

CIRCULAR:

A reference is invited to the Scheme of Papers at the B A degree course vide this office Circular No.UG/156 of 2001 dated 4th May, 2001 and the Principals of the affiliated colleges in Arts and the Professor-cum-Director of the Institute of Distance & Open Learning are hereby informed that the recommendation made by the Board of Studies in Geography at its meeting held on 24th July, 2009 has been accepted by the Academic Council at its meeting held on 14th July, 2009 an adjunct meeting 7th August, 2009 vide Item No.453 and that, in accordance therewith, the minimum exercises for the journal sheets for Practical Paper VI and IX at the T.Y.B.A degree course in the subject of Geography is as per Appendix and that the same has been brought into force with effect from the academic year 2009-2010

MUMBAI-400 032
25th September, 2009

PRIN K VENKATARAMANI
REGISTRAR

To,

The Principals of the affiliated colleges in Arts and the Professor-cum-Director of the Institute of Distance & Open Learning.

A.C/4.53/07.08.2009

No.UG/374-A of 2009, MUMBAI 400 032 25th September, 2009

Copy forwarded with compliments for information to :-

- 1) The Dean, Faculty of Arts
- 2) The Chairman, Board of Studies in Geography.
- 3) The Controller of Examinations,
- 4) The Co-Ordinator, University Computerization Centre.


(D.H. KATE)
DEPUTY REGISTRAR
(U.G./P.G SECTION)

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The Director, Board of College and University Development, the Deputy Registrar (Eligibility and Migration Section), the Director of Students Welfare, the Executive Secretary to the Vice-Chancellor, the Pro-Vice-Chancellor, the Registrar and the Assistant Registrar, Administrative sub-center, Ratnagiri for information.

The Controller of Examinations (10 copies), the Finance and Accounts Officer (2 copies), Record Section (5 copies), Publications Section (5 copies), the Deputy Registrar, Enrolment, Eligibility and Migration Section (3 copies), the Deputy Registrar, Statistical Unit (2 copies), the Deputy Registrar of the Institute of Distance & Open Learning, the Deputy Registrar, Section (2 copies), the Professor-cum-Director of the Institute of Distance & Open Learning (IDE Building), Vidyanagari, (2 copies) the Deputy Registrar

UNIVERSITY OF MUMBAI



EXERCISES FOR THE JOURNAL SHEETS
FOR
PRACTICAL PAPER VI AND IX
AT THE
T. Y. B. A
DEGREE COURSE
IN THE SUBJECT OF
GEOGRAPHY

(with effect from the academic year 2009-2010.)

T.Y.B.A. - Geography

Paper VI – Topographical and Thematic maps

(Applied component – Paper I)

List of exercises to be included in Journal

- (1) Collection of Primary Data
 - (a) Observations and identification of geographical features in a particular area (Report of one or two paragraphs)
 - (b) Interview – Socio-economic survey (questionnaire and report)
- (2) Collection of Secondary Data
 - (a) Newspaper – Conversion of news in illustrative form – diagram, map to make it more interesting.
 - (b) Magazines – National Geographic
 - (c) Research Journals
 - (d) District Census Handbook
 - (e) Railway Time-table
 - (f) Text book / Other books
- (3) Collection of data from Modern Sources
 - (a) Use of internet – How to find out information related to specific topic
- (4) Reading and interpretation of data tables
- (5) Reading and interpretation of diagrams
- (6) Reading and interpretation of maps
- (7) Reading and interpretation of photographs
- (8) Reading and interpretation of satellite imagery
- (9) Construction and interpretation of diagrams – Simple line graph
- (10) Construction and interpretation of diagrams – Super imposed graph
- (11) Construction and interpretation of diagrams – Band graph
- (12) Construction and interpretation of diagrams – Simple Bar (Vertical)
- (13) Construction and interpretation of diagrams – Simple Bar (Horizontal)
- (14) Construction and interpretation of diagrams – Multiple Bars
- (15) Construction and interpretation of diagrams – Divided Bars
- (16) Construction and interpretation of diagrams – Proportionate Circles
- (17) Construction and interpretation of diagrams – Divided Circles / Pie chart
- (18) Construction and interpretation of Simple Distribution map
- (19) Construction and interpretation of Located diagram
- (20) Construction and interpretation of Dot Map
- (21) Construction and interpretation of Choropleth
- (22) Construction and interpretation of Isopleth

