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PG (NEW) CBCS
M.Sc. Semester-II Examination, 2020
GEOGRAPHY
PAPER: GEO 295
PRACTICAL
(**REMOTE SENSING AND COMPUTER APPLICATION**)

Full Marks: 30   **Time: 2 Hours**

Write the answer for each unit in separate sheet

GEO296.1 PRINCIPLES OF REMOTE SENSING AND AERIAL PHOTOGRAPHY

Answer any <u>one</u> question of the following: **15 x 1= 15**

1. How do you measure the height of a building in an air photo from relief displacement?   15

2. What is orbital velocity of a satellite? Give a mathematical proof of $v = \sqrt{Gm/r}$, where v= orbital velocity, g= gravitational constant, m= the mass of the larger body, r= radius of the circular orbit.   5+10=15

3. State implications of Wine's displacement law in the thermal remote sensing. 15

4. What is electromagnetic radiation? How do you explain the radiation from an object using the wave and particle theory?   6+9=15

5. How do you derive the Keplar's law of T2dr3 for orbiting satellite around the earth? Explain the concept of Black Body radiation.   10+5=15

GEO296.2 COMPUTER BASICS AND APPLICATION

Answer any <u>one</u> question of the following: **10 x 1= 10**

1. Write down the proper steps and content to make a 7 slides power point presentation about Stockholm conference.   15

2. Elaborately discuss the numbering system with their base, digit and examples. Convert '12345' number to base 2 numbering system.   10+5=15

3. What is binary arithmetic? Discuss the different types of binary arithmetic with examples.   3+12=15

4. What is logic gate? Discuss the different type of basic logic gates with proper diagram and input-output bit.   3+12=15

5. Briefly write about any five hardware of a computer system. Differentiate between system software and application software.   8+7=15

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