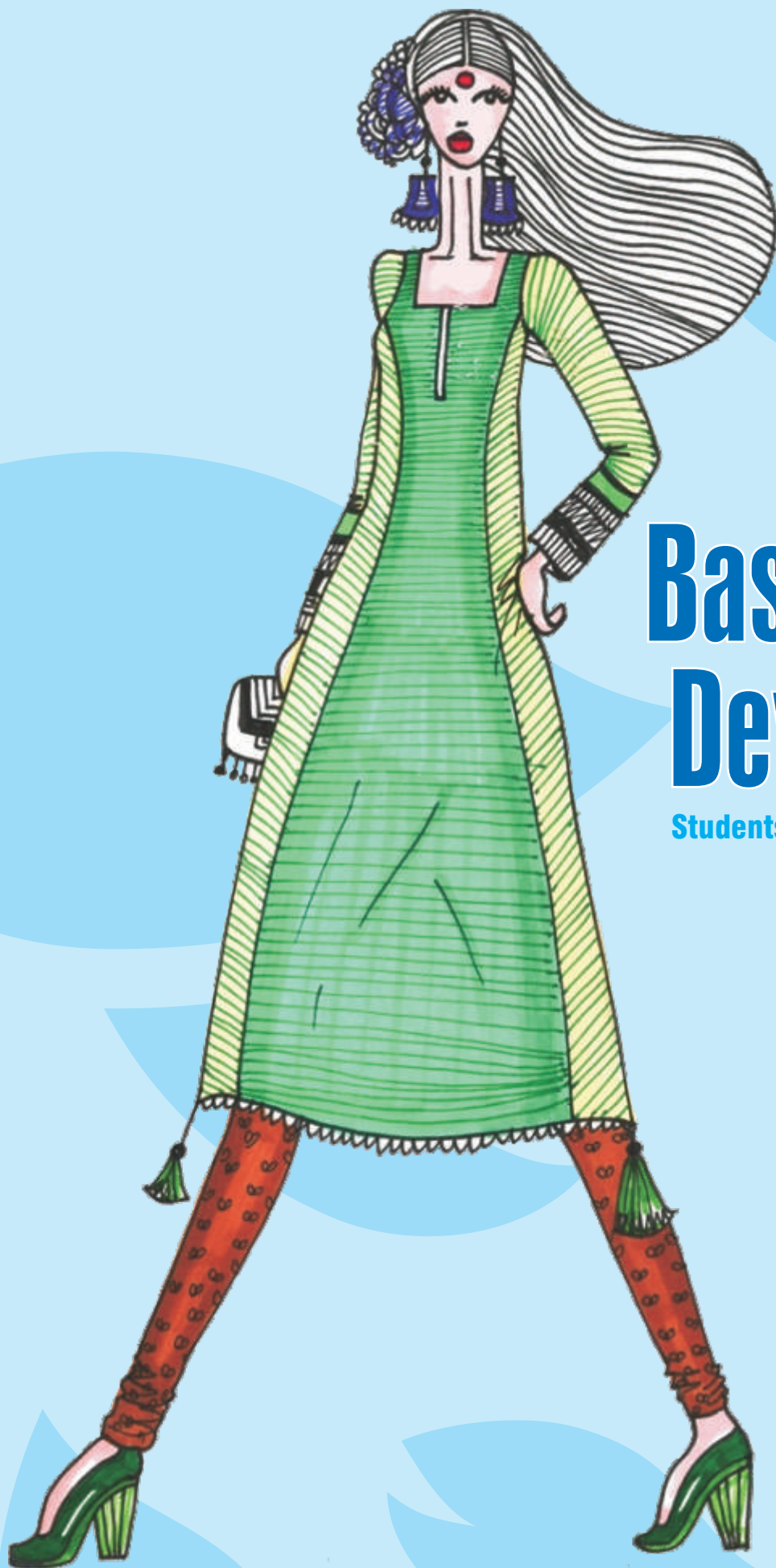




Basic Pattern Development

Students Handbook + Practical Manual

Class XII



**CENTRAL BOARD OF
SECONDARY EDUCATION**

Shiksha Kendra, 2, Community Centre,
Preet Vihar, Delhi-110301



Basic Pattern Development

Students Handbook + Practical Manual

CLASS-XII



CENTRAL BOARD OF SECONDARY EDUCATION

in collaboration with



NATIONAL INSTITUTE OF FASHION TECHNOLOGY



Basic Pattern Development

Students Handbook + Practical Manual for Class - XII

PRICE: ₹

First Edition: June 2014, CBSE

Copies: 1000

Paper Used: 80 gsm White Maplitho



***"This book or part thereof may not be reproduced by
any person or agency in any manner."***

Published By : The Secretary, Central Board of Secondary Education,
Shiksha Kendra, 2, Community Centre, Preet Vihar,
Delhi-110301

Design & Layout : Multi Graphics, 8A/101, WEA Karol Bagh, New Delhi-110005
Phone: 011-25783846

