# Government of the People's Republic of Bangladesh **Geological Survey of Bangladesh** Segunbagicha, Dhaka 1000

# A GUIDE TO AUTHOR FOR PREPARING GEOSCIENTIFIC REPORTS OF THE GEOLOGICAL SURVEY OF BANGLADESH

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#### **Preface**

Geological Survey of Bangladesh (GSB) is a national organization of the People's Republic of Bangladesh and is entrusted with the study and research on matters related to the earth science. The results and data of all types of study and research are disseminated through different types of reports. Considering the immediate necessity, importance and standard of the reports, these are to be transmitted, released and published. These reports may be categorized into: a) Information Release, b) Pre-Publication Series, c) Map Series, d) Records and e) Memoirs.

An Information Release will be read and used primarily by other organizations, therefore it should be written in a lucid language and should contain relatively simple illustration. Information Release series and Record series should not contain elaborate discussions if not require to explain the geological logics. Illustrations in these series should be prepared preferably for black and white reproduction thus should be simpler than illustrations prepared for the Memoirs.

#### A. Information Release of the Geological Survey of Bangladesh

These reports are prepared on the basis of work done as short investigations or a part of any program of the Geological Survey of Bangladesh. These reports are may be complete or preliminary in nature, dealing with reports on the geo-scientific works, mineral resources exploration and other important studies. These reports may not undergo thorough reviewing process and will be issued by the Geological Survey of Bangladesh. These may be distributed amongst the geoscientists of the organization and be given to other organizations in a restricted manner for official use only. The contents of such reports may be referred to in other reports. These reports may be considered for publication in any form according to merit. The form of repots may be in the credit of the author's bibliography.

#### B. Pre-Publication Series of the Geological Survey of Bangladesh

Reports, with the intention for publication in the records or memoir series of the Geological Survey of Bangladesh but need expeditions release for public interest, are to be included in the pre-publication series of the Geological Survey of Bangladesh. These reports will contain relevant maps, illustrations, and tables containing results of different analyses. The reports of this series may be used as reference. These reports may not undergo due reviewing and editing and be used for official purpose. The contents of such reports may be referred to in other reports. This form of reports may be in the credit of the author's bibliography.

#### C. Map Series

Geological, geophysical and other related geoscientific derivative maps in different scales may be published on the basis of mapping in different parts of the country in the map series. These maps will/may contain explanation, correlation, cross-section and precise relevant description. These maps will be incorporated in the related reports of various forms.

#### D. Records of the Geological Survey of Bangladesh

These reports are based on geo-scientific works, mineral resources explorations and other important studies. These reports will undergo thorough reviewing and standard editing. Reports in the records series will be published by the Government of the People's Republic of Bangladesh.

#### E. Memoirs of the Geological Survey of Bangladesh

Memoirs are comprehensive reports covering all phases of any research on specific geoscientific problems. This series contains technical and scientific reports on geology or other comprehensive studies not necessarily directly or immediately applicable to economic resource development. These reports will undergo thorough reviewing and standard editing and be published by the Government of the People's Republic of Bangladesh.

All scientific and technical writings must follow certain basic rules and procedures to maintain standard and symmetry. In this regard, a detail guideline for organizing and writing the geoscientific reports of GSB has been prepared to attain a minimum standard of presenting data/information.

## **Report Writing Format**

#### **Margins**

Left, Right, Top and Bottom margins should be 2.54 cm or (1")

#### **Writing Font**

**Font** : Times New Roman

Font Size : 12

Font Style: Regular style in general (if not necessary for *Italic* Font)

#### Line, Headline and Paragraph Spacing

Line Spacing: 1.3 pt through out the Report

Headline Spacing: Before-6pt and After-6pt

Paragraph Spacing: Before-6pt and After-0pt

#### Paragraph Style and Word Spelling

**Paragraph Style:** There are two styles of paragraph writing as shown below. The author can follow any of them. It is to be noted here that the same style should be followed throughout a report.

#### (1) British Style:

There is normal practice of leaving a space of ½" from the Left Margin as shown in this paragraph.