- (23) Construction and interpretation of Flow Map
- (24) Locating places on the world map – Absolute Location – Latitude and Longitude
- (25) Relative location – Locating places on the map with reference to natural or cultural features
- (26) Absolute distance – Measurement of straight line distance and distance along the river or road
- (27) Relative distance – Time Distance
- (28) Relative distance – Economic Distance
- (29) Direction – Concept of bearing
- (30) Basic component of the map – Preparation of one sample map with explanatory note on various components
- (31) Signs and Symbols used in the Topographical map (Minimum 50)
- (32) Types of maps – Physical, Economic, Political, Historical, Climatic, Thematic –
Paste Xerox copies of these maps and write brief interpretation about them
- (33) Preparation of maps related to different areas (Minimum 2)
Village, Taluka, Mumbai, Maharashtra, Konkan, India, World
- (34) Concept of scale – Types and conversion
- Verbal scale to R.F.
 - Verbal scale to Graphical
 - R.F. to Verbal
 - R.F. to Graphical
 - Graphical to Verbal
 - Graphical to R.F.
 - Comparative scale
- (35) Enlargement and reduction of map – Graphical method – Use of Xerox in enlargement and reduction of map
- (36) Calculation of area of the given map
- Grid method
 - Strip method
- (37) Grid reference system – Four and Six figure coordinates
- (38) Locating features on outline map – Distance, Direction (Bearing) and Symbols
- (39) Construction and function of weather instruments
- Thermometer
 - Thermograph
 - Aneroid Barometer
 - Barograph
 - Wind Vane
 - Anemometer

- (g) Dry and Wet Bulb Thermometers (Hygrometer)
- (h) Rain gauge
- Weather symbols
- (40)
- (a) Cloud amount
- (b) Wind direction
- (c) Wind speed
- (d) Special weather phenomenon
- (e) Sea condition
- Reading of weather maps
- (41)
- (a) January
- (b) May
- (c) July – August
- (d) October
- (42) Concept of contour – construction of contour diagrams
- Types of slope –
- (a) Gentle slope
- (b) Steep slope
- (c) Very steep slope / Escarpment / Cliff
- (d) Convex slope
- (e) Concave slope
- (f) Terraced slope
- (g) Even slope
- (h) Uneven slope
- (43) Contour landforms
- (a) Conical hill
- (b) Island
- (c) Valley
- (d) Spur
- (e) Ridge
- (f) Plateau
- (g) Pass
- (h) Col
- (44) Calculation of C. I. (Contour Interval)
- Calculation of gradient (Slope)
- (45) Contour diagram – Cross section and inter-visibility
- (46) Types of profiles – Simple, superimposed, Projected and Composite (Skyline)
- (47) S.O.I. Topographical map – Concept, Difference between Topographical and Thematic maps
- (48) Indexing system – Topographical map number – relationship between map number and scale

(49) Topographical map – Marginal information

- (a) Title
- (b) Sub-title
- (c) Year of Survey
- (d) Year of Publication
- (e) Magnetic declination
- (f) Extent of the map
- (g) Index to sheets
- (h) Administrative index
- (i) Scale – Types
- (j) Symbols
- (k) Map reference

(50) Topographical map – Reading and identification of various natural and cultural features

(Minimum 5 maps)

(51) Map reading – Exercises

- (a) Measurement of distances
- (b) Measurement of directions
- (c) Maximum and minimum height
- (d) Landform features
- (e) Drainage pattern
- (f) Vegetation
- (g) Settlement pattern
- (h) Transport network
- (i) Economic activities
- (j) Signs & symbols related to various features

(52) Thematic maps – Map reading of the thematic maps representing various cartographic techniques (Minimum 5 maps)

