India: Introduction
Structures

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BY

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E-content for

B.A. Hons. Part- II

India: Introduction

.Geologically, India is a land of diversity.

.Here all geological systems (except some one or two) are present and can be studied .

.These geological structures are responsible for the formation of Indian Physiography and relief .

.The wide range of Physical features of India makes the country a complete geographical entity.

India: Introduction

.It is interesting that India has every possible landscape that the Earth has.

.It contains cold & high rise new mountains to hot arid desert.

.It has diverse rolling surface of Plateau to vast area of flat Plains .

. It has wide range of sea shore to tropical Islands even it contains coral reef islands and active volcanic Island.

Contd...

Stratigraphy

Cenozoic

Mesozoic

Paleozoic

Azoic

Indian Stratigraphy

Geologically, Stratigraphy of India is as follows –

Paleozoic

U U

Azoic - (oldest)

Vindhyan -Known as Super group- Rich in Lime stone

Delhi series-

Aravalli-

Cudappah- Rich in in sandstone, nickel, cobalt ,copper, limestone, marble etc.

Dharwar- First sedimentary system of India

Archean- Known as Basement complex

Rich in metallic and non - metallic minerals

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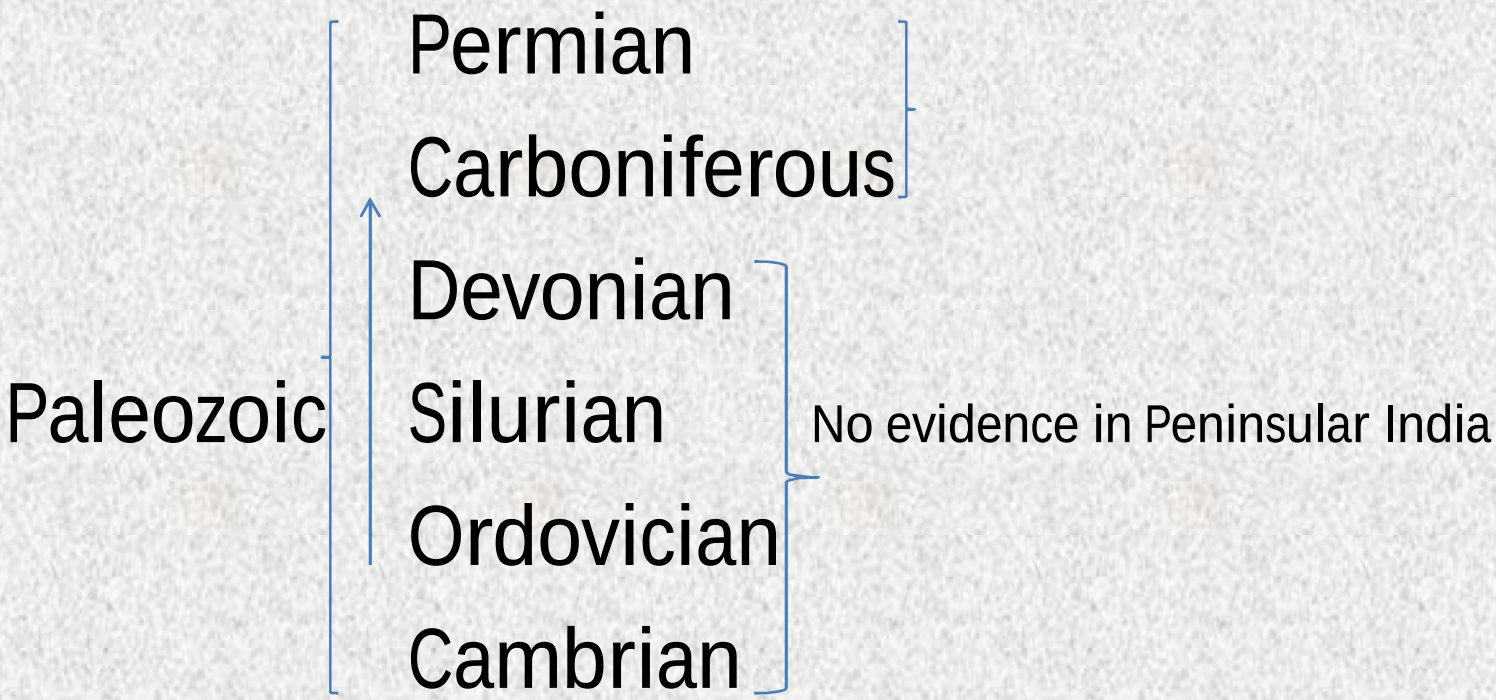

The period before Cambrian i.e. Azoic ; is known as Pre-Cambrian era.