#### (2) American Style:

In this style, paragraph will be started from the Left Margin without leaving any space as shown in this paragraph. To separate one paragraph from other, double line break needs to be given between the paragraphs.

**Spelling :** The author can follow either British or American style of spelling, but one style should be followed althrough the Report

#### **Page Numbering**

Font Type: (a) Pre-literature Sections (Top page, 2<sup>nd</sup> page and 3<sup>rd</sup> page, Abstract with 'সারসংক্ষেপ' and Content pages) — Roman Numeric Numbers in Times New Roman Font e.g., i, ii, iii, iv, v, vi, vii, viii, ix, x and so on.

(b) Literature Sections – Numeric Numbers in Times New Roman e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and so on.

Font Size: 12
Font Style: Regular

**Position**: Bottom of the Page **Alignment**: Middle of the Page

# **Specification of Paper and Printing**

## **Paper**

Size: A4

Weight: Preferably 80 gm

Quality: Offset

#### **Printing**

The literature part should be printed in both sides of a page. But, if needed for a precise purpose, single side printing could be performed for a particular section or sections. The Report should preferably be printed by Laser Jet printer.

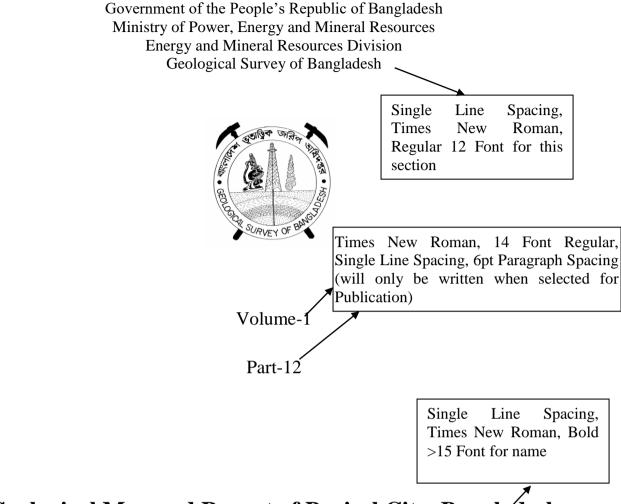
## **Formatting of the Pre-literature Sections**

The Pre-literature sections are comprised of

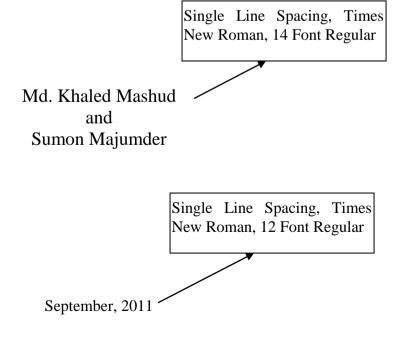
- a) Cover Page (Volume and Part numbers need to be given when the report is selected for publication)
- b) Inner Page
- c) Page containing the name of the Members of the Editorial Board (When selected for Publication)
- d) Abstract and
- e) Contents

Standard Format and Writing styles of these sections are shown below accordingly.

# This is a Standard Format for the Top page



# Geological Map and Report of Barisal City, Bangladesh



# This is a Standard Format for the 2nd page

Government of the People's Republic of Bangladesh

Geological Survey of Bangladesh

Times New Roman, 14 Font Bold

# Geological Map and Report of Barisal City, Bangladesh

Font, Font size, Line spacing, paragraph spacing etc will be the same of Top page

Md. Khaled Mashud<sup>1</sup>

and

Sumon Majumder<sup>2</sup>

## September, 2011

<sup>&</sup>lt;sup>1</sup>Director (.....) and <sup>2</sup>Deputy Director (.....), Geological Survey of Bangladesh, 153 Pioneer Road, Segunbagicha, Dhaka 1000, Bangladesh

# This is a Standard Format for the 3rd page – should be added only to the reports selected for publication



Times New Roman, 15 Font Bold, Paragraph Spacing 6pt after, Underlined

# **Editorial Board**

Pradip Kumar Sen Gupta, Director (Geology) and Chairman

Dr. Sirajur Rahman Khan, Director (Geology) and Member

Dr. A.K.M. Khorshed Alam, Director (Geology) and Member

Md. Khairul Islam, Director (Geology) and Member

Dr. Md. Nehal Uddin, Director (Geology) and Member

Dr. Khan Md. Shamsul Arefin, Director (Geophysics) and Member

Times New Roman, Regular 12 Font, 1.3pt Line Spacing, Paragraph Spacing 6pt before and after.

