

NATIONAL DEVELOPMENT AGENCY, PROMOTED BY GOVERNMENT OF INDIA CENTRAL BOARD OF EXAMINATIONS BSS NATIONAL VOCATIONAL EDUCATION MISSION

EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION ONE YEAR EXAMINATION NOV-2015

EEE011-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

TIME: 3 Hours Marks: 100

INSTRUCTIONS

- * 33 questions are there in total
- * Write answers to each question in proportion to the mark allotted
- * During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS $1 \times 10 = 10$

- 1) Hewell in the stage.
- 2) The tiger A deer
- 3) Suresh is sitting Ram and Gopal.
- 4) I would like to have fruits.
- 5) -----is example for network operating system.(windows nt)
- 6) Ctrl+X is used to
- 7) Redo option is in menu
- 8) The expansion of WAN is-----
- 9) Who is the father of computer-----
- 10) The letters in computer application is called

II. DEFINE THE FOLLOWING

- 1) What is meant by transitive verb?
- 2) What are the types of Gender?
- 3) Define software?
- 4) What is input and output unit
- 5) Explain windows explorer
- 6) Enter
- 7) MS Access
- 8) Clause
- 9) Insert column and insert chart
- 10) Explain any five functions in MS Excel

 $5 \times 5 = 25$

- 1) Explain few sentences using "do/does"?
- 2) Explain few sentences using "should would"?
- 3) Key board
- 4) Font
- 5) Custom filter
- 6) Calculator
- 7) Print view
- 8) Symbols and pictures

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Write what in complex sentence
- 2) Esplain details of Accessories in windows?
- 3) Explain 'slide presentation creating' in MS Power Point
- 4) Describe status bar
- 5) Write briefly about generations of computer?



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EEE011-02 BASIC ELECTRONICS

TIME: 3 Hours Marks: 100

INSTRUCTIONS

- * 33 questions are there in total
- * Write answers to each question in proportion to the mark allotted
- * During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS $1 \times 10 = 10$

- 1) Alpha of a transistor is always......
- 2) The process of making DC from AC is known as
- 3) Which one of the following conductors is used in bulbs?
- 4) The nominal voltage of a fully charged lead acid cell is?
- 5) Select the equivalent value of power, 1 HP.
- 6) In the two meter method if the power factor is unity then
- 7) What is the working temperature of a electricians solder?
- 8) Identify and select the soldering method suitable for larger sized jobs like underground cable joining
- 9) Select the resistance value across both ends of a conductor with a cut......
- 10) The flow of Electrons is called

II. DEFINE THE FOLLOWING

- 1) What is meant by open circuit? What are its effects?
- 2) What is electrical resistance?
- 3) What is a transistor?
- 4) What is the cut in voltage of Germanium diode?
- 5) Name the instrument used to test the zener diode?
- 6) What is phase current?
- 7) What is unbalanced load?
- 8) Write the skew coil winding?
- 9) What is line triggering?
- 10) What is the purpose of cadmium test in a battery?

 $5 \times 5 = 25$

- 1) Explain some electronics equipments
- 2) What is a capacitor? Explain the colour coding of a Capacitor.
- 3) Explain the moving iron attraction type instruments?
- 4) Write the volt?
- 5) Write the Current?
- 6) Explain the Bare conductor?
- 7) Write the Silver?
- 8) Write the GI wire?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Differentiate between the AC and DC
- 2) Difference between electromagnet and permanent magnet?
- 3) Write the series generator?
- 4) Write the equipment earthing?
- 5) Write the lagging power factor?



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EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION ONE YEAR EXAMINATION NOV-2015

EEE011-03 REFRIGERATION MAINTENANCE, SERVICE & TROUBLE SHOOTING

TIME: 3 Hours Marks: 100

INSTRUCTIONS

- * 33 questions are there in total
- * Write answers to each question in proportion to the mark allotted
- * During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS
1) compressor has shaft seal
2) Father of Refrigeration
3) Unit of pressure

- 5) A natural-draft cooling tower can be installed
- 6) In evaporative type of condenser, the refrigerant is cooled by
- 7) In chilled-water air conditioning application, the following evaporator is used
- 8) Which one of the following refrigerants has the lowest boiling point?
- 9) The metal tape or rope which packed the refrigerator can be removed by.
- 10) The point marked in the Fig. of A/c. cover installation as .

4) In SI units, one ton of refrigeration is equal to :.....

II. DEFINE THE FOLLOWING

- 1) Define the compressor
- 2) Define Heat
- 3) Define-Flash point
- 4) Define Sensible heat
- 5) How can you detect leaks without the aid of any instrument?
- 6) Why it is necessary to provide space around the softy machine?
- 7) What type of bearing used in agitator?
- 8) Which component is located in between the evaporator and drier?
- 9) In which compartment the meat and fish to be preserved?
- 10) Where the earth wire is connected in the refrigerator body?

 $5 \times 5 = 25$

- 1) What is distributor? Draw the sectional view of distributor. Mention the parts
- 2) What are the differences between AC and DC current
- 3) Explain with Neat sketch about forced fin & tube condenser
- 4) Table the firing order for four stock engine
- 5) What about connecting rod. Draw the diagram and explain it
- 6) What is spark plug? Explain and draw it
- 7) What is meant by pumping down in A/c?
- 8) How is a refrigeration system evacuated?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Explain the type of refrigeration machines
- 2) Induced draft cooling tower Explain and draw the diagram
- 3) Table the differences between four-stroke and two stroke engine
- 4) Explain with neat sketch about MRS (or) VCS
- 5) Testing of a high pressure control.



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EEE011-04 AIRCONDITIONING MAINTENANCE, SERVICE & TROUBLE SHOOTING

TIME: 3 Hours Marks: 100

INSTRUCTIONS

- * 33 questions are there in total
- * Write answers to each question in proportion to the mark allotted
- * During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS $1 \times 10 = 10$

- 1) The year round air condition is type
- 2) _____ is employed for cleaning air.
- 3) compressor used in refrigerator (single door)
- 4) Normal drinking water temperature is .
- 5) The softly ice cream to be filled in cones at the condition of .
- 6) The voltage rated used for softy machine is .
- 7) Churner barrel should be cleaned .
- 8) In the name plate of the unit you will find .
- 9) Gudgeon pin locked by .
- 10) Thermostat is used to controlof refrigerant.

II. DEFINE THE FOLLOWING

- 1) What is meant by electrical air filter?
- 2) Define the term vapor lock
- 3) Define Surge tank.
- 4) Write briefly about viscous filter
- 5) Write the chemical name of R12, R22, R134 a
- 6) Which motor have separate three windings?
- 7) What is CSIR circuit?
- 8) How to identify suction service valve compare to discharge service valve?
- 9) What are the two working position of the cylinder in reciprocating compressor?
- 10) What do you mean by Humidity

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- 1) Draw the window aircondition picture
- 2) Advantages of diesel engine write
- 3) Explain with neat sketch about flesh method lubrication
- 4) Write all types of compressor?
- 5) Write the piston pin and cylinder
- 6) Write the function of evaporator
- 7) Write the function of pin type evaporator
- 8) Explain the electronic leak tester.

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS

- 1) Explain with neat sketch of static cold storage indirect system
- 2) Explain with neat sketch of Remote type package AC
- 3) Compare the petrol engine with diesel engine
- 4) Explain the working principle of milk plant with neat sketch.
- 5) Draw and explain the central plant (indirect) A/C