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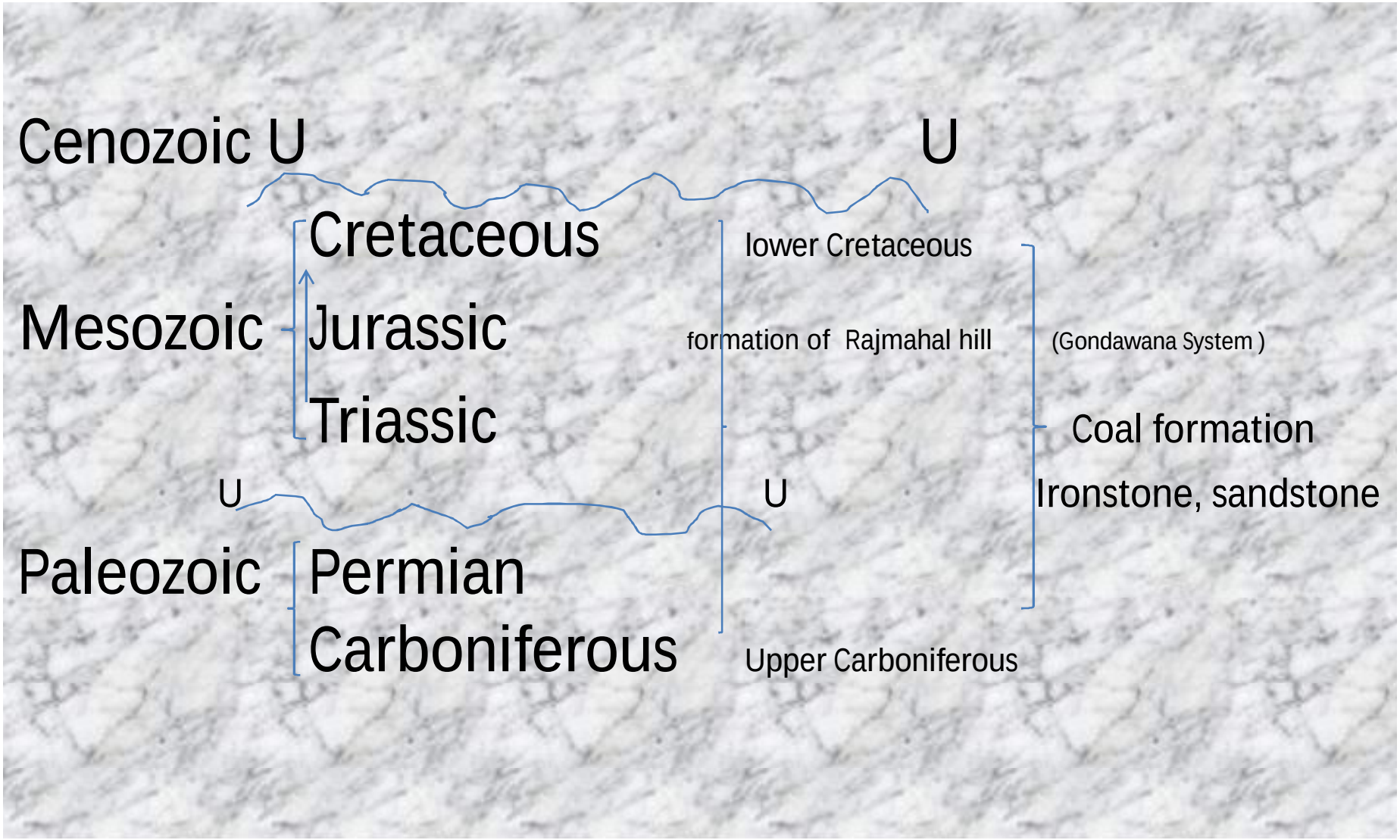