#### **ABSTRACT**

#### **Writing Style**

An ABSTRACT is considered as the summary of a Report. Generally, it is comprised of the brief statements of three (3) main chapters of a Report. In an ideal case, the brief statements of those chapters are written in three separate paragraphs which can be designated as 1<sup>st</sup> Paragraph, 2<sup>nd</sup> Paragraph and 3<sup>rd</sup> Paragraph. Instead of writing separately, the three paragraphs can also be written together in a single paragraph. But the sequential appearance of the three paragraphs should be maintained. Sequential appearance of the three (3) paragraphs and their corresponding chapters are given below –

1st Paragraph – Introductory statements in brief (What, where, why and how)

2<sup>nd</sup> Paragraph – Experimentation, Findings and Results

3<sup>rd</sup> Paragraph – Concluding statements

#### Length

The **ABSTRACT** should preferably be written within 500 words unless it is an extended Abstract, which may be up to 1000 words.

Unicode/SutonnyMJ, Bold 16 Font, Paragraph Spacing 6pt after

তিনটি অনুচ্ছেদের বাংলা অনুবাদ দিতে হবে। প্রয়োজনে বাংলা অনুবাদে অতিরিক্ত তথ্য দেয়া যেতে পারে। ভূবৈজ্ঞানিক/বৈজ্ঞানিক নামের যদি বাংলা থাকে তবে তা ব্যবহার করতে হবে কিন্তু প্রথম বন্ধনীর () মধ্যে ইংরাজীতে নাম লিখে দিতে হবে, যেমন - ভূতত্ত্ব (Geology)। কিন্তু যদি ইংরাজী নামের বাংলায় কোন প্রতিশব্দ না থাকে তবে ইংরাজী নামই বাংলায় বানান করে লিখে দিতে হবে এবং প্রথম বন্ধনীর () মধ্যে ইংরাজীতে নাম লিখে দিতে হবে, যেমন - জিওলোজি (Geology)।

ইংরাজীতে কোন উদ্ভিদ বা প্রাণীর বৈজ্ঞানিক নাম লিখতে ইটালিক (Italic) হরফ স্টাইল (ডান দিকে ঢুলে) ব্যবহার করা হয়, যেমন- (Ananas sativa)। এরকম ক্ষেত্রে ইংরাজী নামটি বাংলায় বানান করে লিখে ইটালিক হরফ স্টাইল (ডান দিকে বাঁকা) করে দিতে হবে, যেমন- আনানাস সাটিভা। এ সুবিধা কেবল কম্পিউটার ব্যবহারকারীগণই পাবেন। যদি কেহ টাইপরাইটারে বা হাতে লিখে দিতে চান সে ক্ষেত্রে যতটুকু ইটালিক হবে ততটুকুর নিচে লাইন দিয়ে দিতে হবে, যেমন - আনানাস সাটিভা।

For Bangla: Unicode/SutonnyMJ, Regular 14 Font, Line Spacing 1.3, Paragraph Spacing 6pt Before for Bangla literature.

**For English** (written within Parenthesis): 12 Font, Times New Roman.

[ Note: 'ABSTRACT' and 'সারসংক্ষেপ' will be placed above CONTENTS just after the top pages of the Report as shown in this Guide.]

A typical style of Content writing is shown below. The **CONTENTS** may vary depending upon the Purpose and Category of works.

#### **CONTENTS**

Page No.

