

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी

Question paper Design 2020-21

Class: XI Subject: Physics
Session: 2020-21 Annual/Supplementary

Books Name: NCERT/HBSE
Physics Part-1
Physics Part-11
Marks: 70

Time: 2:30 hrs

1 Weightage to Objectives

Objective	K	U	A	S	Total
Percentage of marks	40	30	20	10	100
Marks	28	21	14	07	70

2 Weightage to Form of Questions

Form of questions	E (MARKS)	SA (MARKS)	VSA (MARKS)	Objective type (MARKS)	Total
No. of Questions	02	05	05	35	47
Marks allotted	10	15	10	35	70
Estimated time	40	40	20	50	150

3 Weightage to content:

Marks			
	Marks	No of Questions	Total Marks
1 Physical world, Units and Measurement	06	05	06
2 Motion in a straight line, motion in a plane	08	06	08
3 Laws of motion	08	06	08
4 Work energy & power	06	05	06
5 Motion of system of particles & rigid bodies	06	04	06
6 Gravitation	06	04	06
7 Properties of bulk modulus matter	10	05	10
8 Thermodynamics	06	04	06
9 behavior of perfect gas & kinetic Theory	04	03	04
10 Oscillations & waves	10	05	10
	70	47	

MCQ=18

V.V. Short Ans.=08

Fill in the blanks =09

Total =35 Questions

4 Scheme of Options : A:B:C:D

5 Scheme of Options : Internal Choice in long answer question i.e. essay type two questions

Abbreviations: K (Knowledge), U (Understanding) A (Application) S (Skill) E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

प्रश्न-पत्र बोर्ड द्वारा निर्धारित पुस्तकों से ही सैट किया जाएगा। कृपया अध्यापकगण बोर्ड द्वारा निर्धारित पुस्तकें ही पढ़ाएँ।

QUESTION PAPER DESIGN

1 WEIGHTAGE TO OBJECTIVES

2 WEIGHTAGE TO FORM OF QUESTIONS3 WEIGHTAGE TO CONTENT:

4. Scheme of Sections : A:B:C:D
5. Scheme of Options : Internal Choice in long answer question i.e. essay type in two questions.
6. MCQ :- **1x18= 18**, One Word Answer:- **1x12= 12**, Fill in the blanks:- **1x10 = 10**

Abbreviations: K (Knowledge),U(Understanding)A(Application) S(Skill)
E (Essay Type), SA(Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी।

QUESTION PAPER DESIGN.

CLASS- 10+1	SUBJECT- OSS ENG	BOOKS-
SESSION- ANNUAL/SUPPLEMENTARY		
TIME- 2.30 HOURS	MARKS-	

1 WEIGHTAGE TO OBJECTIVES

OBJECTIVE	K	U	A	S	TOTAL
PERCENTAGE OF MARKS	50%	20%	10%	20%	100
MARKS	30	12	06	12	60

2 WEIGHTAGE TO FORM OF QUESTIONS

FORM OF QUESTIONS	04 E (04 MARKS)	03 SA (MARKS)	02 VSA (MARKS)	OBJECTIVE TYPE (01 MARKS)	TOTAL
NO. OF QUESTIONS	03	02	06	30	41
MARKS ALLOTTED	12	06	12	30	60
ESTIMATED TIMES	50	20	30	50	150

3 WEIGHTAGE TO CONTENT:

MARKS			
	MARKS	NO. OF QUESTIONS	TOTAL MARKS
I office means suportance, function, principle of modern office, male, types of mail in word mail , out word, equipment. Types of Indeny Parsonel letter, method of typing features of good letter.	24		24
II Importance of shorthand, Origin of short-hand, Qualities of a stenographer, list of corsonet thicknon, Thinon, direction Joining Etrokes Vowel, Grammalogues, Punctuation.	20		20
III meaning, In Porture of Computer, character Stics, Types of Computer Posts key board, mouse, moniter, CPU, Printer, out put devices. using comp. Tcoms my computer, my document.	16		16

4. Scheme of Sections : A:B:C:D
5. Scheme of Options : Internal Choice in long answer question i.e. essay type in two questions.

Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skill)
E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

प्रश्न-पत्र बोर्ड द्वारा निर्धारित पुस्तकों से ही सैट किया जाएगा। कृपया अध्यापकगण बोर्ड द्वारा निर्धारित पुस्तकें ही पढ़ाएँ।

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी।

QUESTION PAPER DESIGN.