(53) Projections – concept

- (a) Disadvantages of Globe
- (b) Advantages of maps
- (c) Necessity of map projections
- (d) Terms related to projection
 - (i) Graticule
 - (ii) Parallel scale
 - (iii) Meridian scale
 - (iv) Exaggeration in scale
 - (v) Reduction in scale
 - (vi) scale- true
 - (vii) Standard parallel
 - (viii) Homolographic projection

- (ix) Orthomorphic projection
 - (x) Zenithal projection
 - (xi) Cylindrical projection
 - (xii) Conical projection
 - (xiii) Perspective projection
 - (xiv) Non-perspective projection
 - (xv) Antipodal location
- (54) Zenithal polar equidistant projection – construction, properties & use
- (55) Cylindrical equidistant projection – construction, properties & use
- (56) Conical projection with one standard parallel – construction, properties & use
- (57) Pace survey – preparation of maps using pace survey
- (a) Location of college
 - (b) Location of home (residence)
 - (c) Preparation of map representing various functions (residential, commercial etc.) along the road
- (58) Field sketching –
- (a) Natural landform features
 - (b) Cultural features
 - (c) Preparation of ground plan (Internal structure) of house
 - (d) Cross-section of house
 - (e) Preparation of line sketch with the help of photograph
 - (f) Preparation of location sketch of any locality (Rough sketch)
- (59) Landscape photograph - reading and inferences
- (60) Oblique (low & high) aerial photograph - reading and inferences
- (61) Vertical aerial photograph - reading and inferences
- (62) Sampling – concept
- (a) Systematic point sampling
 - (b) Systematic line sampling
 - (c) Random point sampling
 - (d) Random line sampling
- (63) Minerals & Rocks
- Differences between minerals & rocks
 - Identification of minerals – Quartz, Talc, Calcite, Gypsum
 - Identification of rocks – Basalt, Granite, Limestone, Sandstone, Schist, Shale, Marble, Gneiss, Slate
- (64) Soil analysis – (physical method)
- Colour, texture & composition
 - Moisture content – dry, medium or moist
 - Use of triangular graph
- (65) Field trips & report writing

One field trip of more than two days and four field trips of one or half day duration.

Field trip report should include following –

- (a) Purpose of field trip
- (b) Itinerary
- (c) Location map of the study area
- (d) Line sketches of natural features
- (e) Line sketches of cultural features
- (f) Photographs with interpretation
- (g) Pace survey
- (h) Description and analysis of physical features
- (i) Description and analysis of cultural features
- (j) Socio-economic survey
- (k) Drawing of soil profile with layers
- (l) Orientation of map in the field
- (m) Drawing of profiles – simple, superimposed, projected & composite
- (n) Statistical diagrams
- (o) Conclusion

(66) Quantitative techniques

Nature & attribute of geographical data

Scales of measurement – nominal, ordinal, ratio & interval

Ungrouped data

Grouped data – discrete

Grouped data – continuous

Importance of quantitative techniques in Geography

(67) Frequency distribution

(a) Preparation of frequency distribution table

(b) Histogram

(c) Frequency polygon

(d) Frequency curve

(e) More than cumulative frequency curve (ogive)

(f) Less than cumulative frequency curve (ogive)

(68) Measures of central tendency – Mean – Ungrouped, grouped – discrete & grouped-continuous data (Minimum 3 exercises)

(69) Measures of central tendency – Median – Ungrouped, grouped – discrete & grouped-continuous data (Minimum 3 exercises)

(70) Measures of central tendency – Mode – Ungrouped, grouped – discrete & grouped-continuous data (Minimum 3 exercises)

(71) Measures of dispersion – Range – Ungrouped, grouped – discrete & grouped-continuous data (Minimum 3 exercises)

