

Please check that this question paper contains 9 questions and 2 printed pages within first ten

[Total No. of Questions: 09]

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[Total No. of Pages:]

Uni. Roll No.

12 JUN 2023

Program: B.Tech. (Batch 2018 onward)

Semester: 3rd (2018)

Name of Subject: Civil Engineering Introduction,
Societal and Global Impact.

Subject Code: HSMCE-101

Paper ID: 16025

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

Part – A

[Marks: 02 each]

Q.1

- a) Write the applications of 3D printing in Civil Engineering.
- b) What are the significance of Public Private Partnership in Infrastructure development.
- c) List applications of simulation software in Civil Engineering.
- d) How pollution impact growth.
- e) What is the basic difference in transportation of tradition and conventional modes?
- f) What are the possible causes and the impact of Global Warming.

Part – B

[Marks: 04 each]

- Q.2** How does the infrastructure development in any nation can impact its GDP?
- Q.3** What do you mean by continual improvement in environment performance? How can it be planned in an organization?
- Q.4** List and explain of different types of road based on materials used and its performance.

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- Q.5 What are the vital characteristics of energy-efficient built environments
- Q.6 List different types of special concretes and discuss any two in detail..
- Q.7 Discuss the merits and demerits of solar power energy with hydropower energy.

Part – C

[Marks: 12 each]

- Q.8 Define Ocean thermal energy conversion. What it is in news now a days

OR

Write note on recent civil engineering breakthroughs and innovations.

- Q.9 What are the essential features of a Smart City? Also, discuss various challenges involved in turning an existing city into a smart city.

OR

Discuss the functions of dams and the challenges associated with its construction.

Also, discuss the significance of river interlinking.