Printed By : Akashdeep Printers, 20, Ansari Raod, Daryaganj,
New Delhi - 110002

भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक सम्पूर्ण ¹प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य बनाने के लिए, तथा उसके समस्त नागरिकों को:

सामाजिक, आर्थिक और राजनैतिक न्याय,

विचार, अभिव्यक्ति, विश्वास, धर्म

और उपासना की स्वतंत्रता,

प्रतिष्ठा और अवसर की समता

प्राप्त कराने के लिए

तथा उन सब में व्यक्ति की गरिमा

²और राष्ट्र की एकता और अखंडता

सुनिश्चित करने वाली बंधुता बढ़ाने के लिए

दृढ़संकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई० को एतद्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

1. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से “प्रभुत्व-संपन्न लोकतंत्रात्मक गणराज्य” के स्थान पर प्रतिस्थापित।
2. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से “राष्ट्र की एकता” के स्थान पर प्रतिस्थापित।

भाग 4 क

मूल कर्तव्य

51 क. मूल कर्तव्य – भारत के प्रत्येक नागरिक का यह कर्तव्य होगा कि वह –

- (क) संविधान का पालन करे और उसके आदर्शों, संस्थाओं, राष्ट्रध्वज और राष्ट्रगान का आदर करे;
- (ख) स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखे और उनका पालन करे;
- (ग) भारत की प्रभुता, एकता और अखंडता की रक्षा करे और उसे अक्षुण्ण रखे;
- (घ) देश की रक्षा करे और आह्वान किए जाने पर राष्ट्र की सेवा करे;
- (ङ) भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करे जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करे जो स्त्रियों के सम्मान के विरुद्ध हैं;
- (च) हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझे और उसका परिरक्षण करे;
- (छ) प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करे और उसका संवर्धन करे तथा प्राणी मात्र के प्रति दयाभाव रखे;
- (ज) वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करे;
- (झ) सार्वजनिक संपत्ति को सुरक्षित रखे और हिंसा से दूर रहे;
- (ञ) व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करे जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई उंचाइयों को छू ले;
- ¹(ट) यदि माता-पिता या संरक्षक हैं, छह वर्ष से चौदह वर्ष तक की आयु वाले अपने, यथास्थिति, बालक या प्रतिपाल्य के लिये शिक्षा के अवसर प्रदान करे।

1. संविधान (छयासीवां संशोधन) अधिनियम, 2002 की धारा 4 द्वारा प्रतिस्थापित।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the²unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

-
1. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
 2. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "unity of the Nation" (w.e.f. 3.1.1977)
-

THE CONSTITUTION OF INDIA

Chapter IV A

FUNDAMENTAL DUTIES

ARTICLE 51A

Fundamental Duties - It shall be the duty of every citizen of India-

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- ¹(k) to provide opportunities for education to his/her child or, as the case may be, ward between age of 6 and 14 years.

-
1. Subs. by the Constitution (Eighty - Sixth Amendment) Act, 2002

Foreword

The Indian textile and fashion industry contributes substantially to its exports earnings. It is also the second largest domestic employer after agriculture. The garment industry is classified into organized and unorganized sectors catering to a diverse consumer segment. The unorganized segment comprises small-scale readymade apparel stores, independent fabric and tailoring shops etc. The organized sector comprises single-brand or multi-brand retail outlets, designer boutiques etc. to cater to different strata of consumers. The domestic apparel market is expected to grow @ 11% CAGR primarily driven by high value growth due to organized and branded segment. The Indian textile and apparel trade is estimated at USD 662 billion in 2011 and is expected to grow at 5% CAGR by 2021. Employment in the Indian textile and apparel sector stands at 45 million with an additional employment of 60 million in allied sectors.

The Central Board of Secondary Education (CBSE) has taken the initiative of developing a range of vocational courses in areas of emerging interest for those students who may not pursue higher education due to financial constraints or for any other reason. In keeping with this objective, the vocational course on Fashion Design Garment Technology (FDGT) for students of Std XI and XII offers an option to those who would like to enter the fashion industry right after completion of secondary level of education. While academic courses have more theory-based curricular content and do not develop extensive hands-on skill competency, it is envisaged that vocational courses will inculcate not only knowledge but also the related skills which are required by specific industry segments. The FDGT course combines a gamut of theoretical with practical inputs in order to enable students to gain professional competency education in the area of fashion design and garment technology.

The content of the subject is the outcome of consultative discussions among CBSE officials and teachers, senior NIFT faculty members and alumni, industry members representing the export and domestic garment sector including fashion designers.

The Board would like to place on record the support received from Shri P K Gera, IAS, Director General NIFT and Sr. Prof. Banhi Jha, Dean - Academic. We also acknowledge the contribution of Sr. Prof. Banhi Jha, Prof. Vandana Narang - Project Anchor, Prof. Malini Reddy, Dr. Rajitha & Mr. K.D. Sharma faculty of NIFT for their time and effort in developing the FDGT textbooks for Std XII. The contribution of Dr. Biswajit Saha, Addl. Director & Ms. Swati Gupta, Deputy Director, Vocational Education Cell, CBSE is also deeply appreciated.