INTRODUCTION - 1<sup>st</sup> Order Heading (All capitals)

Background and Objectives

Location, Extent and Access - 2<sup>nd</sup> Order Heading (1<sup>st</sup> letters of each word will be capital)

Purpose and Scope

Previous Work/Literature Review

Materials Used and Methods

Acknowledgements

#### **GEOGRAPHY**

Population and Culture

Vegetation and Cultivation

Agricultural Soil

Meteorological Data

Rainfall - 3<sup>rd</sup> Order Heading (1<sup>st</sup> letters of each word will be capital)

Temperature

Humidity

Wind Speed

Flooding

Cyclone and Water Surge

Historical Cyclones - 4<sup>th</sup> Order Heading (1<sup>st</sup> letters of each word will be capital)

Physiography

#### HYDROLOGY/HYDROGEOLOGY

Surface Water

**Stagnant Water Bodies** 

**Ponds** 

Beels

**Abandoned Channels** 

Flowing Water Bodies

Charas

Channels

Rivers

Ground Water

#### **GEOLOGY**

Regional Tectonic Setting

General Geology of the Study Area

Structure and Tectonics of the Area

Geological Map Units and Their Descriptions

Stratigraphy

Geological History of the Area

#### ANALYTICAL RESULTS AND INTERPRETATIONS

Grain-size Analysis

Clay Mineralogy

# Page No.

Microfossil Analysis Palynological Study Geotechnical Study Chemical Analysis

TERRAIN EVALUATION

HAZARDS OF THE AREA

LAND-USE PLANNING

**ECONOMIC GEOLOGY** 

**DISCUSSION** 

CONCLUSION AND RECOMMENDATION উপসংহার (CONCLUSION-এর বঙ্গানুবাদ) REFERENCES

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[Note: Annexure/Annexures are extended/elaborate part of the data used for interpretation.

Appendix/Appendices are not interpretation linked data but additional data for extra information]

## **Literature Writing Instructions**

Planning for presenting information in a Report is very important for the author (s). It has to be mentioned here that the author(s) is (are) not writing only for his/her (their) understanding but to disseminate data/information among the wide range of readers. He/She (They) has (have) to think about the easiest and the most effective and logical ways of presenting his/her (their) findings. On the basis of type of data/information, the Main Headings, Headings and Sub-headings have to be determined. Then all the writing materials including the data/information have to disseminate under every logical headings to construct a draft report. After completion of constructing the draft report, formatting of the writing materials is necessary in maintaining the order of headings. For instance, guidelines of the headings according to their orders and writing styles are shown below. Please follow the style, font, font type and position for each type of headings.

[Note: Report should be written in simple sentences, passive voice and in present perfect tense.]

#### A. Order of Headings

#### FIRST ORDER HEADING

(Centre line and all CAPITAL Letters as above)

Literature writing under the 1<sup>st</sup> Order heading will be started from the left margin with a paragraph break (as shown here). The Paragraph break will be the same type as used in the ABSTRACT.

#### **Second Order Heading**

(Centre line and all the words started with Capital letter as above)

Literature writing under the 2<sup>nd</sup> Order heading will also be started from the left margin with a paragraph break (as shown here). The Paragraph break will be the same type as used in the ABSTRACT.

[Note: Regular page numbering of the Report will be started from here with '1' in Times New Roman, 12 Font and continue till last page]

**Third Order Heading** 

(Left aligned and all the words started with Capital letter as above)

Literature writing under the 3rd Order heading will also be started from the left margin with a paragraph break (as shown here). The Paragraph break will be the same type as used in the

ABSTRACT.

Fourth Order Heading - Literature writing under the 3rd Order heading will also be started

from the left margin with a paragraph break (as shown here). The Paragraph break will be the

same type as used in the ABSTRACT.

(Left aligned and all the words will be started with Capital letter as above. The literature

writing will be continuous just after a dash (–) as shown above).

**B.** Font Type and Size for writing

Font: Times New Roman for all writings

**Size**: 12 for all writings

Styles: Bold- for all Headings, Regular- for literature writings and Italic- for writing the

scientific names of plants and animals, and for writing special words and name of

journals or books in REFERENCES.

C. Spelling

Author should follow either British or American Spellings all through the Report

including ABSTRACT.

D. Para Break

Author will follow either British or American style of Para breaking throughout the Report

including ABSTRACT.

(1) British Style of Para Break

Writing will be started leaving a space of ½" from the left margin like this line as

shown here.