- (72) Measures of dispersion – Quartile deviation - Ungrouped, grouped – discrete & grouped- continuous data (Minimum 3 exercises)
- (73) Measures of dispersion – Mean deviation - Ungrouped, grouped – discrete & grouped- continuous data (Minimum 3 exercises)
- (74) Measures of dispersion – Standard deviation - Ungrouped, grouped – discrete & grouped- continuous data (Minimum 3 exercises)
- (75) Normal curve
- (76) Skewness – Positive & Negative
- (77) Kurtosis - Platykurtic, Mesokurtic, Leptokurtic
- (78) Moving average – 3 yearly / 5 yearly
- (79) Drawings of constellations of stars
- (80) Drawings of cloud types
- (81) Photographs of clouds haze, fog, dew etc.
- (82) Identification of clouds types & determination of cloud amount
- (83) Determination of wind direction
- (a) Direction of smoke
- (b) Direction of dust
- (c) Preparation of simple wind vane
- (84) Identification of north –
- (a) Magnetic compass
- (b) Pole star
- (c) Wrist watch
- (85) Skills of presentation –
- Oral presentation – individual or group
- Use of teaching aids – maps, diagrams, globe, model, OHP, Power Point
- Presentation
- (86) Preparation of landform models –
- (a) Natural or physical landforms
- (b) Cultural landform features
- (c) Functioning models
- (87) Display techniques
- Preparation of exhibits
- Posters & Their exhibition

T.Y.B.A. - Geography

Paper IX – Geographical skills and aptitudes

(Applied component – Paper II)

List of exercises to be included in Journal

- (1) Plotting of weather data & diagrams
 - (a) Wind rose – Simple, compound
 - (b) Line & bar graph – Temperature & rainfall, diagrams of different climatic regions
 - (c) Climograph
 - (d) Hythergraph
- (2) Weather maps
Interpretation of weather map (Minimum 8 maps)
January, March, May, June, July, September, October, December
- (3) Contour landforms
Identification and drawing of contour landforms
 - (a) Identification of landforms, slope, calculation of the gradient (minimum 3 exercises)
 - (b) Drawing of contour landforms (minimum 2 exercises)
Conical hill, spur, Ridge, Col, Pass, Waterfall, Plateau
- (4) Topographical maps (minimum 8 maps)
Interpretation of topographical maps representing various types of landscapes
- (5) Thematic maps (minimum 5 maps)
Interpretation of the thematic maps (NATMO)
- (6) Thematic maps (minimum 3 maps)
Drafting of thematic maps
- (7) Projections -- Construction, Properties and uses
 - (a) Cylindrical equal area
 - (b) Zenithal polar Gnomonic projection
 - (c) Zenithal polar Stereographic projection
 - (d) Zenithal polar Equal Area projection
 - (e) Zenithal polar Orthographic projection
 - (f) Conical two standard parallel projection
- (8) Choice of projection

- (9) Field trip report
Survey of small locality – one field trip of more than two days duration and three field trips / visits of half day
- (10) Stratified sampling exercise
- (11) Quantitative techniques
 - (a) Rn Statistics
 - (b) Chi square test
 - (c) Scatter diagram
 - (d) Dispersion diagram
- (12) Oblique & vertical aerial photographs
Reading & interpretation (minimum two)
- (13) Remote sensing – introduction, concept, nature of data, types & uses
- (14) GIS – Conceptual basis, characteristics and use
- (15) MS Word – Letter drafting / Writing of a report

MS Excel - Basic.

- (16) Construction and interpretation of diagram – Simple bar graph
(Clustered column)
- (17) Construction and interpretation of diagram – Multiple bar graph (Clustered column)
- (18) Construction and interpretation of diagram – Divided bar graph (Stacked column)
- (19) Construction and interpretation of diagram – Percentage bar graph
(100% Stacked column)
- (20) Construction and interpretation of diagram – Simple bar graph horizontal
(Clustered bar)
- (21) Construction and interpretation of diagram – Multiple bar graph-horizontal
(Clustered column)
- (22) Construction and interpretation of diagram – Divided bar graph-horizontal
(Stacked bar)
- (23) Construction and interpretation of diagram – Percentage bar graph-horizontal
(100% Stacked bar)
- (24) Construction and interpretation of diagram – Simple line graph (Line)

- (25) Construction and interpretation of diagram – Superimposed line graph
(Line)
- (26) Construction and interpretation of diagram – Band graph (Stacked area)
- (27) Construction and interpretation of diagram – Proportional circles
- (28) Construction and interpretation of diagram – Proportional squares
- (29) Construction and interpretation of diagram – Divided circle/Pie (diagram)
- 30) Construction and interpretation of diagram – Scatter diagram (Scatter)

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