CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION

ONE YEAR EXAMINATION NOVEMBER-2025

EEE011-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 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 - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) A cat is _____ the table.

2) Call out _____

3) www stand for _____

4) TCP is _____

5) MS word is used for _____

6) I waited for _____ hours

7) _____ are where the text is typed

8) In MS Word print is in _____ menu

9) Corel draw is based on _____ graphics.

10) The speed of computer is measured in _____

11) WWW means _____

12) Who is the father of computer _____

13) Pronouns are used instead of _____

14) Esc used for _____

15) _____ apple a day keeps the doctor away.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Define what is noun?
2) Define kinds of noun?
3) What are the types of letters?
4) What is meant by adverb?
5) What is meant by preposition?
6) Define kinds of Adverbs?
7) What is meant by neuter Gender?
8) Taskbar
9) What is the difference between Notepad and Wordpad
10) Link language
11) MS Access
12) Pattern
13) Define Mouse
14) Define Vowel
15) Define keyboard?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain 'WH' type question words?
2) Write a letter to the inspector of police about the theft of your bicycle
3) Write a letter to a book seller ordering some prize books?
4) Use of 'has' and 'have' in sentences
5) Explain any five options for the format 'menu'
6) Shift+functions of the keys
7) Techniques for moving an injured (or) ill person.
8) What is sentence? Define its classification

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Explain a computer and draw a block diagram
2) Explain 'Mail Merge'
3) Describe the relevance of computerization in hospital field
4) Explain in detail about MS Word?
5) Write a letter to the Superintendent of Police regarding frequent thefts in your Colony

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EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION

ONE YEAR EXAMINATION NOVEMBER-2025

EEE011-02 BASIC ELECTRONICS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 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 - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Rectification efficiency of Fullwave bridge rectifier is _____
2) Unit of Inductor is _____
3) Diode is an electronic circuit is used for _____
4) A conductor should have?
5) A multimeter can measure?
6) According of Ohm's law, which one of the following relationship correct?
7) Select the value of power which is the result of one ampere of current driven by a one volt force through a circuit?
8) Which rectifier gives more smooth DC?
9) Diode is a device which converts: _____
10) Select the feature / facility which is applicable only for digital multimeter _____
11) Select the resistance value across both ends of a conductor with a cut _____
12) The spread of 2 pole, 50HZ synchronous machines is _____ R.P.M
13) Heat produce in a conductor is proportional to _____
14) The di-electric strength of the transformer oil of 11kv, 1KVA, C type transformer is _____
15) IC Represents _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What is a wattmeter? What is it used for?
2) What is a relay and what is the function of over load protector?
3) What is the basic difference between a fuse and a circuit breaker?
4) What may happen if the terminals of an electrical joint are loose?
5) What is meant by doping?
6) Name the three electrodes of a transistor?
7) In which unit electrical resistance is measured?
8) Name the instrument used to test the zener diode?
9) What is line voltage?
10) What is phase connection?
11) What is hard winding?
12) What is multimeter?
13) What is line triggering?
14) Types of supply distribution?
15) Types of line insulator?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) What are the functions of the conservator in a transformer?
2) Explain the moving iron attraction type instruments?
3) Write the generator?
4) Write the potential difference - PD?
5) Write the volt?
6) Explain the Resistance?
7) Write the Rheostat?
8) What is OHM's law? Write mathematical form

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) What is an emitter follower? What is its important application?
2) Difference between lab winding and wave winding?
3) Characteristic and uses of DC motor?
4) Explain and draw the bed room lighting circuit?
5) Write the earth continuity conductor - ECC?

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EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION

ONE YEAR EXAMINATION NOVEMBER-2025

EEE011-03 REFRIGERATION MAINTENANCE, SERVICE & TROUBLE SHOOTING

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 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 - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ the pisstan cylinder used

2) Unit of capacitance _____

3) _____ converts HPHTV into HPHTL

4) Chemical name of the R22 _____

5) The freezing point of R 717 is _____ ° F

6) Joule's constant or mechanical equivalent of heat is equal to : _____

7) If the relative humidity of atmospheric air is 100% the rate of evaporation of water will be _____

8) The liquid line of a refrigeration system may be insulated, to minimize _____

9) Which component of the mechanical refrigeration system is considered to be its heart? _____

10) The fin type condenser in a household refrigerator is located at _____ of the refrigerator.

