

Total No. of Questions : 12]

[Total No. of Printed Pages : 4

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F. E. (2008 Course) Examination - 2008

BASIC CIVIL AND ENVIRONMENTAL ENGINEERING

Time : 3 Hours]

[Max. Marks : 100

Instructions :

- (1) Attempt Q. No. 1 or 2, Q. 3 or 4, Q. 5 or 6. from section I. Attempt Q. 7 or 8, Q. 9 or 10, Q. 11 or 12 from section II.
- (2) Answers to the **two** sections should be written in **separate books**.
- (3) Black figures to the right indicate full marks.
- (4) Neat diagrams must be drawn wherever necessary.
- (5) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam table is allowed.
- (6) Assume suitable data if necessary.

SECTION - I

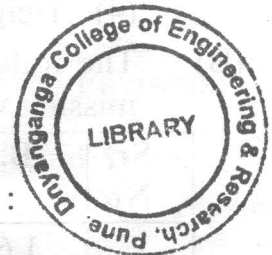
Q.1) (A) Explain the role played by a Civil Engineer in the construction of dams. [06]

(B) Write a brief note on following :

- (1) Transportation Engineering
- (2) Town Planning

Your answer shall include following points :

- (1) What it deals with ?
- (2) Two practical applications of each. [05x02=10]



OR

Q.2) (A) Explain the importance of Interdisciplinary Approach in Civil Engineering. [06]

(B) Briefly explain three practical applications of the following :

- (1) Project Management
- (2) Environmental Engineering [03x02=06]

(C) Enlist and briefly explain the infrastructural facilities required for the proper development of an area. [04]

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P.T.O.

- Q.3)** (A) Enlist any six causes of the Settlement of Foundation. Explain with a sketch Uniform Settlement. [03+02+01=06]
- (B) Explain with neat sketch, what is meant by Foundation ? Explain in brief, any four functions of a Foundation. [02+02+04=08]
- (C) Enlist any four basic materials used in the Construction Industry. [$\frac{1}{2} \times 4 = 02$]

OR

- Q.4)** (A) Write a brief note on 'Recycling of Materials' in Construction Industry. [06]
- (B) Explain the fundamental requirements of a Masonry. Min. four requirements are expected. [04]
- (C) Compare the following : (Min. 3 pts. expected)
- (1) Superstructure and Substructure
 - (2) Shallow Foundation and Deep Foundation [03x02=06]

- Q.5)** (A) Explain with a neat common sketch following terms, as applicable in levelling :
- (1) Backsight (B.S.)
 - (2) Foresight (F.S.)
 - (3) Intermediate Sight (I.S.)
 - (4) Height of Instrument [02+02x04=10]
- (B) The following is the page of levelling field-book. Fill up the missing readings and complete the page. Apply usual check : [08]

Sr. No	B.S.	I.S.	F.S.	Collimation RL (M)	R.L. (M)	Remarks
1.	1.650			X	500.00	BM
2.		3.740			497.910	
3.		X			498.820	
4.	3.640		X	X	498.380	C.P. I
5.		0.380			X	
6.	1.640		X	502.700	501.060	C.P. II
7.		2.840			499.860	
8.	X		3.480	502.900	499.220	C.P. III
9.			X			Last pt.

OR