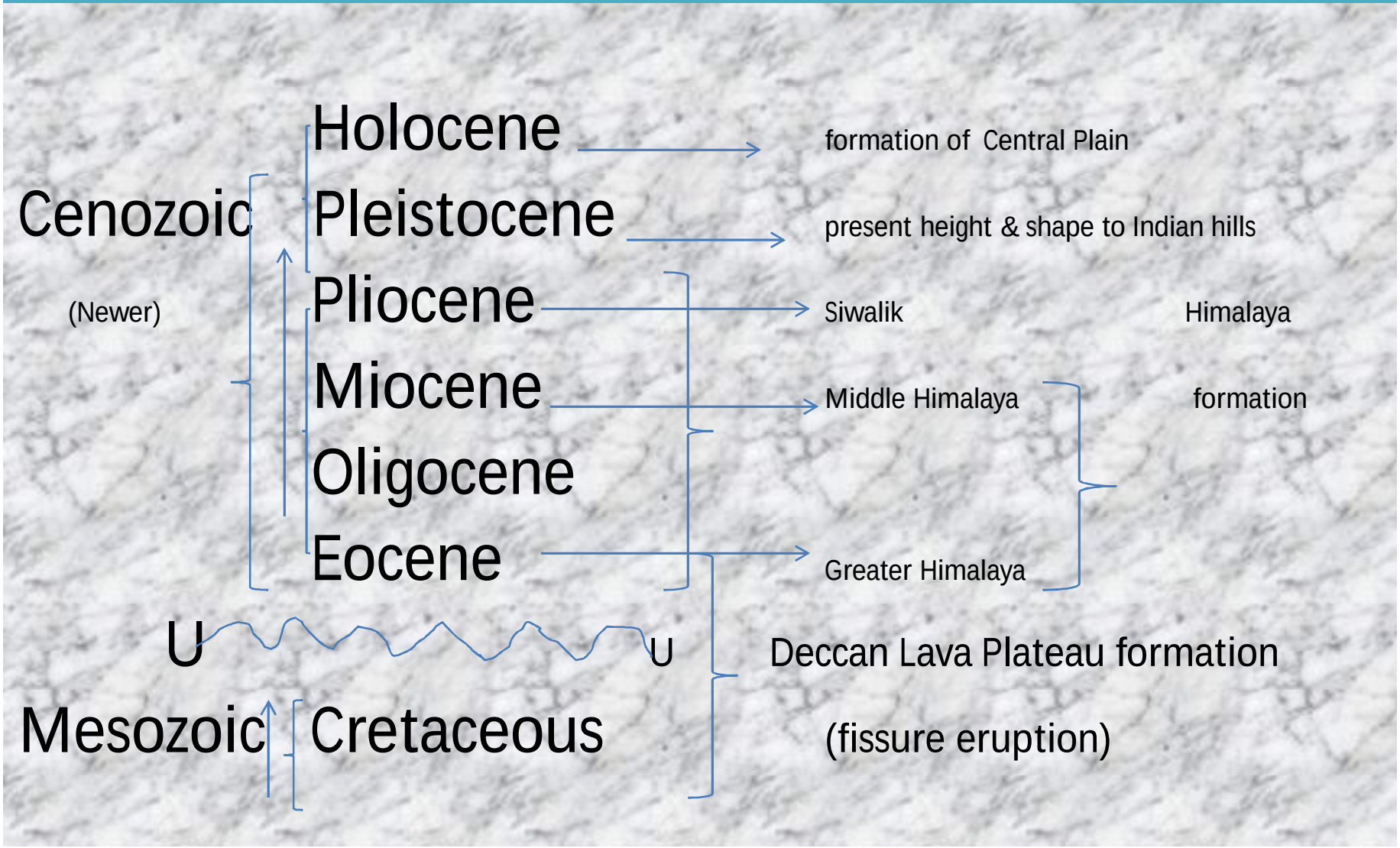
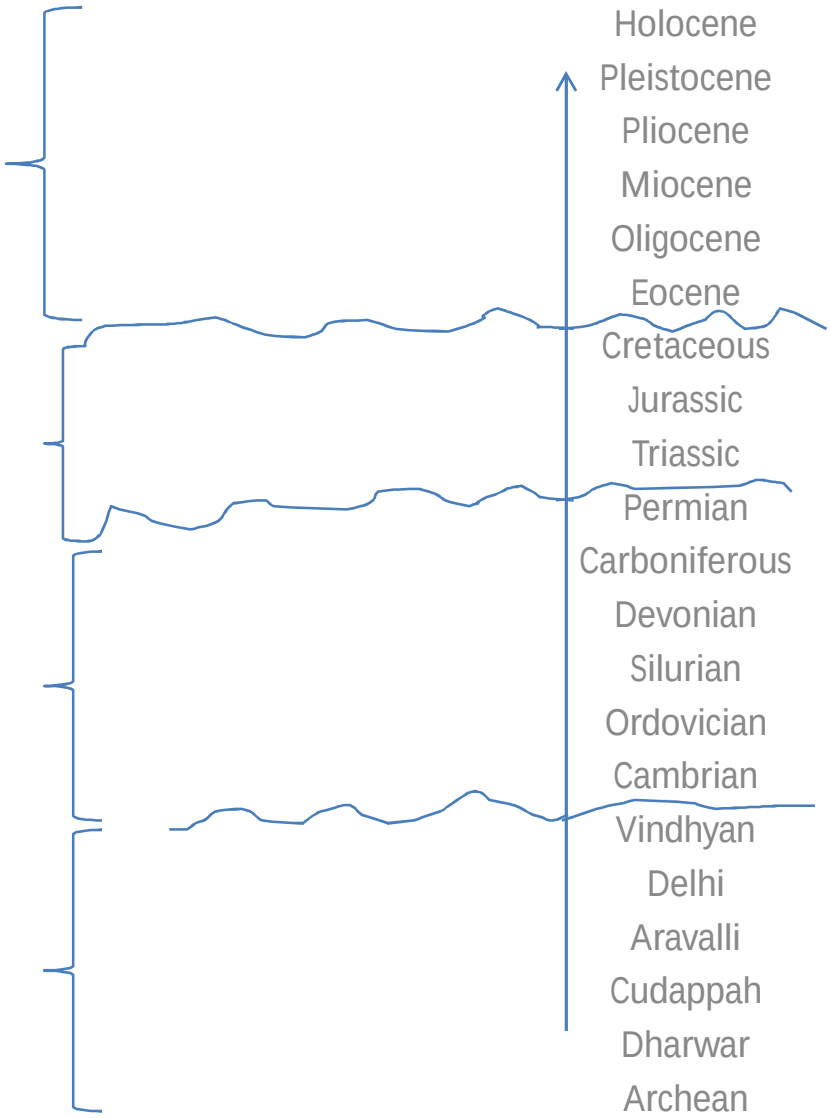

