the ground area of a closed traverse Prismatic compass survey when AB = 12 m. BC = 10 m. and CA = 14 m.
- 8. Describe the importance of Dot and Sphere map in geographical study.
- 9. Describe the various types of Bearing with suitable diagram.



 $10 \times 1 = 10$

Full Marks: 40

GROUP-C

Answer any *five* questions from the following

- 10. What is mantissa?
- 11. Round the 5868 into nearest thousand and round the 4537 into nearest ten.
- 12. What is magnetic declination?
- 13. Calculate the slope and gradient between P and Q, when the Reduced level of the points are 436 m. and 218 m. respectively and the distance between P and Q is 10 km.
- 14. Convert Whole Circle Bearing (WCB) of Line $AB=198^{\circ}$ into Reduced Bearing and Reduced Bearing of Line $CD = N55^{\circ}$ W into Whole Circle Bearing.
- 15. Mention with example the use of pie diagram to represent socio-economic data.
- 16. Distinguish between true north and magnetic north.
- 17. Define closing error.
- 18. What is index of power?
 - **N.B.**: Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.

X

