

B

Sl. No. : CCC

ಒಟ್ಟು ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ : 7]

[ಒಟ್ಟು ಮುದ್ರಿತ ಪುಟಗಳ ಸಂಖ್ಯೆ : 4

Total No. of Questions : 7]

[Total No. of Printed Pages : 4

ಸಂಕೇತ ಸಂಖ್ಯೆ : **71****CCE RR
UNREVISED****Code No. : 71**

ಇಲ್ಲಿಂದ ಕತ್ತರಿಸಿ

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್
Subject : ELEMENTS OF ENGINEERING

(ಹಳೆಯ ಪಠ್ಯಕ್ರಮ / Old Syllabus)

(ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ / Regular Repeater)

ದಿನಾಂಕ : 23. 03. 2019]

[Date : 23. 03. 2019

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

ಪರಮಾವಧಿ ಅಂಕಗಳು : 50]

[Max. Marks : 50

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 TO OPEN THE QUESTION PAPER

ಪ್ರಶ್ನೆ-ಪತ್ರಿಕೆಯನ್ನು ತೆರೆಯಲು ಇಲ್ಲಿ ಕತ್ತರಿಸಿ

Tear here

RR(B)-5005

[Turn over

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) A transformer works on
(*a.c., d.c., a.c. & d.c.*)
- b) The hydroelectric power is first generated in Karnataka at
(*Jog, Shivanasamudra, Supa*)
- c) Armature of *d.c.* machine is made of
(*cast steel, mild steel, silicon steel*)
- d) Direction of *e.m.f.* induced in a generator is given by
(*Fleming's right hand rule, Lenz's law, Fleming's left hand rule*)
- e) Electric motor converts electrical energy into
(*electrical energy, mechanical energy, solar energy*)
- f) Steam is used to supply a steam at a high pressure and temperature.
(*turbine, boiler, engine*)
- g) The function of the is to remove the sediments collected at the bottom of the boiler.
(*blow off cock, fusible plug, feed check valve*)
- h) Pumps are used to increase the of the fluid by utilizing the power at the input shaft.
(*volume, temperature, pressure*)
- i) Indicated power of an I.C. engine is
(*higher than brake power, equal to brake power, less than brake power*)
- j) Pelton wheels are used in
(*thermal power plant, hydroelectric power plant, nuclear power plant*)

2. a) What is transformer ? 2
b) List out the applications of shunt generator. 3
c) Draw a neat sketch of transformer and label the parts. 5
3. a) What is *d.c.* generator ? 2
b) List the types of *d.c.* motor. 3
c) Draw a neat sketch of *d.c.* generator and label the parts. 5
4. a) Define electromagnetic induction. 2
b) Explain the working principle of transformer. 3
c) Draw a neat sketch of sodium vapour lamp and label the parts. 5

SECTION - B

Instruction : Answer any two full questions of the following.

5. a) What are boiler mountings ? 2
b) List the boiler accessories. 3
c) Draw a neat sketch of Cochran boiler and mark its important parts. 5
6. a) What is a pump ? 2
b) How are the pumps classified ? 3
c) Draw a neat sketch of reciprocating pump and label the parts. 5
7. a) Mention the types of turbines. 2
b) Explain the applications of I.C. engine. 3
c) Draw a neat sketch of two stroke petrol engine and label the parts. 5
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