Cenozoic U
U
Cretaceous
lower Cretaceous
Mesozoic
Jurassic
formation of Rajmahal hill
(Gondawana System)
Triassic
Coal formation
U
U
Ironstone, sandstone
Paleozoic
Permian
Carboniferous
Upper Carboniferous

Contd....

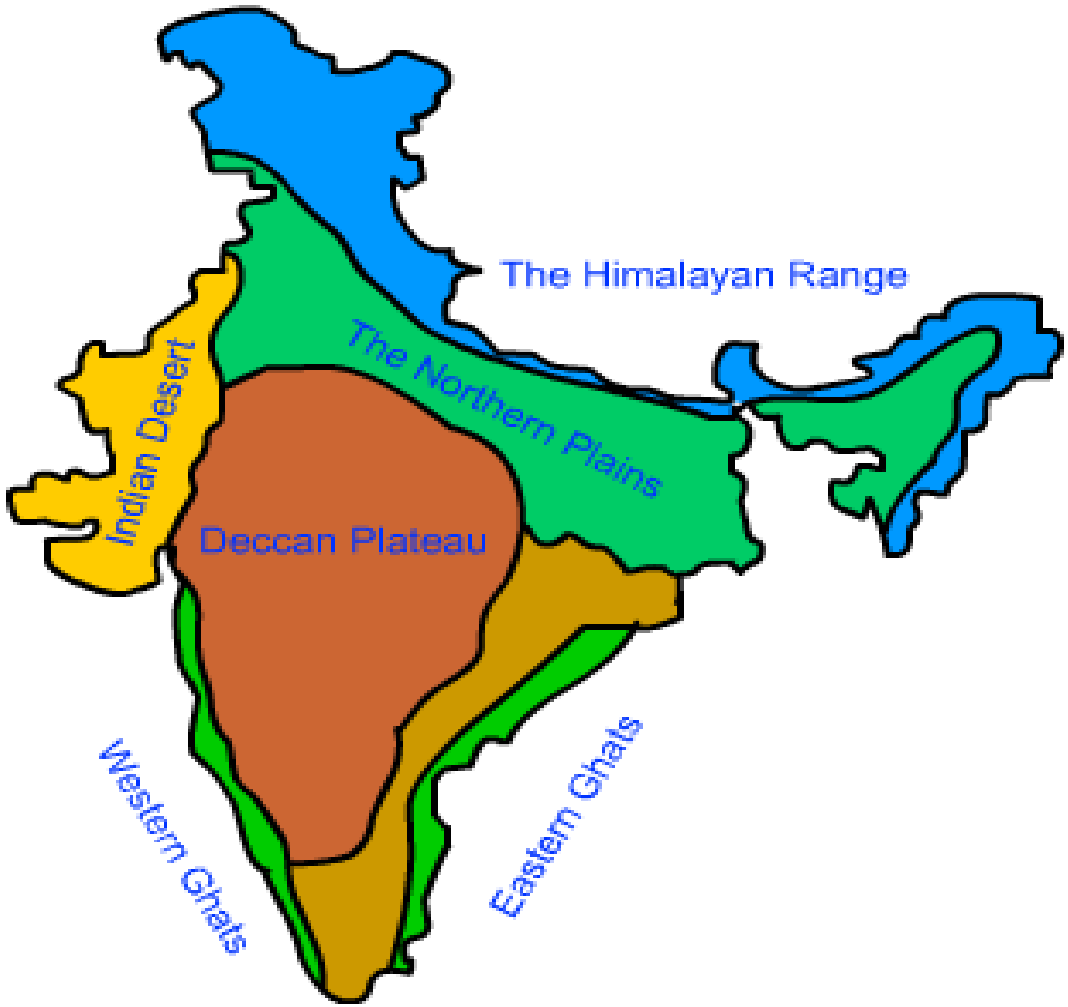

Cenozoic
(Newer)
Holocene
Pleistocene
Pliocene
Miocene
Oligocene
Eocene
U
U
Mesozoic
Cretaceous
formation of Central Plain
present height & shape to Indian hills
Siwalik
Himalaya
Middle Himalaya
formation
Greater Himalaya
Deccan Lava Plateau formation
(fissure eruption)

Contd....


Holocene
Pleistocene
Pliocene
Miocene
Oligocene
Eocene
Cretaceous
Jurassic
Triassic
Permian
Carboniferous
Devonian
Silurian
Ordovician
Cambrian
Vindhyan
Delhi
Aravalli
Cudappah
Dharwar
Archean

