

UP Polytechnic 2022 Syllabus

Information about each topic and chapter UP Polytechnic 2022 Syllabus that may come in the examination is very important. For better performance, it will be necessary to cover every UP Polytechnic 2022 Syllabus without skipping of a single topic.

The question paper will come from the Physics, Chemistry and Mathematics subjects. Whatever you have studied in your 10th/11th/12th standard will come in the examination.

Mathematics section contains more marks weightage so try to provide more focus on it. The detailed UP Polytechnic Syllabus will be given below group-wise.

Physics

- Measurement
- Motion in one dimension
- Laws of Motion
- Motion in two dimensions
- Work, Power and Energy
- Linear Momentum and collisions
- Rotation of a rigid body about a fixed axis
- Gravitation
- Oscillatory motion
- Mechanics of solids and fluids
- Heat and thermodynamics
- Wave
- Electrostatics
- Current Electricity
- Magnetic Effect of Current
- Magnetism in Matter
- Electromagnetic induction
- Ray Optics and optical instruments
- Wave Optics
- Modern Physics

Chemistry

- Atomic Structure
- Chemical Bonding
- Redox Reactions
- Chemical Equilibrium and Kinetics
- Acid – Base Concepts
- Electrochemistry
- Catalysis
- Colloids
- Colligative Properties of Solution
- Periodic Table
- Preparation and Properties
- Thermochemistry
- General Organic Chemistry
- Isomerism
- IUPAC
- Polymers
- Carbohydrates

- Solid State
- Petroleum

Mathematics

- Algebra
- Probability
- Trigonometry
- Co-ordinate Geometry
- Calculus
- Vectors
- Dynamics
- Statics

Biology

Zoology:

Zoology will comprise following topics

- Origin of Life
- Organic Evolution
- Mechanism of Organic Evolution
- Human Genetics and Eugenics
- Applied Biology
- Mammalian Anatomy (Eg. Rabbit)
- Animal Physiology
- Detailed studies of Protozoa, Porifera, Coelenterate, Aschelminthes, Annelida and Arthropod.

Botany:

Botany will comprise following topics

- Plant Cell
- Protoplasm
- Ecology
- Ecosystem
- Genetics
- Seeds in angiospermic plants
- Fruits
- Cell differentiation Plant Tissue
- Anatomy of Root, stem and leaf
- Important phylums
- Soil
- Photosynthesis

Agriculture

Agricultural Physics

Unit, measurement, Vernier, screw gauge, Force-analysis, force parallelogram, momentum of force, equilibrium of forces, velocity and acceleration, speed, laws of motion, gravitational motion, acceleration due to gravity, circular motion, Centrifugal and centripetal forces, pressure, Capillary force and tension, atmospheric surface-barometer, Boyle's law, friction and simple example of its laws, Working of common pumps, operation, performance, power and energy, heat and temperature, radiation, convection and

conduction, heat conductance, specific heat in relation to solids, physical change in the solid due to heat, latent heat, relationship between heat and work, dew point, relative humidity and its determination, formation of clouds, fog frost, snow and halls, weather and its forecasting.

Agricultural Chemistry

Water and its hardness, methods of treatment of hard water and soft water, occurrence of compounds, properties and uses of the followings elements nitrogen, ammonia, nitric acid, carbon, carbon dioxide, phosphoric acid, sulphur dioxide, sulphuric acid, chlorine, hydrochloric acid. Occurrence properties, uses and their functions in the plants of the following: Sodium, sodium chloride, sodium hydroxide, sodium carbonate, sodium bicarbonate, sodium phosphate, sodium nitrate, potassium sulphate, Calcium, calcium oxide, calcium carbonate, calcium sulphate and calcium nitrate, Iron, sulphate and iron phosphate, aluminum, aluminum sulphate and aluminum phosphate Nitrogen cycle, Fixation of nitrogen in the soil, function of Super-phosphate and phosphorus in plant, nitrogen fertilizers.

Agricultural Engineering

Properties of different materials used in agricultural implements, Classification of plough their merits, comparison, common troubles in their operation and precautions, maintenance, assembly, cost and comparasion of cultivation harrow, hoe, float, scraper and seed drill, draft of implements. Their measurements, factors affecting draft. Water lifts, their discharge, capacities, command area, and cost of irrigation (water lifts should include common water lifts and low lift pumps). Tillage and ploughing, types of ploughing and their merits. Types and objects tillage. Chemical and Physical effects of tillage practices for different crops. Transmission of power through gears. Pulleys and belts, hand operated chaff cutters, cane crusher, winnowing fan, and splad threshers.

Agricultural Statistics

Collection of data, classification and tabulation, frequency distribution, mean and their kinds, merits and demerits. Measurements of dispersion.

General Intelligence & Reasoning

It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figurative classification, arithmetic number series, non-verbal series.

Coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization.

Venn Diagrams, Drawing inferences, Punched hole/pattern –folding & unfolding, Figural Pattern – folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence, Other sub-topics, if any.

Numerical Ability & Scientific Attitude

- Arithmetical questions up to 10th standard
- Calculation of fraction, percentages, square roots etc.
- Profit & Loss and Interest calculations
- Data / Table analysis, Graph & Bar Diagram and Pie Chart analysis

- Questions related to common use of science (Physics & Chemistry)
- Health & Nutrition

General Awareness

Questions in this component will be aimed at testing the candidates general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighboring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy & Scientific Research.

