

JUNE 2017						
WK	M	T	W	T	F	S
22				1	2	3
23	5	6	7	8	9	10
24	12	13	14	15	16	17
25	19	20	21	22	23	24
26	26	27	28	29	30	

Dr. Manisha Kumari  
 Assistant Professor  
 Deptt. of Geography  
 S. B. College, Ara

(11)  
 MAY '17

TUESDAY  
 DAY 122-243 Wk 18

02

B.A. Part - I

Paper - I

Date - 21/05/24

Physical Geography

\* Karst Topography (Unit - III)  
(continued)

# Erosional Landforms :-

7.7 Poljes :->

Most extensive, larger than dolines, depressions are called 'poljes'.

-> They are characterized by vertical side walls, flat alluvial floors, independent surface drainage systems on their floors, irregular borders and central lake.

-> According to previous diagram poljes are, in fact, closed basins of elliptical shape having an area up to 258 km<sup>2</sup>.

-> Poljes are formed due to downfolding and downfaulting of limestone areas due to earth movements. The resultant grabens are then modified by solution work of water.

-> According to B. N. Sparks (1972) - 'The

When you have to make a choice and you don't make it, that itself is a choice.

- William James

MAY						
Wk	M	T	W	T	F	S
18	1	2	3	4	5	6
19	8	9	10	11	12	13
20	15	16	17	18	19	20
21	22	23	24	25	26	27
22	29	30	31			

poies are probably not solution forms at all but tectonic depressions modified by solution, of limestone preserved in them.

8.7 Valleys of Karst Region :->

The upper surface having several sink holes in the region of limestone having horizontal beds or slightly inclined beds is called Karst plain on which surface drainage systems develop various types of valleys and typical landforms.

(i) Sinking Creek :-> The surface of the Karst plain looks like a sieve because of development of closely spaced numerous sink holes.

-> These sink holes act as funnels because surface water disappears to go underground through these holes.

-> When surface water disappears through numerous sink holes located in a line, the resultant feature is called

2017						
JUNE	M	T	W	T	F	S
			1	2	3	4
27	5	6	7	8	9	10
28	11	12	13	14	15	16
29	17	18	19	20	21	22
30	23	24	25	26	27	28
	29	30				

Sinking creek and the point through which water goes downward, is called sink.

(ii) Blind Valley :- Blind Valley refers to the valley of that surface stream which disappears in limestone formation through a swallow hole or sink hole.

→ That valley is called blind valley, the flow of water which terminates at a swallow hole and the valley looks dry valley.

→ Blind valleys are developed on Uvala floors - According to O. D. von Engel

(iii) Karst Valley :- → Surface streams develop their U-shaped valleys on limestone formation. Such wide U-shaped valleys developed on limestone are called Solution valleys or Karst Valleys.

→ Such valleys are always temporary because generally water disappears through swallow holes and the valleys become dry.

We choose our joys and sorrows long before we experience them.

- Kahlil Gibran

Wk	M	T	W	T	F
18	1	2	3	4	5
19	8	9	10	11	12
20	15	16	17	18	19
21	22	23	24	25	26
22	29	30	31		

## 9.7 Caves or Caverns :->

→ Caves are the most significant landforms produced by erosional work (mainly corrosion or solution and abrasion) of groundwater in limestone.

→ It vary in sizes and shapes ranging from smaller size to larger caves.

→ Large caves are formed in the regions of pure, massive and thickly bedded limestones.

→ Examples of Extensive cave are Carlsbad and Mammoth caves of the USA.

→ Carlsbad caves dimensions - 1219 m length, 190.5 m width and 300 m depth, consists of several chambers, and the ceiling is about 83.3 m high from the floor.

→ Limestone caves examples in India -

(i) Robert Cave, Sahasradhara in Dehra Dun in Uttanchal or Uttarakhand.

(ii) Guptadham Cave (1.5 km long) in Rohtas, South Western Bihar.

It's okay to make mistakes. Mistakes are our teachers -- they help us to learn.

2017						
JUNE	M	T	W	T	F	S
				1	2	3
				4	5	6
	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

SATURDAY

DAY 126-239 Wk 18

06

(ii) Kutumbasar Cave in Bastar district of Chhattisgarh (~~in Pachmarhi Hill~~).

(iv) Pachmarhi Hill in Chitrakut area of Satna district of Madhya Pradesh

(v) Gupta Godavari Cave near Visakhapatnam coast etc.

→ The cavern is characterized by ~~Lozi~~ horizontal passages and amphitheatre-like extensive areas at the junctions of tunnels (Cave crossings.)

→ The Guptadham Cave of the Rohtas plateau is an example of galleried cave and has been formed due to dissolution of Rohtas stage limestone of Vindhyan formations lying below 90m thick capping ~~by~~ horizontal of quartzitic sandstones.

SUNDAY 07

→ The formation and development of limestone caverns is most debatable of all the karstic landforms.

→ According to 'corrosion theory' caves are formed due to corrosion of limestone by groundwater in the vadose zone above the water table of groundwater.

We can do anything we want as long as we stick to it long enough.

- Helen Keller