(2) American Style

Writing will be started just from the left margin like this line. But an extra line space will

be given between the Heading and the first line of the literature as shown here.

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#### E. Unit

Metric Units will be used althrough the report. But the FPS units, used earlier, will be given within first bracket, e.g., 1 meter (3.28 feet).

#### F. Reference writing in literature

References should be written in the text body in the following manner-

- (1) When **single Author**: The coastal areas of Bangladesh has been evolving through a complex geological processes since the closing of the last glacial maxima (Khan, 1992)
- (2) When **two Authors**: The evolutionary history of the coastal areas of Bangladesh following the last glacial maxima (Alam and Islam, 1992)
- (3) When **three or more Authors**: The Holocene depositional pattern of the coastal areas of Bangladesh depends mainly on sea level fluctuations (Khan *et al.*, 1992)
- (4) When **Journal or Book will be edited by an individual or panel**: The sea level is rising slowly since the last glacial maxima (Steckler, 1984).

## (5) When **no particular Author**:

- a) The maximum temperature of Bangladesh has been reached to 40°C in the month of August, 2010 (Anon¹, 2010) Statistical data or
- **b)** Fifteen people died in a road mishap on the 15<sup>th</sup> July, 2010 (Anon², 2010) Paper news
- c) Rajshahi District Falls under the Zone-III in the Earthquake Zonation Map of Bangladesh (Anon, 1990) Report without author's name (s)
- (6) In case of **unpublished report** (s) Dighipara coal is one of the finest anthracitic coal found in Bangladesh (Uddin, 1996 (unpublished report))
- (7) In case of **Personal Communication with a Person:** Drilling in the northwestern Part of Bangladesh could be resulted into a huge discovery of coal deposit (Personal communication: Md. Khurshid Alam, Ex-Director General, Geological Survey of Bangladesh, 22/08/2010) **This type of reference will not be included in the Reference list.**

#### **G.** References

To write Reference (s) some major examples are given below (follow their text marks above) –

#### **REFERENCES**

- Khan, M.A. and Uddin, M.K., 1990. The evolutionary history of the coastal areas of Bangladesh following the last glacial maxima, *Journal of Sedimentary Geology or Jour. Sed. Geol.*, Elsevier Publications, New York-London-Paris, Vol. 4, pp. 20-24.
- Anon, 1990. *Earthquake Zoning Map of Bangladesh*, Prepared by a group of experts from the Geological Survey of Bangladesh and Bangladesh University of Engineering and Technology, Dhaka, Ministry of Energy and Mineral Resources, Government of the People's Republic of Bangladesh.
- Anon<sup>1</sup>, 2010. Meteorological Data of the Dhaka City, *The Statistical Year Book of Bangladesh*, 2010, Statistical Bureau of Bangladesh, Ministry of Defense, Government of the People's Republic of Bangladesh, pp. 110-130.
- Anon<sup>2</sup>, 2010. Road Mishap, *The Daily Ittefaq*, Chief Editor: Jamshed Khan, 15<sup>th</sup> February, 2010, Dhaka, Bangladesh.
- Khandker, S.A., 1992. The coastal areas of Bangladesh have been evolving through a complex geological processes since the closing of the last glacial maxima, *Journal of the Geological Society of Bangladesh* (or *Jour. Geol. Soc. Bangladesh*), Vol. 12, pp. 20-37.
- Khandker, S.A., Khan, M.A. and Uddin, M.K., 1992. The Holocene depositional pattern of the coastal areas of Bangladesh, Proceedings of the 3<sup>rd</sup> International Conference on Global Warming, 20-22 June, 2011, Dhaka, Bangladesh, pp.110-130.
- Steckler, M., 1984. Changes in Sea level, In: Holland, HD and Trendall, A.F., (eds) *Patterns of changes in Earth evolution*, Springer-Verleg, Berlin, Heidelberg, New York, Tokyo, pp. 103-121.
- Uddin, M.K., 1996. Geological Report of the Dighipara Coal Field, Rangpur, Bangladesh, Unpublished Geological Report of the Geological Survey of Bangladesh, Energy and Mineral Resources Division, Ministry of Power, Energy and Mineral Resources, Government of the People's Republic of Bangladesh.