CLASS- 10+1	SUBJECT- OSS HINDI	BOOKS-
SESSION- ANNUAL/SUPPLEMENTARY		
TIME- 2.30 HOURS	MARKS- 60	

1 WEIGHTAGE TO OBJECTIVES

OBJECTIVE	K	U	A	S	TOTAL
PERCENTAGE OF MARKS	50%	20%	10%	20%	100
MARKS	30	12	06	12	60

2 WEIGHTAGE TO FORM OF QUESTIONS

FORM OF QUESTIONS	04 E (MARKS)	03 SA (MARKS)	02 VSA (MARKS)	01 OBJECTIVE TYPE (MARKS)	TOTAL
NO. OF QUESTIONS	03	02	06	30	41
MARKS ALLOTTED	12	06	12	30	60
ESTIMATED TIMES	50	20	30	50	150

3 WEIGHTAGE TO CONTENT:

PART-A (MARKS)

READING COMPREHENSION- 20 MARKS			
	MARKS	NO. OF QUESTIONS	TOTAL MARKS
कार्यालय-कार्यालय परिचय एवं कार्य, कार्यालय प्रकार, कार्यालय उपकरण एवं कार्यालय यन्त्रों के प्रकार।	24		24
आशुलिपि व्यंजन/वर्णमाला, स्वर, स्वर चिन्ह, द्विस्वर, त्रिस्वर, शब्दचिन्ह, शब्दाक्षर, संक्षिप्ताक्षरों का निर्माण (व्याकरणिक चिन्ह) विराम चिन्ह। व्यंजन रेखाओं के वैकल्पिक प्रयोग। वृत्तों का प्रयोग, आरम्भिक वृत्त, मध्यम वृत्त, छोटा वृत्त, बड़ा वृत्त, लूप(चाप) का प्रयोग। अनुस्वर, अनुवासिक्य, व्यंजन रेखाओं पर प्रारम्भिक हुक(अकुश) का प्रयोग।	20		20
कम्प्यूटर-कम्प्यूटर का अर्थ, विशेषता, कार्यालय में उपयोगिता। CPU। विडॉज-विडॉज क्या है इसके एसेसरीज प्रोग्राम।	16		16

4. Scheme of Sections : A:B:C:D
5. Scheme of Options : Internal Choice in long answer question i.e. essay type in two questions.

Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skill)
E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

प्रश्न-पत्र बोर्ड द्वारा निर्धारित पुस्तकों से ही सैट किया जाएगा। कृपया अध्यापकगण बोर्ड द्वारा निर्धारित पुस्तकें ही पढ़ाएँ।

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी।

QUESTION PAPER DESIGN.

CLASS- 11th	SUBJECT- PHE. EDU.	BOOKS-
SESSION- ANNUAL/SUPPLEMENTARY		
TIME- 2.30 HOURS	MARKS- 60	

1 WEIGHTAGE TO OBJECTIVES

OBJECTIVE	K	U	A	S	TOTAL
PERCENTAGE OF MARKS	50	36.67	13.33		100
MARKS	30	22	08	-	60

2 WEIGHTAGE TO FORM OF QUESTIONS

FORM OF QUESTIONS	E (MARKS)	SA (MARKS)	VSA (MARKS)	OBJECTIVE TYPE (MARKS)	TOTAL
NO. OF QUESTIONS	02	04	04	30	40
MARKS ALLOTTED	10	12	08	30	60
ESTIMATED TIMES	50	45	20	35	150

3 WEIGHTAGE TO CONTENT:

MARKS	MARKS	NO. OF QUESTIONS	TOTAL MARKS
1. Meaning and Definition of Physical Education.	09		09
2. Meaning and Definition of Health Edu.	09		09
3. Communicable Diseases	10		10
4. Occupational Health	06		06
5. Posture	06		06
6. Body System	07		07
7. Second Wind	05		05
8. Psychology and Sports Psychology	08		08

4. Scheme of Sections : A:B:C:D
5. Scheme of Options : Internal Choice in long answer question i.e. essay type in two questions.

Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skill)
E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

प्रश्न-पत्र बोर्ड द्वारा निर्धारित पुस्तकों से ही सैट किया जाएगा। कृपया अध्यापकगण बोर्ड द्वारा निर्धारित पुस्तकें ही पढ़ाएँ।

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी

Question paper Design 2020-21

Class: 11th

Subject: Pol Science

Books name:

Session: 2020-21

Annual/Supplementary

Time: 2:30 hrs

Marks: 80

1 Weightage to Objectives

Objective	K	U	A	S	Total
Percentage of Marks	60	30	10	00	100
Marks	48	24	08	00	80

2 Weightage to Form of Questions

Form of question	E	SA	VSA	Objective type	Total
No of Questions	03	05	05	40	53
Marks allotted	15	15	10	40	80
Estimated time	30	45	35	40	150

3 Weightage to content:

Reading Comprehension	Marks	No of Questions	Total Marks
1 राजनीतिक सिद्धान्त एक परिचय	05		05
2 स्वतंत्रता	04		04
3 समानता	04		04
4 सामाजिक न्याय	04		04
5 अधिकार	05		05
6 शांति	05		05
7 विकास	05		05
8 संविधान क्यों और कैसे	05		05
9 भारतीय संविधान में अधिकार	07		07
10 विधायिका	06		06
11 कार्यपालिका	06		06
12 न्यायपालिका	06		06
13 चुनाव और प्रतिनिधित्व	08		08
14 संविधान एक जीवन दस्तावेज	05		05
15 संविधान का राजनीतिक दर्शन	05		05

4 Scheme of Sections : A:B:C:D

5 Scheme of Options : Internal Choice in long answer question i.e. essay type in two questions.

Abbreviations: K(Knowledge of element of language) C(Comprehension) E(Expression) A (Appreciation) E(Essay Type) SA(Short Answer) VSA(Very Short Answer)O(Objective type)

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी

Question paper Design 2020-21

Class: 11th Subject: Accountancy Books Name:
Session: 2020-21 Annual/Supplementary
Time: 2:30 hrs Marks: 60

1 Weightage to Objectives

Objective	K	U	A	S	Total
Percentage of marks	10	40	50	---	100
Marks	06	24	30	---	60

2 Weightage to Form of Questions

Form of questions	E	SA	VSA	Objective type	Total
No. of Questions	01	01	10	30	42
Marks allotted	06	04	20	30	60
Estimated time	30	20	40	60	150

3 Weightage to content

Marks			
	Marks	No of Questions	Total Marks
Unit-01	01	04	04
Unit-02	01	01	01
Unit-03	06	01	06
	02	04	08
	01	06	06
Unit-04	02	01	02
	01	04	04
Unit-05	02	01	02
	01	04	04
Unit-06	04	01	04
	02	02	04
	01	02	02
Unit-07	02	01	02
Unit-08	02	01	02
	01	02	02
Unit-09	01	01	01
Unit-10	01	02	02
Unit-11	01	02	02
Unit-12	01	01	01
Unit-13	01	01	01

4 Scheme of Sections : A:B:C:D

5 Scheme of Options : Internal Choice in long answer question i.e. essay type in one questions

Abbreviations: K(Knowledge) ,U(Understanding),A(Application) S(Skill)
E(Essay Type), SA(Short Answer) ,VSA(Very Short Answer),O(Objective type)

हरियाणा विद्यालय शिक्षा बोर्ड, भिवानी।

QUESTION PAPER DESIGN

CLASS- 11 TH SESSION-2020-21 TIME- 02.30: HOURS	SUBJECT- Urdu ANNUAL/SUPPLEMENTARY MARKS- 80	BOOKS-Gulistan-e-Adab Khayaban-e-urdu
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1 WEIGHTAGE TO OBJECTIVES

OBJECTIVE	K	U	A	S	TOTAL
PERCENTAGE OF MARKS	50	31.25	18.75	---	100
MARKS	40	25	15	---	80

2 WEIGHTAGE TO FORM OF QUESTIONS

FORM OF QUESTIONS	E (5 MARKS)	SA (3 MARKS)	VSA (MARKS)	OBJECTIVE TYPE (40 MARKS)	TOTAL
NO. OF QUESTIONS	05	05	---	40	50
MARKS ALLOTTED	25	15	---	40	80
ESTIMATED TIMES	55	40	---	55	150

3 WEIGHTAGE TO CONTENT:

PART-A (60 MARKS)

READING COMPREHENSION- 20MARKS			
Gulistan-e-Adab	MARKS	NO. OF QUESTIONS	TOTAL MARKS
Gulistane Adab, Dastan, Tanqeedi Mazameen, Muktasar Afsana, Masanavi Tanz O Mezah, Safarnama, Khaka,	10	02	10
Gulistan-e-adab (Poetry)-Ghazal, Marsiya	05	01	05
Word Meanings	08	08	08
Numbers/Genders	06	06	06
Idioms & Poverbs	03	01	03
Text Book (Objective Questions)	19	19	19
Text Book (Short answer type questions)	09	03	09
Total	60	40	60

PART-B (20 MARKS)

Khayaban-e-Urdu	MARKS	NO. OF QUESTIONS	TOTAL MARKS
Khayaban-e-Urdu : Nazam, Geet	05	01	05
Essay/Letter	05	01	05
Text Book (Short answer type questions)	03	01	03
Text Book (Objective Questions)	07	07	07
Total	20	10	20

Grand Total(Part-A+Part-B)	80	50	80
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4. Scheme of Sections :

A:B:C:D

5. Scheme of Options :

Internal Choice in long answer question i.e. essay type in two questions.

