

Roll No.										
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Serial No. of
Q. C. A. B.

ಒಟ್ಟು ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ : 7]
Total No. of Questions : 7]

[ಒಟ್ಟು ಮುದ್ರಿತ ಪುಟಗಳ ಸಂಖ್ಯೆ : 16
[Total No. of Printed Pages : 16

ಸಂಕೇತ ಸಂಖ್ಯೆ : **71**

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್

Code No. : **71**

Subject : **ELEMENTS OF ENGINEERING**

ದಿನಾಂಕ : 06. 04. 2013]

[Date : 06. 04. 2013

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

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Q. No.	Marks	Q. No.	Marks	Q. No.	Marks	Q. No.	Marks	Q. No.	Marks	
1.		×		×		×		×		
2.		×		×		×		×		
3.		×		×		×		×		
4.		×		×		×		×		
5.		×		×		×		×		
6.		×		×		×		×		
7.		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
×		×		×		×		×		
Total Marks										
Total Marks in words						Grand Total				
1. ✓										
2. ✓						✓				
Signature of Evaluators			Registration No.			Signature of the Deputy Chief			Signature of the Room Inivigilator	

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General Instructions :

- i) The Question-cum-Answer Booklet consists of 7 objective and subjective types of questions.
- ii) Space has been provided against each objective type question. You have to choose the correct choice and write the complete answer in the space provided.
- iii) For subjective type questions enough space for each question has been provided. You have to answer the questions in the space.
- iv) Follow the instructions given against both the objective and subjective types of questions.
- v) Candidate should not write the answer with pencil. Answers written in pencil will not be evaluated (Except Graphs, Diagrams & Maps).
- vi) In case of Multiple Choice, Fill in the blanks and Matching questions, scratching / rewriting / marking is not permitted, thereby rendering to disqualification for evaluation.
- vii) For reading the questions 15 minutes of extra time has been provided.

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 word(s) selecting from the choices given in the brackets :

10 × 1 = 10

- a) In pump piston is used for movement.

(*centrifugal , reciprocating, gear*)

Ans : _____

- b) Thermal efficiency of engine is more.

(*steam, gas, I.C.*)

Ans : _____

c) Steam containing water particles is called

(*saturated steam, superheated steam, wet steam*)

Ans : _____

d) A turbine is used in hydroelectric power station to obtain electricity.

(*steam, water, gas*)

Ans : _____

e) is used to empty the boiler.

(*Blow off valve, Fusible plug, Safety valve*)

Ans : _____

f) In *d.c.* machines, the pole shoe is laminated to reduce

(*reluctance, inductance, resistance*)

Ans : _____

g) The output rating of a lamp is

(*volt, ampere, watt*)

Ans : _____

h) The current which flows only in one direction is called

(*alternating current, direct current, eddy current*)

Ans : _____

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i) An electric power can be measured by using

(*voltmeter, energymeter, wattmeter*)

Ans : _____

j) The whole circuit of a domestic wiring is protected against short circuits and overloads by

(*miniature circuit breaker, main switch, earthing*)

Ans : _____

2. a) What is a boiler ? 2

b) Name the essential accessories of a boiler. 2

c) Draw a neat sketch of simple vertical boiler and explain briefly.

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c) Describe with a line diagram the working of a reciprocating pump.

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- c) Explain with a neat diagram the working of a two-stroke petrol engine.

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b) Draw a sine wave of *a.c.* and mark cycle and amplitude on it.

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c) With a neat sketch explain the construction and working of thermostat.

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- c) Draw a neat circuit diagram of sodium vapour lamp and name the parts. 4

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