

Class: 12th

Physics

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All Punjab Boards

Most Important Guess Paper



"یہ گیس پیپر اتنا اہم ہے کہ آپ کی محنت اور یہ سوالات آپ کو کامیابی کی بلندیوں تک پہنچائیں گے، انشاء اللہ! ان کو اچھی طرح تیار کر لیں۔"

Most Important Exercise Short Questions

Chapter No	Question No	Chapter No	Question No
12	1, 2, 3, 5, 7, 9	17	1, 2, 4, 5, 8, 9, 10, 11
13	2, 4, 5, 7, 8, 9	18	1 TO 8
14	6, 7, 8, 10, 11, 14, 15	19	1, 2, 4, 6, 7, 9, 10, 11, 13, 14, 15, 18, 19, 20, 23, 25, 26
15	1, 5, 8, 10, 12, 13, 14, 15, 16	20	1, 3, 5, 7, 8, 9
16	1, 3, 5, 6, 8, 9, 10	21	1, 2, 4, 8, 12, 14, 16, 17, 19, 20

Additional Most Important Short Questions

Electric field and field intensity, Write down the characteristics of Electric field lines. Gauss law and electric flux, EEG and ECG, time constant, Prove that unit of RC is second. Show newton per coulomb is equal to volt per meter. Two sources of current, ohmic and non ohmic devices, ohm law, resistance of conductor rise with temp why? Tolerance of resistor, Potential gradient and its unit. Define unit of capacitance and its unit. Show 1 eV is equal to 1.6×10^{-19} . Electric potential energy and potential difference. Why potential difference decreases when current increased, Define temperature coefficient of resistance and its unit. Thermistors with its two applications. Under what conditions EMF of cell and terminal potential difference are equal? voltmeter cannot read exact EMF why? Short and open circuit, Kirchhoff's rules, Negative coefficient of temperature. Why potentiometer is an accurate measuring instrument? Define 1 Tesla and its unit. Magnetic flux and its unit. Lorentz force and formula. Right hand rule, name of parts of CRO, function of Grid, CRO working principle and its uses, how galvanometer more sensitive? Define DMM. Amperes law, magnetic flux density and flux, Motional EMF and its unit, Electromagnetic induction, energy density with equation, 1 Henry with formula and unit, on what factors induced current depend? Faraday law and Lenz law, mutual induction and self-induction, factors on which self-inductance depend, induced emf and induced current, Impedance

with its unit and symbol, root mean square, instantons and peak value, inductive and capacitive reactance, main reason or the use of AC, Back motor effect in generator, back emf effect in motor, characteristics of series and parallel resonance circuit, A. M and F. M, types of solids, crystal lattice, ductile and brittle substances, depletion region, superconductor and uses, forward and reverse biased, photodiode with its two applications, potential barrier? Application of photodiode, characteristics of OP AMP, principle of virtual ground, ionization and excitation potential, two postulates of Bohar, four uses f X-Rays, critical mass and volume, mass defect and binding energy, why heavy nuclei unstable? Treatment of cancer, basic forces of nature, hardon and leptons.

Most Important Long (Theory) Questions

Chapter No # 12



Coulombs law, **Gauss law and its applications in detail**, electric potential due to point charge, energy **stored in a capacitor**, Millikan **oil drop method**, Parallel plate capacitor, charging and discharging of capacitor

Chapter No # 13

Ohm's Law in detail, Kirchhoff rules, Wheatstone bridge, Potentiometer

Chapter No # 14

Ampere's law and apply to find the field due to current carrying solenoid, Force on a current carrying conductor placed in a uniform magnetic field, drive an expression for force on a moving charge in a magnetic field, **E/m of electron**, CRO, Torque on a current carrying coil in a magnetic Field, Galvanometer in detail along with its conversion to voltmeter and ammeter

Chapter No # 15

Types Motional E.m.f, **Faradays law, mutual induction, Energy stored in an inductor, A.C Generator**, Transformer describe its construction working and types.

Chapter No # 16

AC through capacitor and resistor, **RL- RC series circuit, RLC Series and Parallel**, Electromagnetic waves discus its principal transition and reception.

Chapter No # 17

What is strain energy? Derive the relation for strain energy in a deformed material from the area under the fore extension graph, **Energy Band Theory, Intrinsic and Extrinsic Semi-Conductors, formation of n and p type semi-conductor**

Chapter No # 18

Rectification, **Transistor as an Amplifier**, Operational Amplifier, **draw the circuit diagram of Non-Inverting Amplifier and label it.**

Chapter No # 19

Photo Electric and Compton Effect, Davison Germer Experiment, uncertainty principal

Chapter No # 20

Postulates of bohar atomic model and show that radii of hydrogen atom are quantized, characteristics and production of X rays, spontaneous and stimulated emissions and explain laser action in detail. Explain De-Broglie's interpretation of bohar orbit to show that angular momentum mvr .

Chapter No # 21

Astons Mass Spectrograph, Radioactivity, Wilson cloud chamber and Geiger Muller counter, nuclear reactor, Explain mass defect and binding energy, explain nuclear transmutation

Most Important Numerical Questions

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Chapter No	Example No	Numerical No
12	12.3, 12.4, 12.5	12.3, 12.5, 12.7, 12.10, 12.12, 12.13
13	13.1, 13.2, 13.3	13.1, 13.2, 13.4, 13.5, 13.6, 13.8
14	14.1, 14.3, 14.5	14.1, 14.2, 14.4, 14.5, 14.7, 14.9
15	15.1, 15.5	15.4, 15.5, 15.7, 15.10, 15.11, 15.13, 15.17, 15.18
16	16.2, 16.3, 16.4, 16.7	16.3, 16.4, 16.6, 16.7, 16.8, 16.9
17	-----	17.1, 17.2, 17.3, 17.4, 17.5
18	18.1	18.1, 18.2, 18.5
19	19.5, 19.7, 19.8, 19.9, 19.10, 19.11	19.1, 19.4, 19.5, 19.7, 19.9, 19.10
20	20.1	20.2, 20.3, 20.4, 20.5, 20.7, 20.8
21	21.1, 21.3	21.1, 21.2, 21.6, 21.9, 21.10

➤ **"Bold questions are very important, so make sure to focus on them!"**

نوٹ: "MCQs کے لیے، آپ Pakcity.org کی ویب سائٹ سے گیس پیپر کی مکمل فری PDF فائل ڈاؤن لوڈ کر سکتے ہیں، جس

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12th Class Physics

Question No. 2, 3, 4 Short Questions

Question No.2 Attempt any 8/12		Question No.3 Attempt any 8/12		Question No.4 Attempt any 6/9	
Chapter No	12, 14, 21	Chapter No	13, 16, 17, 18	Chapter No	15, 19, 20

Question No.5,6,7,8,9 Long Questions

Question No	Chapter No
Questions No # 5	Chapter No # 12 (a) + Chapter No # 13 (b)
Questions No # 6	Chapter No # 14 (a) + Chapter No # 15 (b)
Questions No # 7	Chapter No # 16 (a) + Chapter No # 18 (b)
Questions No # 8	Chapter No # 17 (a) + Chapter No # 19 (b)
Questions No # 9	Chapter No # 20 (a) + Chapter No # 21 (b)