

**B**

Sl. No. : YYY

ಒಟ್ಟು ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ : 7 ]

Total No. of Questions : 7 ]

ಸಂಕೇತ ಸಂಖ್ಯೆ : **71****CCE RR  
UN-REVISED**

[ ಒಟ್ಟು ಮುದ್ರಿತ ಪುಟಗಳ ಸಂಖ್ಯೆ : 4

[ Total No. of Printed Pages : 4

**Code No. : 71**

ಇಲ್ಲಿಂದ ಕತ್ತರಿಸಿ

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್

**Subject : ELEMENTS OF ENGINEERING**

( ಹಳೆಯ ಪಠ್ಯಕ್ರಮ / Old Syllabus )

( ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ / Regular Repeater )

ದಿನಾಂಕ : 23. 06. 2018 ]

[ Date : 23. 06. 2018

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

**General Instructions to the Candidate :**

1. This Question Paper consists of 7 objective and 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

ಪ್ರಶ್ನೆಪತ್ರಿಕೆಯನ್ನು ತೆರೆಯಲು ಇಲ್ಲಿ ಕತ್ತರಿಸಿ

Tear here

**RR(B)-20005**

[ 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) The winding to which the load is connected, is called .....  
( *primary, secondary, core* )
  - b) The cleat wiring is used for ..... purpose.  
( *temporary, permanent, both* )
  - c) Commutator segment are made of .....  
( *aluminium, cast iron, copper* )
  - d) Filament of incandescent lamp is made of .....  
( *copper, tungsten, eureka* )
  - e) The pressure coil of wattmeter is connected in .....  
( *parallel, series, series-parallel* )
  - f) Feed pump is used for .....  
( *decreasing the pressure of feed water, increasing the feed water pressure, reducing the temperature of water* )
  - g) Impellers are used in .....  
( *reciprocating pump, rotary pump, centrifugal pump* )
  - h) Fusible plug is used to save the boiler against .....  
( *overheating, low water level, high steam pressure* )
  - i) In petrol engine ..... is used to ignite the fuel.  
( *injector, spark plug, fly wheel* )
  - j) Compression ratio of diesel engines may have a range of .....  
( *8 to 10, 10 to 15, 16 to 22* )
2. a) What is a boiler ? 2
- b) How are the boilers classified ? 2
- c) Draw a neat sketch of Lancashire boiler and mark its important parts.

3. a) What is priming ? 2  
b) Differentiate between reciprocating pump and centrifugal pump. 2  
c) Draw a neat sketch of centrifugal pump and explain briefly. 6
4. a) Define I.C. engine. 2  
b) How are the hydraulic turbines classified ? 2  
c) Draw a neat sketch of two-stroke petrol engine and explain briefly. 6

**SECTION - B**

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

5. a) What is *d.c.* motor ? 2  
b) Draw a neat sketch of a transformer and label the parts. 3  
c) Mention the applications of transformer. 5
6. a) Define amplitude. 2  
b) State Fleming's right hand rule. 3  
c) Draw a neat sketch of an alternator and label its parts. 5
7. a) List the applications of shunt motor. 2  
b) State Faraday's laws of electromagnetic induction. 3  
c) Draw a neat sketch of fluorescent lamp and explain briefly. 5