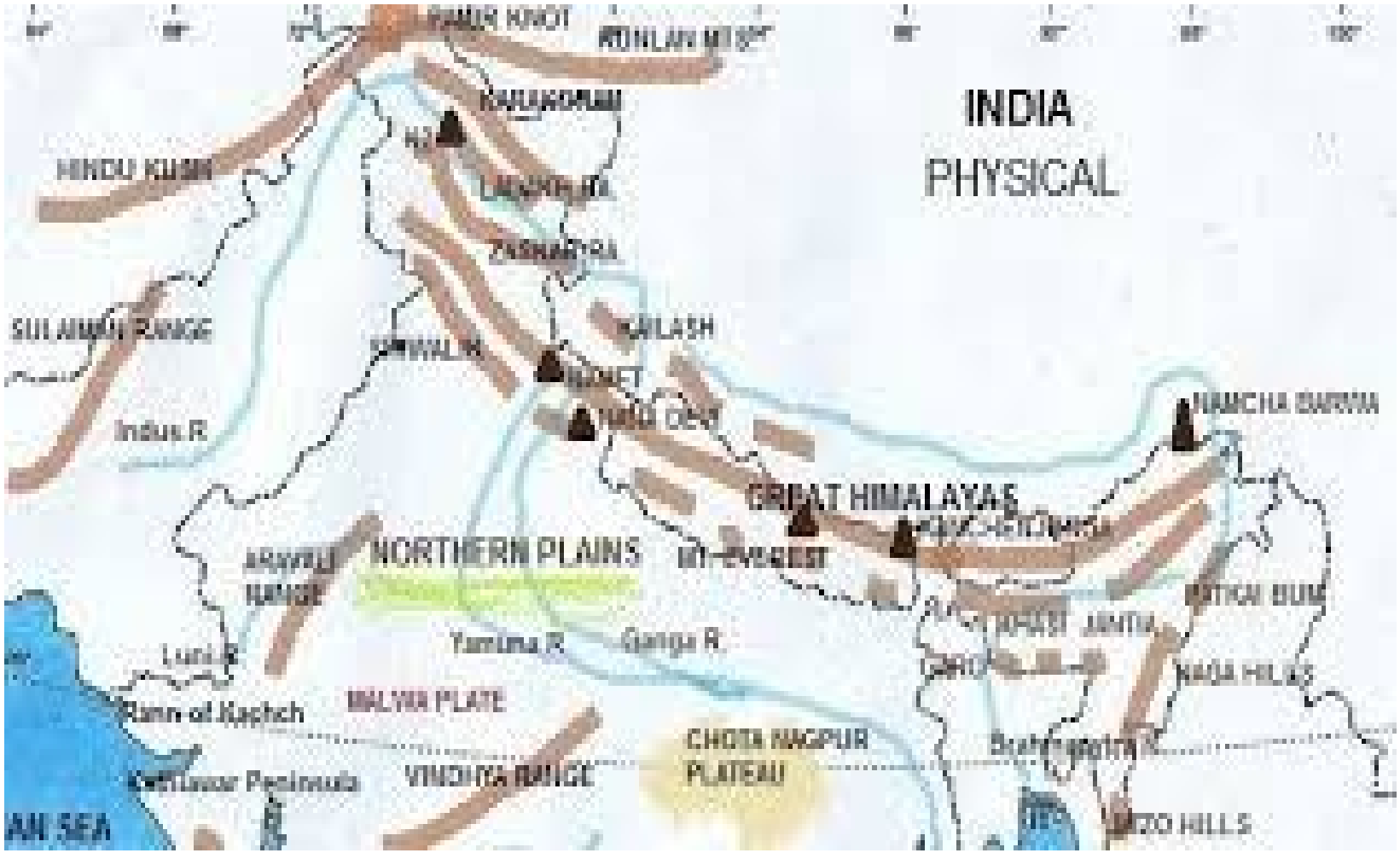
Contd...

Physiographic Division



Mt. Everest

Mt. Everest


INDIA
PHYSICAL
HINDU KUSH
SULAIMAN RANGE
Indus R.
KAILASH
NORTHERN PLAINS
Yamuna R.
Ganga R.
MALWA PLATE
Rann of Kutch
CHOTA NAGPUR PLATEAU
VINDHYA RANGE
NAMCHA BARWA
GREAT HIMALAYAS
NAGA HILLS
AN SEA

