Q.P.Code: 27621

CIVIL SEM-III CBSCS (Choîce Based)

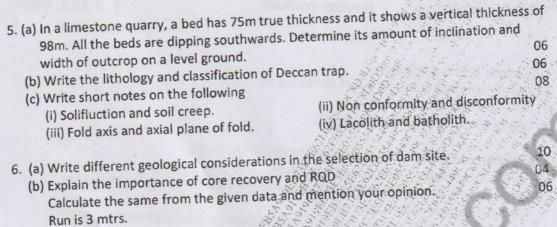
Engineering Geology

(REVISED COURSE)

(3 Hours)

[Total Marks:80

N.B. (1) Question No 1 is compulsory.		
(2) Attempt any four questions out of remaining six.		
(3) Draw sketches wherever necessary.		
(4) Figures to the right indicate full marks.		
4 (a) With the help of the following properties identify the time and	05	
(i) Fibrous form, Lustre – Silky, Spiritery Hactures (ii) Massive form, Colour – lead grey, Streak – lead grey, Lustre – Metallic, Sp. Gravit	Y	
7.4 -7.6, Chemical composition – PDS: (iii) Lamellar form, Colour – Black, Lustre – Pearly, Cleavage – Basal Pinacoid. (iv) Banded form, mostly found with haematite, Lustre – Waxy, Cleavage – Absent,)	
Hardness – 7. (v) Granulur pisolitic form, Crystal System – Amorphous, Lustre – Dull, Fracture – Uneven, Chemical Composition Al ₂ O ₃ .2H ₂ O		
(b) (i) What are the various types of metamorphism?	05	
(ii) Name the parent rock of marble and quartzite.		
(iii) What do you mean by acidic and basic rock?		
(iii) What do you mean by exfoliation?		
(v) State the relationship between dip and strike?		
(c) Write the names and draw rough sketch of each of the following. (i) Core between normal and inverted limbs with horizontal axis.	10	
(ii) Group of synclines and anticlines with parallel axes. (iii) Isolated water table held by small extension of impervious rock within previous tract.	us	
(iv) The structure with bands of platy minerals alternate with granular minerals. (v) Two normal faults forming wedge shaped block mountain.		
	10	
(a) Explain with suitable diagrams different types of texture found in igneous rocks. (b) Describe two land forms each created by erosive action of wind and glaciers.	10	
3. (a) State the terminologies of fault. Explain various types of faults with suitable	10	
diagrams. (b) State the engineering considerations of weathering. What are the different types	of 06	
weathering? (c) Explain concentric fold and similar fold.	04	
4. Explain the following in brief.(any four)	20	
(a) Various products erupted during volcanic activities.		
(b) Water bearing qualities of rock.		
(c) Properties of good building stones.		
Id Various types of plate houndaries.		
(e) Use of seismic waves in understanding the interior of the Earth.		



No of samples	Length of sample (in cm)	Nature of joints
1	12	N
2	04	M
3 86	03	N
4 555	17	M
5 868	03	M
6 33	07	M
57 353	29	N
8 8	05	N
883983	08	N
100 1 10 10 10 10 10 10 10 10 10 10 10 1	06	N
10	42	N
11	35	N
12	05	N
13	03	M
14 15	04	N