Reg. No.....

Name.....

(Pages : 2)

S.U. 1047

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

Geography

PGES 6435—CLIMATOLOGY AND REMOTE SENSING TECHNIQUES

Time : Three Hours

Credits : 4

I . Answer all questions within a maximum of 50 words (Weightage 10x1=10)

1. Weather forecasting
2. Climograph
3. Hyther graph
4. Weather map
5. Isobar
6. Metadata
7. Earth Explorer
8. Raster
9. PAN Data
10. False Color

II. Answer any six questions (Weightage 6x5= 30)

11. Prepare a simple temperature graph for the given data. Station: Ernakulum Year: 2017.

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temperature in ^{0}C	25	27.6	28.3	29.2	28.5	26.7	26	26.1	26.5	26.9	27.3	27

12. Prepare a simple Rainfall graph for the given data. Station: Ernakulum Year: 2017.

Months	J	F	M	A	M	J	J	A	S	O	N	D
Rain fall in cm	17	31	48	141	384	748	716	392	302	305	161	44

13. From the given data, applying the following analysis tools

    a) Composite Band
    b) Raster Clip using Ernakulam boundary extend

14. From the given data, applying the following filters

    a) 3 x 3 Low Pass filter
    b) 3 x 3 High Pass Filter

15. Execute resolution merge for the given ETM+ data.
16. Prepare NDVI map from the given Landsat-7 Data.

Turn over

17. Generate 20 meter contour from the given ASTER Dem.
18. Execute Unsupervised classification (35 classes) for the given data.

III. Answer any <u>two</u> questions (Weightage 2x10= 20)

19. Attempt to draw inferences on the weather of India by making an interpretation of the given weather data.
20. Execute seven fold Supervised classification-Maximum Likelihood Classification techniques for the given Ernakulam district FCC image.
21. Generate watershed and streams for the given DEM data using model builder techniques.
22. Extract LST from Landsat TM and ETM+ Satellite Imagery and find out the mean temperature.