

CBSE | DEPARTMENT OF SKILL EDUCATION

FOUNDATION SKILLS FOR SCIENCES (PHARMACEUTICAL & BIOTECHNOLOGY)(SUBJECT CODE -421)

Blue-print for sample question paper for class X (Session 2024-2025)

Max. Time: 2 Hours

Max. Marks: 50

PART A – EMPLOYABILITY SKILLS (10 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTION	SHORT ANSWER TYPE QUESTION	TOTAL QUESTIONS
		1 MARK EACH	2 MARK EACH	
1	Communication Skills – II	1	1	2
2	Self-Management Skills – II	2	1	3
3	ICT Skills – II	1	1	2
4	Entrepreneurial Skills – II	1	1	2
5	Green Skills - II	1	1	2
TOTAL QUESTIONS		6	5	11
NO. OF QUESTION TO BE ANSWERED		ANY 4	ANY 3	07
TOTAL MARKS		1 X 4 = 4	2 X 3 = 6	10 MARKS

PART B – SUBJECT SPECIFIC SKILLS (40 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANSWER TYPE QUESTION	LONG ANSWER QUESTION	TOTAL QUESTION
		1 MARK EACH	2 MARK EACH	4 MARKS EACH	
1.	Fundamental of Scientific sales and marketing	4	1	1	6
2.	Standard operating procedures and fundamental elements of quality	4	1	1	6
3.	Handling glassware in laboratory.	4	1	1	6
4.	Chemical storage and handling in laboratory.	4	1	1	6

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTION	SHORT ANSWER TYPE QUESTION	LONG ANSWER QUESTION	TOTAL QUESTION
		1 MARK EACH	2 MARK EACH	4 MARKS EACH	
5.	Fundamental Science for medicine manufactory.	4	1	1	6
6.	Fundamental of Innovation and Research to resolve real life problems.	4	1	-	5
Total Question		24	6	5	35
No of Question to be answered		20	Ans. 4	Ans. 3	27
Total Marks		1x20 =20	2x4 = 8	4x3 = 12	40 marks

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(SUBJECT CODE - 421)

Sample Question paper for class X. (Session 2024 - 25)

Max. Time - 2 Hours

Max. Marks: 50

General Instruction:

- 1 Please read the instruction carefully.
- 2 This question paper consists of 21 questions in two sections: Section A and Section B.
- 3 Section A has objective type question where as section B contains subjective type questions.
- 4 Out of the given $(5+16)=21$ questions, a candidate has to answer $(5+10) =15$ questions in the allotted (maximum) time of 2 hours.
- 5 All questions of a particular section must be attempted in the correct order.
- 6 **Section A: Objective Type Questions (24 marks):**
 - i. This section has 5 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given
- 7 **Section B: Subjective type questions (26 marks):**
 - i. This section has 15 questions.
 - ii. A candidate has to do 10 questions.
 - iii. Do as per the instruction given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A:- OBJECTIVE TYPE QUESTIONS

Q.1	Answer any 4 out of the given 6 questions on employability skills:- (1x4=4 marks)	
i)	It is the means by which the information is sent – a) Feedback b) Sender c) Message d) Channel	1
ii)	Mention one skill that you should master to get success in life.	1
iii)	_____ is the ability to identify and name one's own emotion.	1
iv)	The most important software in any computer is _____ .	1
v)	_____ have a positive relationship with society.	1
vi)	How many sustainable development goals are given by the United Nations?	1

Q.2	Answer any five out of the given 6 questions (1x5=5 marks)	
i)	Who plays a crucial role in gathering feedback from health-care professionals, patients and care givers? a) Interviews b) Surveys c) Research d) Marketing	1
ii)	The full form of SOP is- a) Standard Operating Protocols b) Standard Operating Procedures c) Standard Operational Process d) Standard Operating Practice	1
iii)	_____ are conical shaped glass containers with a narrow neck and flat bottom- a) Test-tube b) Graduated cylinders c) Erlenmeyer flasks d) Pipettes	1
iv)	_____ are used to determine the end point of chemical reaction and ph. of a solution – a) Salts b) Acids c) Indicators d) Bases	1
v)	It regulate the pharmaceutical industry to ensure the safety, efficacy and quality of medicines- a) Research and development b) Regulatory Authorities c) Manufacturing Companies d) Healthcare Providers	1

vi)	_____ is a right to use an invention. a) Trademarks b) Copyright c) Trade secrets d) Patents	1
Q.3	Answer any 5 out of given 6 questions (1x5=5)	
i)	What is the full form of RCPA?	1
ii)	Give one example of PPE	1
iii)	Which laboratory deals with the experiments related to chemical reactions	1
iv)	Mention one substance that are used in laboratory for staining any biological specimens	1
v)	Who deals with the spatial arrangement of atoms within molecules?	1
vi)	What type of innovation happens when someone attempts for improving the process.	1

Q.4	Answer any 5 out of given 6 questions (1x5=5)	
i)	Mention the two basic categories for an innovation.	1
ii)	What is the full form of GMP?	1
iii)	Which substance can ignite easily and can cause fires and explosions?	1
iv)	Give one example of Class A glassware.	1
v)	What do you mean by Quality standard?	1
vi)	Mention one type of Advertising Media for Life Sciences sales and Marketing.	1

Q.5	Answer any 5 out of given 6 questions (1x5=5)	
i)	What are the 4P's of marketing mix?	1
ii)	Write one SOP of a factory worker working in an industry.	1
iii)	Give two common examples of glass wares used in science laboratories.	1
iv)	Which substances can cause serious health problems if ingested or inhaled accidentally.	1
v)	What is Isomerism?	1
vi)	What are the two types of research based on application?	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of given 5 questions on Employability Skills: (2x3=6)

Answer each question in 20-30 words:

Q.6.	Write the 7Cs of effective communication?	2
Q.7	Give two differences between Interest and abilities.	2
Q.8	What are the ways in which personal information can be leaked from a computer without our knowing?	2
Q.9	Mention two mis – conceptions that we may have about entrepreneurship.	2
Q.10	What are the main problems related to Sustainable Development ?	2

Answer any 4 out of the given 6 questions in 20-30 words each :(2x4=8)

Q.11	Mention the importance of Sales and Marketing in the field of business.	2
Q.12	What are the two key features of a Quality Management System?	2
Q.13	Write the main use of pipettes and burettes in a chemistry laboratory.	2
Q.14	Mention two important points that you should keep in mind while the labeling of chemicals.	2
Q.15	What are the two benefits of implementing GMP guidelines for Pharmaceutical Companies ?	2
Q.16	Give two differences between Research and Development (R&D) and Innovation.	2

Answer any 3 out of given 5 questions in 50-80 words each: (4x3=12)

Q.17	What are the primary purposes of RCPA and write its benefits.	4
Q.18	Mention the different components of SOP. Give two advantages that we will get from SOP.	4
Q.19	Write the importance of handling glassware's safely in laboratories.	4
Q.20	What are the storage conditions for chemicals that one should follow in laboratory to prevent accidents and minimize the risk of exposure to hazardous substances ?	4
Q.21	Write a short notes on the basic principles of organic chemistry related to medicine manufacturing?	4