PIR MEHR ALI SHAH

ARID AGRICULTURE UNIVERSITY RAWALPINDI

Exam Attendance Sheet

UIIT

BS(CS)(Evening) Session: SPRING-23

Course Code: PHY-403

Course: Applied Physics

Section: A Teacher: Samiullah Yousaf Exam Date: _____

Sr.#	Registration No.	Student Name		Answer Sheet	Student's Signature
1	20-ARID-679	DANIYAL MEHMOOD	13	102733	DANIYAL
2	21-ARID-534	ABDUL HADI MIR	14.5	102734	
3	21-ARID-537	AHMED ALI MALIK	09	102735	
4	21-ARID-543	ALI HAIDER	8.5	102736	
5	21-ARID-544	ALI HAMZA	08	102757	
6	21-ARID-548	ALVEENA TAJ	12.5	102737	
7	21-ARID-549	AMMAD ARSHAD	13	102738	
8	21-ARID-552	AMNA PERVAIZ	16.5	102739	
9	21-ARID-553	ANAS RAFIQ	16.5	102740	Anas
10	21-ARID-554	AQSA MUKHTAR	14.5	102741	
11	21-ARID-555	ARBAZ	06	102742	
12	21-ARID-561	AYESHA WAHID	14	102743	
13	21-ARID-564	DAMAN ALI BABAR	13	102744	102744
14	21-ARID-568	FAIZAN NABI	13.5	102745	
15	21-ARID-575	HAMZA IRFAN	09	102746	
16	21-ARID-581	HUSSNAIN ZIA	11	102747	
17	21-ARID-583	JUNAID AHMED KHOKHAR	11	102781	Junaid
18	21-ARID-585	KANWAL MUMTAZ	17	102748	
19	21-ARID-588	M HUSNAIN AMJAD	11	102749	
20	21-ARID-590	MALIK EHTSAM ALI	11.5	102750	

Number Of Student Present _____ Invigilator's Name & Signature _____

	Registration No.	Student Name		Answer Sheet	Student's Signature
	21-ARID-592	MAMOONA ASIF	13	102751	Mamoona.
	21-ARID-601	MUDASSIR SALEEM	14	102752	
	21-ARID-606	MUHAMMAD ABID	12.5	102753	
	21-ARID-613	MUHAMMAD ARSLAN ATTIQUE	10.5	102754	
	21-ARID-616	MUHAMMAD DAEM ALI	11	102755	M Daem Ali
	21-ARID-617	MUHAMMAD EHSAN YAQOOB	14.5	102756	
	21-ARID-619	MUHAMMAD HASSAN	13.5	102782	
	21-ARID-620	MUHAMMAD HASSAN	12.5	102758	
	21-ARID-624	MUHAMMAD IBRAR KHAN	12.5	102759	
	21-ARID-625	MUHAMMAD IKRAM ULLAH KHAN	9.5	102760	
	21-ARID-630	MUHAMMAD OSAID ABBAS	8.5	102761	Mosaid
	21-ARID-631	MUHAMMAD QADEER ASGHAR	11	102762	
3	21-ARID-632	MUHAMMAD QASIM BHATTI	16.5	102763	
4	21-ARID-634	MUHAMMAD REHAN TARIQ	14.5	102764	
5	21-ARID-639	MUHAMMAD SIDDEEQ	12.5	102765	
6	21-ARID-641	MUHAMMAD UMER SALEEM	17	102766	T
37	21-ARID-642	MUHAMMAD UQBA	11	102767	
38	21-ARID-645	MUHAMMAD ZOHAIB SHABBIR	12	102768	AV
39	21-ARID-648	MUQADAS EJAZ	13.5	102769	
40	21-ARID-653	NAWAIRA YASIN	13	102770	
41	21-ARID-655	QAISAR ABBAS	15	102771	
42	21-ARID-660	RIMSHA PERVAIZ	17	102772	Rimsha Perva T
43	21-ARID-666	SAQUIB ALI	15	102773	
44	21-ARID-678	UBAIDULLAH	16.5	102774	
45	21-ARID-680	UMAR BASHEER	14.5	102775	
46	21-ARID-683	WAJID ABBAS	10	102776	Wajid
47	21-ARID-684	ZAHEER AKBAR	10	102777	
48	21-ARID-688	ZULQURNAIN HAIDER	13.5	102778	

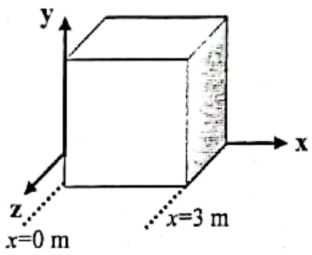
Number Of Student Present:_____Invigilator's Name & Signature:_____

Sr. #	Registration	Student Name		Answer Sheet	Student's Signature
49	21-ARID-912	AHMAD ABDULLAH TARIQ	12.5	102779	A
	21-A-676	Taha Ali Hashmi	16.5	102780	Ali

PMAS Arid Agriculture University Rawalpindi
University Institute of Information Technology

Midterm Exams
Applied Physics, BSCS, Section (A)
Time Allowed: One Hour
Total Marks : 6×3=18

Q. 1(a) A nonuniform electric field given by $E = 2x\,i + 2\,j$ pierces the Gaussian cube shown in Figure (E is in newtons per coulomb and x is in meters.) What is the electric flux through the right face, the left face, and the top face? **(04)**



$\Phi_R = 54\ Nm^2/C$
$\Phi_L = 18\ Nm^2/C$
$\Phi_T =$

$E = \frac{\sigma}{\epsilon_0}$

(b) Find electrical field between two parallel conducting plates with opposite surface charge densities. **(02)**

Q. 2(a) Four particles form a square of edge length $a = 2$ cm and have charges q_1=5 C, q_2=10 C, q_3=10 C, and q_4=5 C. What net electric field do the particles produce at the square's center? **(03)** $E_{net} = 0\ N/C$

(b) Find the mathematical expression for electric field due to a charged disk. **(03)**

$E = \frac{\sigma}{2\epsilon_0}\left(1 - \frac{z}{(\sqrt{z^2 + R^2})}\right)$

Q. 3(a) Two particles with charges $q_1 = 6\ C$, $q_2 = 4\ C$, placed at a distance r = 2 cm from each other. Find the magnitude of electrostatic force. **(02)** $54 \times 10^{13}\ N$

(b) Why the electric lines of force never cross each other? unidirectional **(02)**

(c) What are the limitations of Coulomb's law? (i point charge (ii $r \neq \infty$ **(02)**

***** Good Luck *****