Syllabus
Class-11th
Subject-Physics

Month	Name of book	Subjects Content	Teaching period	Revision periods	Practical Work
April	Physics Text book Class-XI Part-I	Unit-I Physical World and measurement	22	06	07
May	Do	Unit-II Kinematics	25	09	08
June Summer Vacation					
July	Do	Unit-III Law of Motion Unit-IV Work, Energy & Power	14 14	04	08
August	Do	Unit-V Motion of System of Particle & rigid bodies	22	06	07
September	Revision				
October	Physics text book Class-XI Part-II	Unit-VI Gravitation Unit-VII Mechanical Properties of solids & fluids .	12 10	04	08
November	Do	Unit-VII Thermal Properties of Matter Unit-VIII Thermodynamics	12 10	04	08
December	Do	Unit-IX Behaviour of perfect gas & kinetic Theory	14	06	10
January	Do	Unit-X Oscillations & Waves	20	02	04
February	Revision of Complete Syllabus Unit I to X				
March	Annual Examinations				

Detailed Syllabus

Unit-I

Chapter-I: Physical world: What is physics

Chapter-II: Units and measurement :- Need for measurement unit of measurement, System of units, The international system of units, fundamental and derived units, length, mass and times measurement, Accuracy, Precision of instruments and errors in measurement, Absolute error, relative error and % error, significant figures.

Dimension of physical Quantities, dimensional analysis and its application, checking the dimensional, consistency of equations, deducing relation among the physical quantities, convert one system of unit into another system using dimensional analysis.

Unit-II: Kinematics

Chapter-III: Motion in a straight line:

path length and displacement, average speed and average velocity, instantaneous velocity and speed, Acceleration, uniformly accelerated motion, vel, time and position-time graph for accelerated Motion, Kinematic equations for uniformly accelerated motion, Equation of motion for uniformly accelerated motion using(Graphical treatment)

Chapter-IV: Motion in a plane:

Scalars and vectors, position and displacement vectors, Equality of vectors, addition and subtraction of vector- Graphical Method, Multiplication of vector by real number, Relative Velocity, Unit vectors. Resolution of vector in a plane, rectangular components, Projectile motion, equation of path of projectile, Time of flight, horizontal range, Maximum height attained by projectile uniform circular motion.

Unit-III:

Chapter-V: Laws of Motion:

Conservation of Momentum and its application. Equilibrium of a particle, Friction-static, limiting and kinetic friction, Laws of friction, Rolling friction, Lubrication circular motion, centripetal force, motion of car on a level road, motion of car on a banked road.

Unit-IV: Work Energy and Power:

Chapter-VI:

Scalar and vector product of vectors, Work done by a constant force and variable force, kinetic energy, Work-Energy Theorem, Concept of potential energy, potential energy of a spring conservation of Mechanical Energy, Conservation and non-conservation forces. The principal of conservation of energy, power, Collisions, Elastic and inelastic Collisions, Collisions in one and two dimensions.

Unit-V: Motion of system of particles & Rigid Body:

Chapter-VII: System of particles and rotational motion:

Centre of mass of two particle system, Motion of centre of mass, Linear momentum of a system of particle, angular vel and its relation with linear velocity, angular acceleration, torque and angular momentum, conservation of angular momentum with some examples, Equilibrium of a rigid body, Moment of Inertia, radius of gyration, Values of Moment of Inertia for simple geometrical objects (No Derivation) Kinematics of rotational motion about a fixed axis.

Unit-VI: Chapter-VIII: Gravitation: Universal Law of gravitation , Gravitational potential energy, Escape speed satellites, weightlessness.

Unit-VII: Chapter-IX: Mechanical Properties of Solids:

stress and strain, Hook's Law, stress, strain curve, Young's Modules, Bulk Modules, Applications of Elastic behavior of materials.