English

- Word Meanings
- Antonyms & Synonyms
- Meaning of Phrases & Idioms
- Fill in the blanks – Complete/ Improvement of the sentences with correct use of Pronouns, Verbs, Adverbs & Adjectives
- Reading comprehension's followed by questions.

What is the UP Polytechnic Exam Pattern 2022

UP Polytechnic Exam Pattern is one of the essential threats to succeed in the JEECUP examination. Candidates want the proper idea of the UP Polytechnic Exam Pattern and the Syllabus to improve themselves in the analysis. The detailed, informative material for the Joint Entrance Examination Council of Uttar Pradesh. The following is the UP Polytechnic Exam Pattern for JEECUP 2022. Candidates without any delay must view the UP Polytechnic Exam Pattern 2022.

UP Polytechnic details 2022	UP Polytechnic modes, Marks
JEECUP 2022 Exam Mode	Offline Pen & Paper Based
Number of papers in JEECUP 2022	1 Paper
Number of sections	<ul style="list-style-type: none"> • Paper Group A – 3 Sections • Paper Group B to K Each Group will have a different section as per the course
Question Paper Type	Objective Type, Single Select Multiple Choice
JEECUP 2022 Total Marks	400 Marks
JEECUP 2022 Exam duration	3 Hours
JEECUP 2022 Exam language	English/ Hindi

JEECUP Exam Pattern

Courses	Subject wise Question percentage for Examination
Engineering & Technology Diploma	(i) Physics & Chemistry-50% (ii) Maths-50%

Agricultural Engineering	(i) Physics, Chemistry & Agriculture-50% (ii) Maths-50%
Fashion Design, Home Science and Textile design and Engineering	(i) English & Hindi Comprehension-20% (ii) Reasoning & Intelligence-50% (iii) General Awareness-30%
1. Modern Office Management & Secretarial Practice 2. Library & Information Science	(i) English & Hindi Comprehension-30% (ii) Reasoning & Intelligence-35% (iii) Numerical Ability-10% (iv) General Awareness-25%
Diploma in Pharmacy	(i) Physics & Chemistry-50% (ii) Biology or Maths-50%
Post Graduate Diploma in Biotechnology (Tissue Culture)	(i) Chemistry-50% (ii) Zoology-25% (iii) Botany-25%
Post Graduate Diploma Course	(i) English Comprehension-20% (ii) Numerical Ability-15% (iii) Reasoning-30% (iv) General Intelligence-20% (v) General Awareness-15%
Diploma in Hotel Management and Catering Technology	(i) Reasoning & Logical Discussion-25% (ii) Numerical Ability & Scientific Attitude-25% (iii) English-25% (iv) General Knowledge-25%
Diploma in Aircraft Maintenance Engineering	(i) Physics & Chemistry-50% (ii) Maths-50%

What is the Marking Scheme for UP Polytechnic 2022?

All the information mentioned about the UP Polytechnic Marking Scheme. The materials gathered from the official website, if the candidates have doubts, refer to the official website of the Joint Entrance Examination Council of Uttar Pradesh @ bteup.ac.in. Here is the UP Polytechnic Syllabus 2022 Subject Wise and links shown at the end of the article. So that candidates will not suffer any problems at the time of downloading. Our main axiom is to make preparation more manageable. And in the next sections, enclosed the syllabus for only prescribed streams, and in detail manner, for every course, we have mentioned the outline in PDF.

Group A - 10th syllabus of UP Board, Maths – 50 %, Physics & Chemistry – 50%

Group B - It consists of two Sections. In the first section, Questions will be asked from Mathematics. And another section is from Physics or Chemistry or Agriculture. Maths – 50%, Physics, Chemistry & Agriculture – 50%

For Group C - The following are the three Sections in the Group C Syllabus. English & Hindi comprehension –20% Reasoning & Intelligence-50%, General Awareness –30%, Besides this, it also includes the questions from 10th Standard.

For Group D - his Group contains the four Sections and the Syllabus covered under the 12th class syllabus. English & Hindi comprehension –30%. Reasoning & Intelligence – 35%. Numerical Ability – 10%. General Awareness – 25%

For Group E- Group E contains the Syllabus of 12th Standard from the following Subjects.

- Physics & Chemistry – 50%
- Biology or Maths – 50%

For Group F- B.Sc academics.

- It includes sections like
- Chemistry – 50%
- Zoology –25%
- Botany – 25%

For Group G- It includes the syllabus that you have studied in your graduation. The following are the Sections covered in the Syllabus.

- English comprehension – 20%
- Numerical Ability –15%
- Reasoning – 30%
- General Intelligence –20%
- General Awareness –15%

For Group H- Reasoning & Logical Discussion – 25%,

- Numerical Ability & Scientific attitude-25%,
- English- 25%
- General Knowledge-25%
- In this Group Intermediate level questions are also asked.

For Group I- It includes 12th Standard UP Board Syllabus. It contains the two Sections.

- Physics & Chemistry-50%
- Maths-50%

For Group J- This group includes the Syllabus of Diploma academics and it contains 5 sections.

- English Comprehension
- Numerical Ability
- Reasoning
- General Intelligence
- General Awareness.

For Group K- This group includes the Syllabus from the 10th & 12th Standard UP Board. It contains two Sections namely. Physics, Chemistry, and Mathematics – 40%. Engineering – 60%