

PHYSICS

Q. Paper : II (Objective Type)

Time Allowed : 15 Minutes

Maximum Marks : 12

021 - (دہم کلاس)

PAPER CODE = 7475

(پہلا گروپ)

LMR-41-21

فزکس

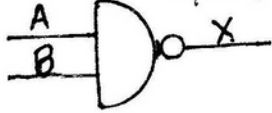
سوالیہ پرچہ : II (معروضی طرز)

وقت : 15 منٹ

کل نمبر : 12

نوٹ : ہر سوال کے چار ممکنہ جوابات A, B, C اور D دیے گئے ہیں۔ جوابی کاپی پر ہر سوال کے سامنے دیئے گئے دائروں میں سے درست جواب کے مطابق متعلقہ دائرہ کو مار کر یا پین سے بھر دیجئے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

Note : Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1	ایکٹرک فیلڈ اینٹینسٹی کا S.I یونٹ ہے :	The S.I unit of electric field intensity is :
	NC ⁻² (A) NC ⁻¹ (B) NC (C) Nm (D)	
2	نارگیٹ کی بولین علامت ہے :	Boolean expression of NOR gate is :
	X = A.B (A) X = A+B (B) X = A+B (C) X = A.B (D)	
3	ایکٹرک پاور کا یونٹ ہے :	The unit of electric power is :
	Ohm (A) Watt (B) Farad (C) Joule (D)	
4	آواز کی اینٹینسٹی کا یونٹ ہے :	The unit of intensity of sound is :
	Wm ⁻² (A) Wm ² (B) Wm ⁻¹ (C) Wm (D)	
5	ایک آئیڈیل ٹرانسفارمر کے لیے :	For an ideal transformer :
	P _p < P _s (A) P _p > P _s (B) P _p = P _s (C) P _p ≠ P _s (D)	
6	عام طور پر ایٹم کو علامت سے ظاہر کیا جاتا ہے :	Generally an atom is represented by the symbol :
	$\begin{matrix} A \\ Z \\ X \end{matrix}$ (A) $\begin{matrix} Z \\ A \\ X \end{matrix}$ (B) $\begin{matrix} Z \\ Z+N \\ X \end{matrix}$ (C) $\begin{matrix} A \\ A+Z \\ X \end{matrix}$ (D)	
7	سینل کا قانون ہے :	Snell's law is :
	n = $\frac{\sin r}{\sin i}$ (A) n = sin r (B) n = $\frac{\sin i}{\sin r}$ (C) n = sin i (D)	
8	کسی کیپیسٹر کی کیپسیٹنس برابر ہوتی ہے :	Capacitance of any capacitor is equal to :
	C = $\frac{Q}{V}$ (A) C = $\frac{V}{Q}$ (B) C = QV (C) C = $\frac{1}{QV}$ (D)	
9	ای ایم ایف کا کلیہ ہے :	Formula of e.m.f is equal to :
	E = $\frac{Q}{W}$ (A) E = $\frac{Q}{t}$ (B) E = $\frac{W}{t}$ (C) E = $\frac{W}{Q}$ (D)	
10	کمپیوٹر میڈ انفارمیشن سسٹم کے اجزاء کی تعداد ہے :	Number of components of computer based information system is :
	3 (A) 4 (B) 5 (C) 6 (D)	
11	ویوز منتقل کرتی ہیں :	Waves transfer :
	Velocity (A) Energy (B) Wavelength (C) Frequency (D)	
12	اس گیٹ سے کون سا لاگک آپریشن حاصل ہوتا ہے :	The logical operation performed by this gate is :
		
	AND (A) NOR (B) OR (C) NAND (D)	

PHYSICS

Paper : II (Essay Type)

Time Allowed : 1.45 hours

Maximum Marks : 48

021 - (دہم کلاس)

(پہلا گروپ)

MR-41-21

(حصہ اول - PART - I)

فزکس

پرچہ : II (انشائیہ طرز)

وقت : 1.45 گھنٹے

کل نمبر : 48

10 2. Write short answers to any Five (5) questions :

2- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- Define quality of sound.
- Define spring constant "K" and write down its unit.
- Define restoring force.
- Prove that : $v = f\lambda$
- How does loudness depend on the area of vibrating body?
- Define pole and centre of curvature in spherical mirrors.
- Differentiate between the focus of convex mirror and concave mirror.
- What is meant by distance formula?

10 3. Write short answers to any Five (5) questions :

3- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- Define ohmic and non-ohmic conductors.
- Define electric power and write its formula.
- Define electromotive force and write its unit.
- Define mutual induction.
- State the right hand rule.
- Draw the symbolic diagram for NAND gate and write its truth table.
- Define truth table.
- What is an electric current and write its formula?

10 4. Write short answers to any Five (5) questions :

4- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- Define electric field intensity and write its equation.
- Define unit of capacitance.
- Write two uses of capacitors.
- Explain the software component of computer based information system.
- What is optical fibre? Write its one advantage for transmission of data.
- Write name of two web browsers.
- Define cosmic radiations and write its source.
- What do you understand by half life of a radioactive element?

(حصہ دوم - PART-II)

Note : Attempt any TWO questions.

5. (a) Prove that motion of a simple pendulum is simple harmonic motion.
- (b) Two capacitors of capacitances $12 \mu F$ and $6 \mu F$ are connected in parallel with a 12V battery. Find the equivalent capacitance of the combination. Find the charge across each capacitor.
6. (a) What is Solenoid? Explain the magnetic field of a Solenoid?
- (b) An object 10 cm in front of a convex mirror forms an image 5 cm behind the mirror. What is the focal length of the mirror?
7. (a) What is meant by nuclear transmutation? Write the general equation of beta decay and also write an example.
- (b) The resistance of a conductor wire is $10 M\Omega$. If the potential difference of 100 volts is applied across its ends, then find the value of current passing through it in mA.