- **Remarks** 1) Name of the Unpublished Report will not be written in Italics as shown above.
  - 2) Generally the Unpublished Reports are not referred in the literature or not included in the Reference list.

General Principles to be followed by an author (s) in writing **REFERENCE** list -

- 1) **If Authors name contains only 2 parts** both the parts write in full, e.g., Rahman, Abdur, 1990 (Original name is Abdur Rahman).
- 2) **If Author's name contains more than 2 parts** the last name will be written in full and the first letters of other parts will be written in Capital according to his name serial, e.g., Khan, M.A., 2010 (Original name is Mahbub Alam Khan).
- 3) The serial position of the Reports or Books or Papers etc. in Reference list will be decided according to the chronological position of the first letters of referred names in Alphabet list (please see the REFERENCE list above).
- 4) If there are many publications of an author in single authorship and in principal authorship with others, the single Authorship Publication will be placed above the Principal Authorship publication (please see REFERENCE list above for Khandker, S.A., 1992, and Khandker, S.A., Khan, M.A. and Uddin, M.K., 1992)
- 5) The earlier publications will appear earlier in the Reference list for the same author (please see Anon, Anon<sup>1</sup> & Anon<sup>2</sup>).
- 6) If there is more than one report or paper of the same Author in the same year then a superscripted numerical number will be included with the author's name (e.g. Anon<sup>1</sup>, Anon<sup>2</sup> etc.). Their numeric values indicate their serial position in the Reference list (as shown in the REFERENCE list above).
- 7) **Use of Italics in Reference List**—Book name (*Sedimentary Petrology*), Journal name (*Journal of the Geological Society of America*), Report name (*Geological Report of Barisal District*), Map name (e.g. *Geological Map of Bangladesh*).
- 8) Use of page number markings in Reference List
  - a) If Single page Simply use 'p.' (e.g., p. 95)
  - **b)** If more than 1 page use 'pp.' (e.g., pp. 10-20)
- 9) If the Book or Journal is edited by an editor or editorial board
  - a) In case of single editor give the editor's name just after the Book or Journal name (e.g., Sedimentary Characteristics of the North Atlantic Contourites, In: Stow, Dorrick (eds) *Sedimentary Petrology*, 9<sup>th</sup> edition, University Press, London, pp. 200-220.
  - **b)** In case of board of editors give the Chief editor's name just after the Book or Journal name (e.g., Ice age in British Isles, In: Stow, Dorrick (Chief Editor) edited *Reconstruction of Quaternary Geology*, Springer-Verleg, Berlin, Heidelberg, New York, Tokyo, pp. 103-121.

#### H. Use of Italics in literature

There are some words which should be written in italics. Some of them are given below with examples –

- 1) For scientific names of plants and animals e.g. Mango tree (*Mangifera indica*), Human (*Homo sapien*)
- 2) For certain Latin terms: in situ, et al
- 3) For footnotes see or see also
- 4) For all foreign words and phrases par avion
- 5) For all names of Journal, Books

#### I. Numerical Expressions

- 1) In general, numbers one to nine inclusive should be written in full, e.g., Two exploration wells were drilled.
- 2) At the beginning of a sentence the number (s) should be spelled out, e.g., Five thousand tones of coal were produced in 1991 and 10 000 in 2001 at Barapukuria Coal Mine.
- 3) Expression of Range and Vary:
  - Range The word 'Range' is used to express the physical extent of some things with numeric figures, e.g., length of the steel rods ranges from 3 m to 5 m.
  - Vary The word 'Vary' is used to express the inherent characteristics of some things, e.g., colour of steel rods varies from dark black to dark brownish black.