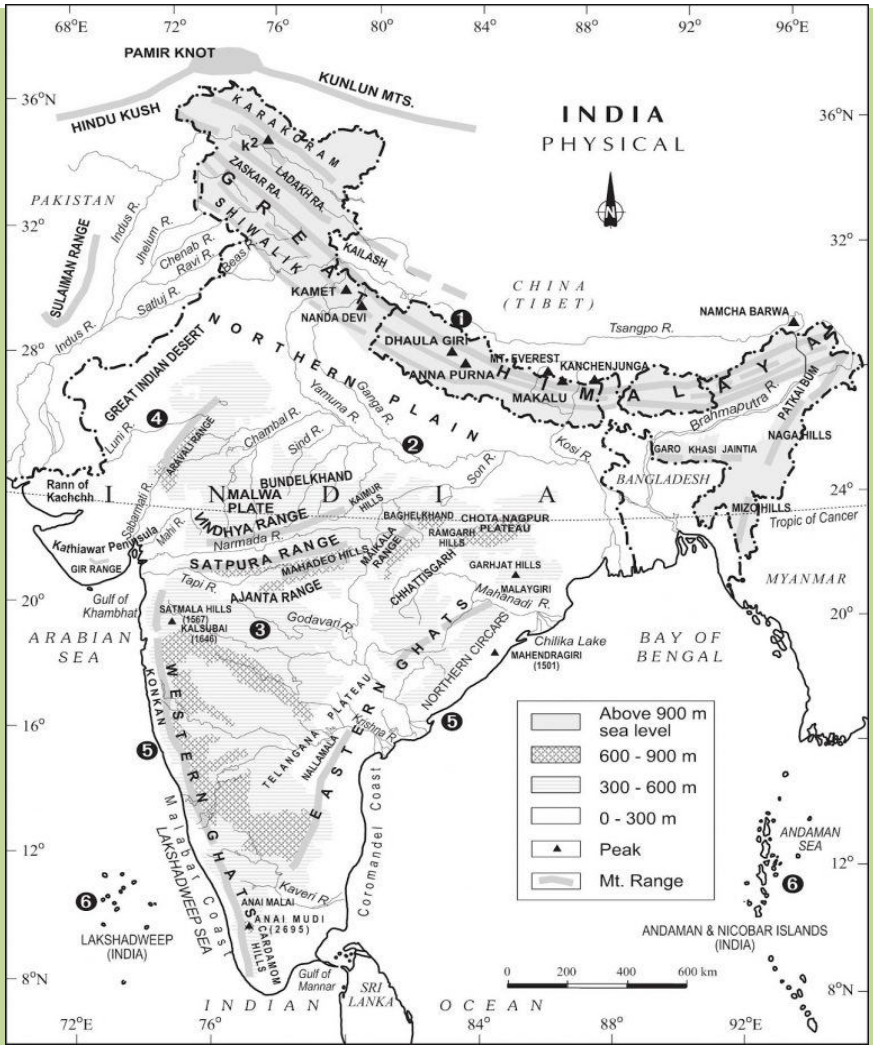
Himalayan Ranges

Central Plain

contd....

Major Plateaus in
Peninsular region
By www.pmfias.com
Shillong or
Meghalaya
Plateau
Marwar or Mewar
Plateau
Malwa
Plateau
Hazaribagh
Plateau
Chotanagpur Plateau
Ranchi Plateau
Chhattisgarh Plain
Maharashtra
Plateau
Deccan Plateau
Malnad
Visit www.pmfias.com for
more on Geography

