

Printed Pages:3

NCE - 044

(Following Paper ID and Roll No. to be filled in your  
Answer Books)

Paper ID : 2289940

Roll No. 

--	--	--	--	--	--	--	--	--	--

**B.TECH**

Regular Theory Examination (Odd Sem -VII), 2016 - 17  
**TUNNEL ENGINEERING**

Time : 3 Hours

Max. Marks : 100

Note: Attempt all the Questions.

**SECTION - I**

**I. Attempt all parts: (10×2=20)**

- a) What is tunnel? Why we are use?
- b) What do you know by open cut?
- c) Write short note shaft?
- d) What are hauling of muck?
- e) What are size and shape of tunnel?
- f) Define timbering in shaft?
- g) Define the drilling of tunnel?
- h) Give some uses of tunnel?

044/12/2016/3400

(1)

[P.T.O.]

**NCE - 044**

- i) What is the T.B.M?
- j) Explain the bore hole?

**SECTION - II**

**2. Attempt any five parts: (5×10=50)**

- a) Sketch the different types of drilling pattern?
- b) Name the different types of drilling equipment used for boring holes in rock?
- c) Explain the drill bits and sketches?
- d) Compare machine mucking with hand mucking.
- e) Explain the dust control system used in construction of tunnel?
- f) What is method of timbering in shaft?
- g) Describe the work of jack hammer with neat sketch?
- h) Explain the drilling and blasting in tunnel?

**SECTION - III**

**Attempt any two parts: (2×15=30)**

- 3. What is the geological investigation in tunnel? Describe with full detail?

044/12/2016/3400

(2)

**NCE - 044**

- 4. What do you mean by the shape and size of tunnel explain with neat sketch of shape of tunnel generally use.
- 5. Why ventilation system is necessary for tunnel during its construction?

\_\_\_\_\_

044/12/2016/3400

(3)