Chapter-X: Mechanical Properties of fluids:

Pressure, Pascal's Law and its application (hydraulic lift, hydraulic brakes) effect of gravity on fluid pressure, streamline flow & turbulent flow, Equation of continuity, Bernoulli's Principle and its application, Viscosity, Stoke's Law, Reynold's number, surface tension & surface energy, Angle of contact, Application of surface tension: Drops & bubbles, capillary rise, detergent and surface tension.

Chapter-XI: Thermal Properties of Matter:

Thermal expansion, linear expansion, area expansion, volume expansion, specific heat capacity, calorimetry, change of state, Latent heat, Thermal conductivity, Newton's Law of Cooling.

Unit-VIII: Thermodynamics:

Chapter-XII: Thermodynamics:

Thermal Equilibrium and definition of temperature (Zeroth Law of thermodynamics), Heat, internal Energy and Work, First Law of thermodynamics, Specific heat Capacity. Isothermal process, Adiabatic process, isochoric process and isobaric process. second Law of thermodynamics.

Unit-IX: Behaviour of perfect gas and Kinetic Theory:

Chapter: XIII: Kinetic Theory:

Equation of state of a perfect gas, behavior of gases, Ideal Gas Kinetic theory of gases: Assumptions, concept of pressure, Kinetic interpretation of temperature, rms, speeds of a gas molecule, Laws of equipartition of Energy, Degrees of freedoms. Specific heat capacity- Monatomic gas, diatomic gases, polyatomic gases, concept of mean free path.

Unit-X: Oscillations and Waves:

Chapter-XIV: Oscillations:

Periodic motion and oscillatory motions, Period and frequency displacement as a function of time. Simple Harmonic Motion (SHM) and its equation; Phase,

velocity and acceleration in simple harmonic motion, Force Law for SHM, Energy in SHM- Kinetic and potential energies; The simple pendulum- derivation of expression for its time period; free, forced and damped oscillations (qualitative idea only), resonance

Chapter-XV: Waves:

Wave motion, Transverse and longitudinal waves, speed of transverse and longitudinal waves. Displacement relation in a progressive wave. Principle of superposition of waves, reflection of waves, standing waves and normal modes in strings, open & closed organ pipe,. Beats.

Class-11th
Subject-Physics Practical
Section-A

Experiments:-

1. Use of vernier calipers
 - i. to measure diameter of a small spherical/cylindrical body.
 - ii. to measure dimensions of a given regular body of known mass and hence find its density.
 - iii. to measure internal diameter & depth of a given beaker and find its volume.
2. Use of Screw gauge:-
 - i. to measure diameter of a given wire.
 - ii. to measure thickness of a given sheet.
 - iii. to measure volume of an irregular lamino.
3. To determine radius of curvature of a given spherical surface by a spherometer.
4. To measure the mass of two different objects using a beam balance.
5. To find the weight of a given body using parallelogram law of vector.
6. Using a simple pendulum, plot L-T and L-T² graph. Find the effective length of a second's pendulum using appropriate Graph.
7. To study the relationship between free of limiting friction and normal reaction and to find the coefficient of friction between a block and a horizontal surface.
8. To find the downward free along on inclined plane acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination by plotting graph between free and $\sin \theta$.

Activities:-

1. To make a paper scale of given least count e.g. 0.2cm, 0.5cm.
2. To determine mass of given body using a meter scale by using principle of moments.
3. To plot a graph for a given set of data with proper choice of scales and error bars.
4. To measure the force of limiting friction for rolling of a roller on a horizontal plane.

5. To study the variation in the range of jet of water with the angle of projection.
6. To study the conservation of energy of a bar rolling down on an inclined plane.

Section-B

Experiments:

1. To determine young's Modules of elasticity of material of given wire.
2. To find force constant and effective mass of a helical spring by plotting T^2 -m graph using Method of oscillations.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P&V and between P&1/V.
4. To determine surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring the terminal vel of a given spherical body.
6. To study the relationship between the temper of a hot body and time by plotting cooling curve.
7. To study the relation between length of a given wire and tension for constant frequency using bonometer.
8. To find the speed of sound in air at room temperature using a resonance tube by two resonance position.
9. To determine Specific heat Capacity of a given 1. Solid 2. Liquid by Methods of mixtures.

Activity:

1. To observe change of state and plot a cooling curve for molten wave.
2. To observe explain the effect of heating on a bimetallic strip.
3. To note the change in level of liquid in a container on heating and interpret the observation.
4. To study the effect of detergents on surface tension of water by capillary rise.
5. To study the factors effecting the rate of loss of heat of a liquid.
6. To study the effect of load on depression of a suitably claimped meter scale loaded 1. at its ends 2. in the middle.