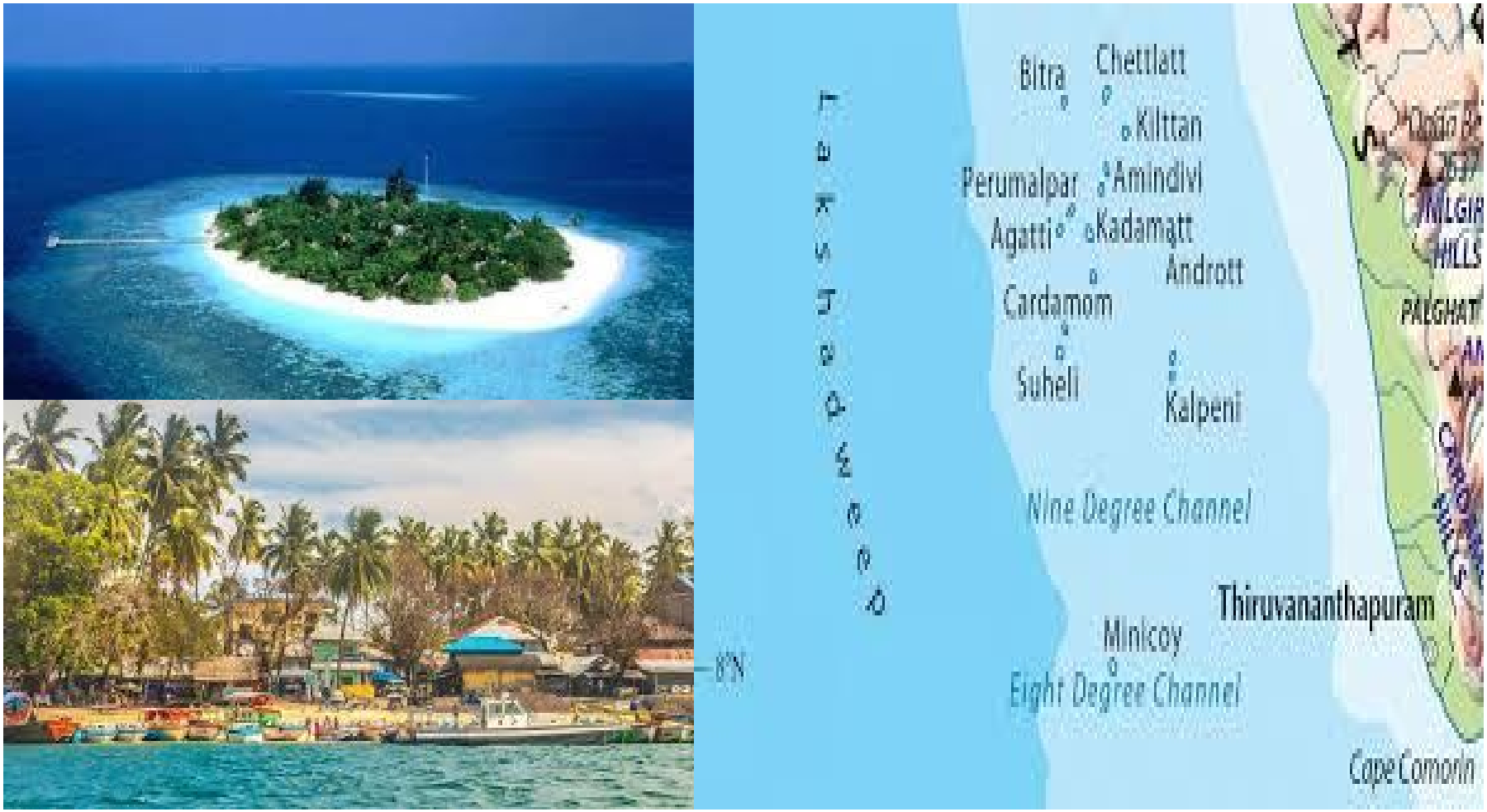
Deccan Trap


INDIA
PHYSICAL
PAMIR KNOT
KUNLUN MTS.
HINDU KUSH
KARAKORAM
K2
ZASKAR RA.
LADAKH RA.
GREAT HIMALAYAN
SHIWALIK
KAILASH
PAKISTAN
SULAIMAN RANGE
Indus R.
Jhelum R.
Chenab R.
Ravi R.
Beas R.
Satluj R.
KAMET
NANDA DEVI
CHINA (TIBET)
NAMCHA BARWA
Tsangpo R.
DHAULA GIRI
MT. EVEREST
KANCHENJUNGA
ANNA PURNA
MAKALU
M. A L A Y A N
Brahmaputra R.
PATKAI BUM
NAGA HILLS
GARO KHASI JAINTIA
BANGLADESH
MIZO HILLS
Tropic of Cancer
MYANMAR
GREAT INDIAN DESERT
NORTHERN PLAIN
Yamuna R.
Ganga R.
Kosi R.
Son R.
Luni R.
ARAVALI RANGE
Chambal R.
Sind R.
Sabarmati R.
Rann of Kachchh
BUNDELKHAND
MALWA PLATE
KAIMUR HILLS
BAGHELKHAND
CHOTA NAGPUR PLATEAU
RAMGARH HILLS
VINDHYA RANGE
Narmada R.
Mahi R.
Kathiawar Peninsula
GIR RANGE
SATPURA RANGE
MAHADEO HILLS
MAIKALA RANGE
GARHJAT HILLS
CHHATTISGARH
Mahanadi R.
MALAYGIRI
Tapi R.
AJANTA RANGE
Gulf of Khambhat