#### J. Numeric Figure writing

- 1) Use of 'From' and 'To': For expressing the extent of something these two words are frequently used, if used the word 'from' will be followed by the word 'to', e.g., the length of the rods ranges from 30 to 50 m, but not from 30-50.
- 2) Use of 'Between' and 'And': The word 'Between, will be followed by the word 'And', e.g., The distance between Dhaka and Savar will be 30 km, Chatak lies between the latitudes 22°52′33" and 22°54′53", but not between the latitudes 22°52′33" to 22°54′53"...
- 3) Use of Fractions: Fractions that stand alone will be spelled out, e.g., Ramna Park is about half a mile away from GSB Office.
  - When a fraction is joined to a whole number, e.g., Ramna Park is about  $1^{1}/_{2}$  kilometers away from GSB Office.

#### K. Use of Units and Symbols

- 1) Unit symbols should be written after the numerical value (s), leaving a space in-between, e.g., 5 m (for 5 meters)
- 2) The symbol of a prefix is combined with the single unit symbol to form a new symbol; it should be added without a space between, e.g., 5 km (for 5 kilometers)
- 3) Unit symbols remain unaltered in the plural, e.g., 1 m, 50 m, 400 m
- 4) Internationally recognized symbol for litre is '1' which is difficult to separate from the number 1 (one), better write in full like 'litre'.
- 5) Millimeter mm (e.g. 24 mm)
- 6) Centimeter cm (e.g. 12 cm)
- 7) Meter m (e.g. 105 m)
- 8) Kilometer km (e.g. 1 km)
- 9) Square Kilometer sq. km (e.g. 10 sq. km or may be written as 10 km<sup>2</sup>)
- 10) Cubic meter may be written as 10 m<sup>3</sup>

- 11) Acre acr (e.g. 1 acr land)
- 12) Milliliter ml (e.g., 5 ml)
- 13) Year yr (e.g. 10000 yrs BP)
- 14) Fig. for Figure

#### L. Compounding of words

Some examples of compounding of words are given below –

- 1) Unifying words without using hyphen, e.g., groundwater, into, upto, alright etc
- 2) Unifying words by using hyphen, e.g., drought-stricken area, light-green clay, water-quality data, coarse-grained sandstone, south-southwest, both short- and long-term loans are available, well-defined curve, ill-considered opinion, self-occupied dwelling etc.

#### M. Figure, Plate, Map Content and Map-unit Presentation

1) **Figure :** All the maps, cross-sections, vertical sections, drawings etc will be captioned as '**Figure**'. All the Figures will have a boarder line. No writings regarding the figure will be written outside the boarder line.

#### Figure Caption:

- Caption of the figure will be written just below the boundary margin from the left margin of the Figure. The caption should be written in the following manner-

Figure-1. Geological Map of Barisal City, Bangladesh

Of

Figure-1. Geological map of Barisal City, Bangladesh

2) **Plate:** All the photographs and pictures will be captioned as '**Plate**'.

#### **Plate Caption:**

- Caption of the plate will be written just below the boundary line from the left margin of the Plate. The caption should be written in the following manner-

Plate-1. Picture showing the erosion of Bhola Island

or

**Plate-1.** Picture Showing the Erosion of Bhola Island.

#### 3) Map Content:

- Generally, Geological and Geomorphological Maps do not contain roads, bridges, buildings or other infrastructures if not needed for special purposes.
- Map should contain linear scale, north indicating arrow, a full legend, latitudes and longitudes with global position marking symbols (for latitudes – N and longitudes – E).
- Explanation of the map symbols will be written under a headline 'LEGEND' instead of writing 'EXPLANATION'.
- The Legend should be underlined (e.g., <u>LEGEND</u>) and will occupy the top centre position of the explanations.
- Location of the important localities will be incorporated in the maps for quick understanding of the position.

#### 4) Map-unit Presentation:

For different map units either different symbols (hatching, dots, dashes, rings, shades etc) or different colour shades should be used.

#### N) Tables

Tables are normally used to show various types of data. The Caption of a Table will be written just above the table margin. The caption should be written in the following manner-

**Table-1.** Annual rainfall data in the Dhaka City, Bangladesh

or

Table-1. Annual Rainfall Data in the Dhaka City, Bangladesh

#### O) Annexure

Generally the interpretations of the acquired data are given in the Report. But the Raw data or elaborate data are often found helpful for researchers. Hence the raw or elaborate data are listed under Annexures. Annexures are nothing but extended part of interpreted data. The Annexures should be numbered as **Annexure-II**, **Annexure-III** and so on. The Caption format of the Annexures is shown below-

Annexure-1. Annual water discharge of Kirtankhola River, Barisal

Ol

Annexure-I. Annual Water Discharge of Kirtankhola River, Barisal

[Note: Generally Annexure or Annexures are included in the main text of a Report and the page numbers will be continuous with the text.]

