

Rubrics : SSC 1st ANNUAL EXAMINATION 2023

Subject: PHYSICS-II (LOCAL)

FINAL 4-5-2023 (3:41PM)

Q No/ Part No	Criteria	Level 1 (Marks)	Level 2 (Marks)	Level 3 (Marks)	Level 4 (Marks)	Level 5 (Marks)
2 (i)	Change in the time period of simple pendulum	Correct calculation with correct answer (03)	Partially correct calculation (02)	Some relevant steps OR writing correct answer (01)	Wrong (0)	
2 (ii)	Definition of noise pollution	Correct definition OR correct brief explanation (01)	Partially correct definition OR some relevant information (0.5)	Wrong (0)		
	Harmful effect of noise pollution on human health	Any two correct effects (02)	Any one correct effect (01)	Wrong (0)		
2 (iii)	Calculate the intensity level of given loud sound	Correct calculation with proper unit i.e. decibel (03)	Partially correct (02)	Some relevant steps of calculation OR writing direct answer (01)	Wrong (0)	
2 (iv)	Condition of formation of virtual image by converging lens	Correct description of condition (Object should be placed between Principal focus and optical centre, forming virtual, erect and enlarge image) with correct ray diagram showing all the points mentioned in the condition (03)	Partially correct description with correct figure OR correct figure with partially correct description (02)	Either correct figure OR correct condition only (01)	Some relevant information (0.5)	Wrong (0)
2 (v)	Angular magnification of magnifying glass at near point	Correct calculation (1.5)	Partially correct (01)	Writing direct answer (0.5)	Wrong (0)	
	Angular magnification of magnifying glass at infinity	Correct calculation (1.5)	Partially correct (01)	Writing direct answer (0.5)	Wrong (0)	
2 (vi)	Definition of electric potential	Correct definition or correct description (02)	Partially correct (01)	Some relevant information (0.5)	Wrong (0)	
	Formula and unit of electric potential	Correct formula and correct SI unit of electric potential (01)	Either correct formula or correct unit (0.5)	Wrong (0)		

2 (vii)	Calculation of distance between charges	Correct calculation (03)	Partially correct (02)	Some relevant steps (01)	Wrong (0)	
2 (viii)	Differences between AC and DC	Any three correct differences (03)	Any two correct differences (02)	Any one correct difference (01)	Some relevant information (0.5)	Wrong (0)
2 (ix)	Calculation of power across resistor	Correct calculation (03)	Partially correct (02)	Some relevant steps (01)	Wrong (0)	
2 (x)	Factor affecting induced emf	Any three correct factors e.g. increasing/ decreasing rate of change of magnetic field in a coil/circuit, changing in the number of turns, area of the coil, strength of magnetic field through the coil, relative velocity between magnet and coil etc. (03)	Any two correct factors (02)	Any one correct factor (01)	Wrong (0)	
2 (xi)	Effect of DC on working of transformer	Correct reasoning (e.g. transformer cannot work on DC with correctly explaining the reason e.g. there is no change of magnetic field or flux through secondary coil) (03)	Partially correct (02)	Some relevant information e.g. transformer cannot work on DC. (01)	Wrong (0)	
2 (xii)	Construction of electron gun	Correct brief description of construction of electron gun e.g. naming necessary parts OR correctly labelled diagram (1.5)	Partially correct (01)	Some relevant information or only correct figure (0.5)	Wrong (0)	
	Working of electron gun	Correct brief description of working of electron gun (1.5)	Partially correct (01)	Some relevant information (0.5)	Wrong (0)	
2 (xiii)	Formation of NAND gate	Correctly describing the formation of NAND gate e.g. NOT gate is connected with the AND gate OR correctly showing this description in with logic diagram. (01)	Partially correct (0.5)	Wrong (0)		
	Symbol of NAND gate	Correct symbol (0.5)	Wrong (0)			
	Truth Table of NAND gate	Correct truth table (1.5)	Partially correct (01)	Any correct output with inputs (0.5)	Wrong (0)	

2 (xiv)	Uses of internet	Any three correct uses (03)	Any two correct uses (02)	Any one correct use (01)	Wrong (0)	
2 (xv)	Background radiation	Correct description or definition (02)	Partially correct (01)	Some relevant information (0.5)	wrong (0)	
	Names of main sources of Background radiation	Any two correct names (01)	Any one correct name (0.5)	wrong (0)		
3 (a)	Definition of telescope	Correct definition (01)	Partially correct (0.5)	Wrong (0)		
	Ray diagram of telescope	Correct labelled ray diagram OR diagram with description to show basic elements of telescope (02)	Partially correct (01)	Wrong (0)		
	Working of telescope	Correct description of its working (02)	Partially correct (1.5)	Some relevant information (01)	Wrong (0)	
	Mentioning the magnifying power (angular magnification) and its explanation	Correct formula and its correct explanation (02)	Partially correct (1.5)	Only formula (01)	Some relevant information (0.5)	Wrong (0)
3 (b)	Calculation of speed of sound	Correct calculation (03)	Partially correct (02)	Some relevant steps (01)	Wrong(0)	
4 (a)	Definition of capacitor	Correct definition (01)	Partially correct (0.5)	Wrong (0)		
	Description of capacitance and its SI unit	Correct brief description of its capacitance and its unit (farad) OR Definition of capacitance, its formula and definition of farad (02)	Partially correct description OR any one information mentioned in rubric level-1 (01)	Some relevant information (0.5)	Wrong (0)	
	Series combination of capacitor	Correct derivation of equivalent capacitance with correct diagram (03)	Partially correct (02)	Some relevant steps (01)	Wrong(0)	

4 (b)	Calculation of number of secondary coil turns	Correct calculation (02)	Partially correct (01)	Wrong (0)		
	Calculation of current in primary coil	Correct calculation (02)	Partially correct (01)	Wrong (0)		
5 (a)	Construction and working of cathode ray oscilloscope (CRO)	Correct description of construction and working of CRO e.g. writing names of main parts of CRO i.e. electron gun, parts of electron gun, deflecting plates horizontal and vertical, fluorescent screen and their detailed working (04)	Sufficiently correct e.g. describing any two parts of CRO in detail (03)	Partially correct e.g. describing any one part of CRO in detail (02)	Some relevant information (01)	Wrong (0)
	Labelled diagram of CRO	Correct labelled diagram (02)	Partially correct (01)	Wrong (0)		
5(b)	Definition of radioisotope	Correct definition (01)	Partially correct (0.5)	Wrong (0)		
	Uses of radioisotopes	Correct explanation of any two uses (03)	Correct explanation of any one use (02)	Some relevant information (01)	Wrong (0)	

Note: All the markers must know the solution of the questions of the Question Paper before starting marking.