SATMALA HILLS
(1567)
KALSUBAI
(1646)
Godavari R.
ARABIAN SEA
BAY OF BENGAL
Chilika Lake
MAHENDRAGIRI
(1501)
NORTHERN CIRCARS
KONKAN
WESTERN GHATS
TELANGANA PLATEAU
NALLAMALA
Krishna R.
EASTERN GHATS
Coromandel Coast
Malabar Coast
LAKSHADWEEP SEA
LAKSHADWEEP
(INDIA)
Kaveri R.
ANAI MALAI
ANAI MUDI
(2695)
CARDAMOM HILLS
Gulf of Mannar
SRI LANKA
ANDAMAN SEA
ANDAMAN & NICOBAR ISLANDS
(INDIA)
INDIAN OCEAN
Above 900 m sea level
600 - 900 m
300 - 600 m
0 - 300 m
Peak
Mt. Range
0 200 400 600 km
68°E
72°
76°
80°
84°
88°
92°
96°E
36°N
32°
28°
24°
20°
16°
12°
8°N

Indian coasts

Indian Coast

Indian Islands



Indian desert

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Geologically , India can be divided into following structural Regions

1. Young Fold Mountain i.e. The Himalayas
2. Shield Region i.e. Peninsular India
3. Fore dip region i.e. Central Plains

The End

Thank U