

# **CBSE – DEPARTMENT OF SKILL EDUCATION**

## **AIR-CONDITIONING & REFRIGERATION (SUBJECT CODE 827)**

### **CLASS XII – SESSION 2019-2020**

**TIME: 3 HOURS**

**Max. Marks: 60**

**PLEASE NOTE THAT:**

- 1. This Question Paper contains 42 (11+31) questions. A candidate needs to answer 30 (7+23) questions.**
- 2. The Question paper is divided into two parts viz. Part A: Employability Skills of 10 marks and Part B: Subject Skills of 50 marks.**
- 3. Part A: Employability Skills (10 Marks):**
  - a. There are 6 questions of 1 mark each. Answer any 4 questions (1 x 4 = 4 Marks).**
  - b. There are 5 questions of 2 marks each. Answer any 3 questions. (2 x 3 = 6 Marks).**
- 4. Part B: Subject Skills (50 Marks):**
  - a. There are 12 questions of 1 mark each. Answer any 10 questions (1 x 10 = 10 Marks).**
  - b. There are 7 questions of 2 marks each. Answer any 5 questions (2 x 5 = 10 Marks).**
  - c. There are 7 questions of 3 marks each. Answer any 5 questions (3 x 5 = 15 Marks).**
  - d. There are 5 questions of 5 marks each. Answer any 3 questions (5 x 3 = 15 Marks).**
- 5. This Question paper also has question(s) of 5 marks weightage conforming to Higher Order Thinking Skills (HOTS) as per Bloom's revised taxonomy of cognitive learning.**

### **BLUEPRINT OF SAMPLE QUESTION PAPER**

#### **PART A: EMPLOYABILITY SKILLS (10 MARKS)**

<b>UNIT NO.</b>	<b>NAME OF THE UNIT</b>	<b>MCQ / FILL IN THE BLANKS/ DIRECT QUESTIONS</b>	<b>VERY SHORT ANSWER QUESTION</b>	<b>TOTAL QUESTIONS</b>
		<b>1 MARK EACH</b>	<b>2 MARKS EACH</b>	
<b>I</b>	COMMUNICATION SKILLS	1	1	2
<b>II</b>	SELF-MANAGEMENT SKILLS	2	1	3
<b>III</b>	INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS	1	1	2
<b>IV</b>	ENTREPRENEURIAL SKILLS	1	1	2
<b>V</b>	GREEN SKILLS	1	1	2
<b>TOTAL QUESTIONS</b>		<b>6</b>	<b>5</b>	<b>11</b>
<b>NO. OF QUESTIONS TO BE ANSWERED</b>		<b>Any 4</b>	<b>Any 3</b>	<b>7</b>
<b>TOTAL MARKS</b>		<b>1 x 4 = 4</b>	<b>2 x 3 = 6</b>	<b>10 MARKS</b>

**PART B: SUBJECT SKILL (50 MARKS)**

UNIT NO.	NAME OF THE UNIT	MCQ / FILL IN THE BLANKS/ DIRECT QUESTIONS	VERY SHORT ANSWER QUESTION	SHORT ANSWER QUESTIONS	LONG/ ESSAY TYPE QUESTION	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	3 MARKS EACH	5 MARKS EACH	
1	Psychrometry	02	01	1	-	04
2	Heat transfer and Air Distribution	02	01	1	1	05
3	Components of Refrigeration Systems	02	02	2	1	07
4	Electric controls	02	01	1	1	05
5	Commercial Applications	02	01	1	1	05
6	Air-Conditioning Systems & Maintenance	02	01	1	1	05
<b>TOTAL QUESTIONS</b>		<b>12</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>31</b>
<b>NO. OF QUESTIONS TO BE ANSWERED</b>		<b>Any 10</b>	<b>Any 5</b>	<b>Any 5</b>	<b>Any 3</b>	<b>23</b>
<b>TOTAL MARKS</b>		<b>1 x 10 = 10</b>	<b>2 x 5 = 10</b>	<b>3 x 5 = 15</b>	<b>5 x 3 = 15</b>	<b>50 MARKS</b>