

LESSON PLAN FOR EVEN SEM
SESSION 2017-18

NAME OF ASSOCIATE PROFESSOR : Dr. ARVIND KUMAR JAIN
CLASS/SECTION : M.Sc. I
SUBJECT : APPLIED PHYSICS

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 1-1-18	-----	CLIPPING CIRCUITS : POSITIVE, NEGATIVE, BIASED AND COMBINATIONAL CLIPPER
DAY2 DATE 2-1-18	INTRODUCTION	-----
DAY6 DATE 6-1-18	NEUTRON SOURCE: A-BERYLLIUM SOURCE	-----
DAY7 DATE 8-1-18	-----	CLAMPER CIRCUITS : POSITIVE AND NEGATIVE CLAMPER
DAY8 DATE 9-1-18	NEUTRON SOURCE: RADIUM- BERYLLIUM SOURCE	-----
DAY12 DATE 13-1-18	NEUTRON SOURCE: PLUTONIUM- BERYLLIUM SOURCE	-----
DAY13 DATE 15-1-18	-----	RC COUPLED AMPLIFIER : TRANSISTORS, RC COUPLED AMPLIFIER, FREQUENCY RESPONSE CURVE
DAY 14 DATE 16-1-18	NEUTRON SOURCE: AMERICIUM- BERYLLIUM SOURCE	-----
DAY18 DATE 20-1-18	NEUTRON SOURCE: PHOTO NEUTRON SOURCE	-----
DAY19 DATE 22-1-18	HOLIDAY	
DAY20 DATE 23-1-18	SPORTS DAY	
DAY21 DATE 24-1-18	HOLIDAY	
DAY23 DATE 26-1-18	HOLIDAY	
DAY 24 DATE 27-1-18	REACTORS - AS NEUTRON SOURCE	-----
UNIT/PART II	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 29-1-18		POWER SUPPLY : ELECTRONIC COMPONENTS, POWER SUPPLY, REGULATED

	-----	POWER SUPPLY, ZENER DIODE SHUNT REGULATOR
DAY2 DATE 30-1-18	NUCLEAR REACTIONS - AS NEUTRON SOURCE, CLASSIFICATION OF NEUTRONS ON THE BASIS OF ENERGY	-----
DAY3 DATE 31-1-18	HOLIDAY	
DAY6 DATE 3-2-18	PROMPT AND DELAYED NEUTRONS	-----
DAY7 DATE 5-2-18	-----	DIFFERENTIATOR AND INTEGRATOR : RECTIFIER, TYPES OF RECTIFIER, OP AMP, FILTER CIRCUIT
DAY8 DATE 6-2-18	NEUTRON MODERATORS, PROPERTIES OF NEUTRON MODERATORS AND DYNAMICS OF ELASTIC SCATTERING OF NEUTRONS	-----
DAY11 DATE 9-2-18	ASSIGNMENT 1	
DAY12 DATE 10-2-18	HOLIDAY	
DAY13 DATE 12-2-18	-----	FOUR PROBE METHOD : RESISTIVITY, THIN FILM AND VACUUM TECHNIQUES, FOUR PROBE METHOD
DAY14 DATE 13-2-18	HOLIDAY	
DAY18 DATE 17-2-18	ANGULAR DISTRIBUTION OF NEUTRONS, AVERAGE LOGARITHMIC DECREMENT IN ENERGY OF NEUTRONS	-----
DAY19 DATE 19-2-18	-----	CURIE TEMPERATURE : MAGNETIC MATERIAL, CURIE TEMPERATURE, HYSTERESIS, B H CURVE
DAY20 DATE 20-2-18	SLOWING DOWN POWER OF MODERATOR	-----
UNIT/PART III	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 24-2-18	MODERATING RATIO	-----
DAY2 DATE 26-2-18	-----	SOIL CONDUCTIVITY : ANALOG AND DIGITAL CONDUCTOMETER
DAY3 DATE 27-2-18	TEST & SEMINAR (PG CLASSES)	