#### P) Appendix (Appendices in plural form)

Some interpretation (s) of different geoscientific topics need to sight similar other data, results or research works. These are extra data not directly used in the report. These data are presented as Appendices. The Appendices should be numbered as **Appendix-A**, **Appendix-B**, **Appendix-C** and so on. The caption format of the **Appendices** are given below-

Appendix-A. Annual water discharge of Ilisa River, Barisal District, Bangladesh

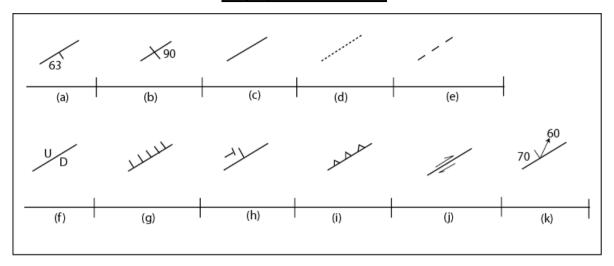
or

**Appendix-A**. Annual Water Discharge of Ilisa River, Barisal District, Bangladesh

[Note: Generally Appendix or Appendices are attached at the end of a Report and the page numbers will be continuous with the text]

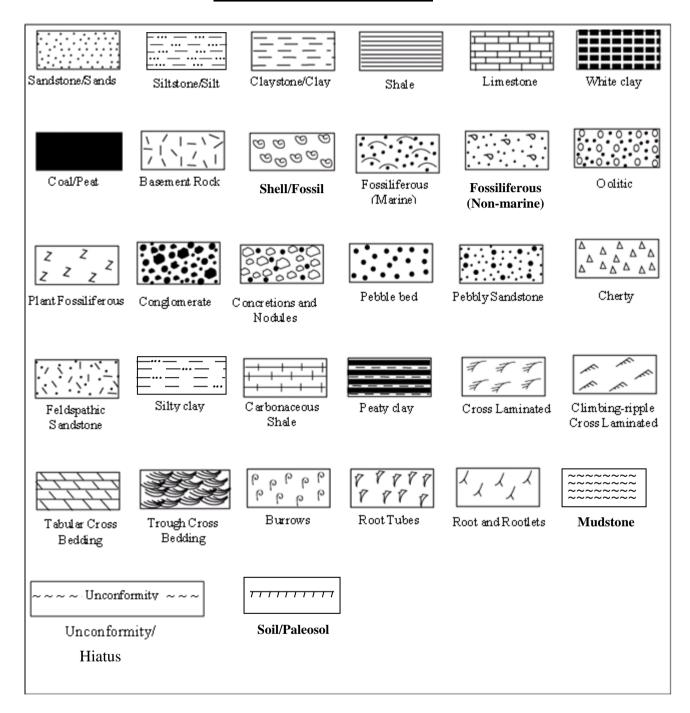
# **Common Structural and Lithological Symbols**

## **Map Symbols for Faults**



(a) Fault, showing strike and dip, (b) Strike of vertical fault, (c) Strike of Fault, dip uncertain (d) Concealed Fault, i.e., fault overlain by younger beds not affected by fault (e) Possible Fault, (f) Normal Fault, 'U' on upthrown block, 'D' on downthrown block, (g) Normal Fault, hachure on downthrown block, (h) Thrust, T on upthrown block or (i) Thrust, sawteeth on upthrown block, (j) Strike-slip Fault, showing relative movement, (k) Fault with dip, also shows bearing and plunge of slickensides.

#### **Common Symbols for Lithology**



[Note: If needed the author(s) can combine the above symbols to represent the lithological features. In such case, the lithological dominancy should be maintained accordingly]