11) In a democratic refrigerator, the evaporator used is of the type _____

12) The refrigerator light (Bulb) is operated by _____

13) The refrigerator door is pulled to close by _____

14) When the thermostat is closed (cut in) in split A/c circuit contact with _____

15) Condensate water spilling in the room from A/c due to _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Secondary refrigeration of importance
2) What is defrost? Name the types
3) What do you know about Radiator
4) Define-Flash point
5) Define - Heat
6) Write the types of lubrication system
7) What are the advantages of open type compressor
8) Write a short note on rotary compressor
9) What refrigerant is used in visible cooler?
10) At what situation the dry bulb and wet bulb temperature will show same?
11) What is the behavior of HC blend refrigerant?
12) Why it is necessary to provide space around the softy machine?
13) If noise came from solenoid valve, how to rectify?
14) What is the use of condenser fan motor?
15) On which operation cycle domestic refrigerator works?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Describe the working principle of scroll compressor and their
2) Describe the tank type Evaporator and Boudelot cooler
3) Describe about capllary tube expansion
4) Name the main compression refrigeration system?
5) What is the purpose of a gasket in a compressor?
6) What is meant by the approach of a cooling tower?
7) What is the main function of liquid receiver?
8) What is meant by evacuation of refrigeration system?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Explain the importance of maintenance of Refrigerator
2) Write the difference between I.C. engine and steam engine
3) Explain and draw four stroke cycle spark ignition engine
4) Testing of a high pressure control.
5) Servicing of deep freezer.

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EEE011-BSS DIPLOMA IN AIR CONDITIONING AND REFRIGERATION

ONE YEAR EXAMINATION NOVEMBER-2025

EEE011-04 AIRCONDITIONING MAINTENANCE, SERVICE & TROUBLE SHOOTING

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 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 - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Indayaradu control aircondition _____ evaporator methods

2) In multi type of pistons run _____ type of lubrication method is used.

3) AHU is _____

4) In drinking fountain very high flow of water from main will increase _____

5) Reason for thermostat no cut out is _____

6) The cause of leaky door Gasket create a fault of _____

7) Most of the refrigerant's including CFCs, HCFCs, HFCs and HC blend are _____

8) The blade assembly in churner helps to _____

9) The voltage rated used for softy machine is _____

10) When compare to CFC12 the charge of 134a will be _____

11) Freon 12 ideal pressure is _____

12) The cause of noise in foundation of ice cream plant is _____

13) The valve seatings should be checked for leak, by _____

14) Cover the outdoor pipe insulation with _____

15) Thermostat is used to control _____ of refrigerant.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Define Surge tank.
2) What is pressure relief valve
3) What is alternator
4) Name the types of horns
5) Define Flash Chamber
6) Write the chemical name of R12, R22, R134 a
7) Define the term vapor lock
8) From where does the lub oil pump of a compressor get its drive?
9) The pressure of non condensable, how reacts with compressor?
10) Write two drying agents used in filter drier?
11) To cut open the sealed compressor which part of the compressor frame has to be cut?
12) Which type of gaskets used in reciprocating compressors?
13) Why oil level is important in the compressor?
14) What do you mean by atmospheric pressure
15) Electric conductor

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Describe the working principle of cone ice machine
2) Write the functions of water cooled condenser.
3) Write the function of shell and tube type condenser
4) Write the function of pin type evaporator
5) Explain the tank type evaporator.
6) What is hot gas deep frasting.
7) Moist air
8) Alternating current

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) What the development of air condition
2) Explain with neat sketch of Remote type package AC
3) Draw and explain the white ice plant
4) Explain with neat sketch about split A/C
5) Write the function evaporator and receiver.