B

Sl. No. : H

ಒಟ್ಟು ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ : 7] [ಒಟ್ಟು ಮುದ್ರಿತ ಪುಟಗಳ ಸಂಖ್ಯೆ : 4

Total No. of Questions : 7] [Total No. of Printed Pages : 4

ಸಂಕೇತ ಸಂಖ್ಯೆ : 71 **Code No. : 71**

CCE RR
UNREVISED

ಇಲ್ಲಿ ಕತ್ತರಿಸಿ

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್

Subject : ELEMENTS OF ENGINEERING

(ಹಳೆಯ ಪಠ್ಯಕ್ರಮ / Old Syllabus)

(ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ/ Regular Repeater)

ದಿನಾಂಕ : 22. 06. 2019] [Date : 22. 06. 2019

ಸಮಯ : ಬೆಳಿಗ್ಗೆ 9-30 ರಿಂದ ಮಧ್ಯಾಹ್ನ–12-15 ರವರೆಗೆ] [Time : 9-30 A.M. to 12-15 P.M.

ಗರಿಷ್ಠ ಅಂಕಗಳು : 50] [Max. Marks : 50

TEAR HERE TO OPEN THE QUESTION PAPER
ಪ್ರಶ್ನೆ-ಪತ್ರಿಕೆಯನ್ನು-ತೆರೆಯಲು ಇಲ್ಲಿ ಕತ್ತರಿಸಿ

General Instructions to the Candidate :

1. This Question Paper consists of 7 subjective types of questions.
2. This question paper has been sealed by reverse jacket. You have to cut on the right side to open the paper at the time of commencement of the examination. Check whether all the pages of the question paper are intact.
3. Follow the instructions given against both the objective and subjective types of questions.
4. Figures in the right hand margin indicate maximum marks.
5. The maximum time to answer the paper is given at the top of the question paper. It includes 15 minutes for reading the question paper.

Tear here

Note : Answer questions from Sections ***A*** & ***B*** as per the instructions given under them.

SECTION – A

Instruction : Answer Question **No. 1** and any *two* full questions of the remaining.

1. Fill in the blanks with the appropriate term selecting from the choices given in the brackets : 10 × 1 = 10

a) Transformer works on the principle of ..... .

(*self induction, mutual induction, dynamically induced emf*)

b) Electrical machine which converts mechanical energy into electrical energy is called ..... .

(*generator, motor, rotor*)

c) The winding to which the load is connected is called ..... .

(*primary, secondary, both primary and secondary*)

d) The current coil of wattmeter is connected in ..... .

(*parallel, series-parallel, series*)

e) Filament of incandescent lamp is made of ..... .

(*tungsten, copper, eureka*)

f) The function of the ..... is to permit the water into the boiler.

(*feed check valve, steam stop valve, safety valve*)

g) Fusible plug is fitted to the ..... .

(*bottom of the boiler, crown of the furnace, smoke box*)

h) Injector are used in ..... engine.

(*diesel, petrol, electric*)

i) The function of ..... is to keep the rotation of the shaft always constant.

(*spark plug, crank shaft, flywheel*)

j) Priming is necessary for ..... type of pumps.

(*reciprocating, centrifugal, rotary*)

2. a) Define amplitude. 2
   b) Mention the applications of transformer. 3
   c) Draw a neat sketch of *d.c.* generator and label the parts. 5
3. a) What is alternator ? 2
   b) What are the types of transformer ? 3
   c) Draw a neat sketch of transformer and label the parts. 5
4. a) Define cycle. 2
   b) What are the types of *d.c.* generator ? 3
   c) Draw a neat sketch of fluorescent lamp and label the parts. 5

SECTION – B

Instruction : Answer any *two* full questions of the following.

5. a) Give examples for water tube boiler and fire tube boiler. 2
   b) Write short notes on the following : 3
      i) Blow off cock valve
      ii) Safety valve.
   c) Draw a neat sketch of Babcock and Wilcox boiler and label the parts. 5
6. a) Define heat engine. 2
   b) Differentiate between external combustion engine and internal combustion engine. 3
   c) Draw a neat sketch of four stroke petrol engine and label the parts. 5
7. a) Mention the uses of pumps. 2
   b) Explain priming. 3
   c) Draw a neat sketch of centrifugal pump and label the parts. 5