Any suggestions and feedback from the readers for improvement in the future editions of the subject is welcome.

Shri Vineet Joshi
Chairman, CBSE



Preamble

Fashion is dynamic and ever changing. It is one of the most powerful forces in our lives. It influences every facet of our lifestyle at a particular period in time e.g. the clothes we wear, the music we listen, the food we eat, where we go for holiday or the car we drive in etc.

The purpose of the stream of Fashion Design and Garment technology under the broad head of Professional Competency Education is to acquaint the students with the fundamentals of fashion design and production of garments. Fashion Design as profession includes the entire process of designing and producing fashion apparels from the fibre and yarn stage to the finished product. The subjects of this course will give an overview of fashion design and elaborate on different aspects like elements of design, history of fashion, fabrics, and understanding of the body, pattern development and garment construction.

The apparel industry is a heterogeneous entity where the design, technology and management of fashion activities are geared towards mass production, limited edition, high fashion clothing, crafts, exports and other niche segments. This subject also gives directional options for students wishing to pursue higher studies in fashion and seeking careers as fashion professionals.

CBSE

Sh. Vineet Joshi, Chairman

Sh. M.V.V. Prasada Rao, Director (Vocational and Edusat)

Dr. Biswajit Saha, Additional Director (Vocational)

Ms. Swati Gupta, Deputy Director (Vocational), CBSE Anchor

NIFT

Mr. Prem Kumar Gera, IAS

Sr. Prof. Banhi Jha, Dean(A)

Anchor

Dr. Vandana Narang, Professor, NIFT

Contributors

Basic Pattern Development Dr. Vandana Narang, Professor, NIFT

Illustrations by Amit Rajak & Srishti Gupta Roy, NIFT

Table of Contents

Chapter - 1 : Introduction to Pattern Making	1
1.1 Introduction	1
1.2 Understanding of Body & Its Measurements	1
1.3 Methods of Measuring Body and Dress Form	3
1.3.1 Method of Measuring a Dress Form	3
1.3.2 Measurements	4
1.3.3 Things to Keep in Mind While Taking Measurement on the Body.	9
Summary	10
Exercise	10
Chapter - 2 : Methods of Measuring	11
2.1 Relationship of Sizes and Measurement	11
2.1.1 Ease	12
2.2 Standard Measurement Chart for Womens wear	12
Summary	13
Exercise	13
Chapter - 3 : Tools & Terminology of Pattern Making	15
3.1 Tools of Pattern Making	15
3.2 Other Pattern Aids	17
3.3 Terminology	17
3.4 Symbols and Abbreviations	23
Summary	23
Exercise	23
Chapter - 4 : Garment Details	25
4.1 Types of Darts, Pleats, Gathers and Tucks	25
4.1.1 Darts	25
4.1.2 Pleats	25
4.1.3 Gathers	26
4.1. 4 Tucks	27
4.2 Types of Collars, Necklines & Edge Finishes	27



4.2.1 Collars	27
4.2.2 Facings	28
4.3 Plackets	29
4. 4 Sleeves	29
Summary	30
Exercise	31

Chapter - 5 : Pattern Making of Indian Garments 32

5.1 Indian Garments	32
5.2 Various Kinds of Saree Blouse	33
5.2.1 Detailing of Blouse	33
5.3 Necklines & Its Variations	34
5.3.1 Points to be Kept in Mind for Developing Necklines	35
5.4. Various Possibilities in Necklines	35
5.5 Finishing of Necklines	36
Summary	36
Exercise	36
5.6. Choli Blouse	37
5.7. Salwar Kameez	39
5.7.1 Salwar	39
5.7.2 Churidar Payjama	40
5.8 Upper Body Garments	41
5.8.1 Kameez	41
5.8.2 Kalidar Kurta	41
Summary	43
Exercise	43

Chapter - 6 : Pattern Development from Drape and Measurements 45

6.1 Pattern Development from Drape and Measurements	45
6.2 Pattern Development	45
6.2.1 Flat Pattern Method	46
6.2.2 Direct Drafting Method	46
6.2.3 Draping	46



Summary	47
Exercise	47
Chapter -7 : Garment Fit	48
7.1 Pattern Development	48
7.2. Garment Fitting	48
7.2.1 Introduction to Fit	48
7.3 Elements of Fit	49
7.4 Evaluating Fit	50
7.4.1 Shoulders	50
7.4.2 Bust	50
7.4.3 Neckline	51
7.4.4 Collar	51
7.4.5 Armscye	51
7.4.6 Sleeves	51
7.4.7 Waistline	51
7.4.8 Hips	52
7.4.9 Crotch/Seat	52
7.5 Other Factors in Fit	52
7.6 Methods of Fitting	53
Summary	54
Exercise	54
Glossary	57