DAY4 DATE 28-2-18	HOLIDAY	
DAY5 DATE 1-3-18	HOLIDAY	
DAY6 DATE 2-3-18	HOLIDAY	
DAY7 DATE 3-3-18	HOLIDAY	
DAY8 DATE 5-3-18	-----	LOGIC GATES : AND, OR, NOT GATE
DAY9 DATE 6-3-18	DIFFUSION OF NEUTRON	-----
DAY13 DATE 10-3-18	ASSIGNMENT 2	-----
DAY 14 DATE 12-3-18	-----	DIAC : SEMICONDUCTORS, TYPES OF SEMICONDUCTORS
DAY15 DATE 13-3-18	FERMI AGE EQUATION	-----
DAY19 DATE 17-3-18	FISSILE AND FERTILE MATERIALS	-----
DAY20 DATE 19-3-18	-----	DIAC : THYRISTORS, V-I CHARACTERISTICS OF DIAC
DAY21 DATE 20-3-18	CHARACTERISTICS AND PRODUCTION OF FISSILE MATERIALS	-----
DAY22 DATE 21-3-18	CONDITIONAL TEST	-----
DAY23 DATE 22-3-18	CONDITIONAL TEST	-----
DAY 24 DATE 23-3-18	HOLIDAY	
DAY 25 DATE 24-3-18	CLASSIFICATION OF NUCLEAR REACTORS	-----
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 26-3-18	-----	GRAIN MOISTURE : ANALOG MOISTURE METER
DAY2 DATE 27-3-18	NEUTRON ECONOMY AND MULTIPLICATION FACTOR	-----
DAY4 DATE 29-3-18	HOLIDAY	
DAY6 DATE 31-3-18	CALCULATION OF CRITICAL SIZE OF REACTOR	-----
DAY7 DATE 2-4-18	-----	GRAIN MOISTURE : DIGITAL MOISTURE METER
DAY8	CONCEPT OF CONTROL OF	

DATE 3-4-18	REACTOR, PROPERTIES OF REACTOR SHIELD	-----
DAY13 DATE 9-4-18	-----	TRIAC : SEMICONDUCTORS, TYPES OF SEMICONDUCTORS
DAY14 DATE 10-4-18	FAST BREEDER REACTOR, CONCEPT OF BREEDING AND DOUBLING TIME	-----
DAY18 DATE 14-4-18	HOLIDAY	
DAY19 DATE 16-4-18	-----	TRIAC : THYRISTORS, V-I CHARACTERISTICS OF TRIAC
DAY20 DATE 17-4-18	REACTOR MATERIALS AND BASIC PRINCIPLE, BASIC CONCEPT OF FUSION REACTOR, DESIRED CHARACTERISTIC OF NEUTRON DETECTORS, BF ₃ COUNTER	-----
DAY21 DATE 18-4-18	HOLIDAY	

NAME OF ASSOCIATE PROFESSOR : Dr. ARVIND KUMAR JAIN
CLASS/SECTION : M.Sc. II
SUBJECT : APPLIED PHYSICS

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 1-1-18	BASIC COMPUTER ORGANISATION: INPUT UNIT / OUTPUT UNIT	-----
DAY2 DATE 2-1-18	-----	FABRICATION OF SPANNER AND SCREW DRIVER
DAY7 DATE 8-1-18	ARITHMETIC LOGIC UNIT	-----
DAY8 DATE 9-1-18	-----	ALGORITHM OF QUADRATIC EQUATION
DAY13 DATE 15-1-18	CONTROL UNIT	-----
DAY 14 DATE 16-1-18	-----	FLOW CHART OF QUADRATIC EQUATION
DAY19 DATE 22-1-18	HOLIDAY	
DAY20 DATE 23-1-18	SPORTS DAY	
DAY21 DATE 24-1-18	HOLIDAY	
DAY23 DATE 26-1-18	HOLIDAY	
UNIT/PART II	TOPIC	
	THEORY	PRACTICAL
DAY1	CENTRAL PROCESSING UNIT	-----

DATE 29-1-18		
DAY2 DATE 30-1-18	-----	PROGRAM OF QUADRATIC EQUATION
DAY3 DATE 31-1-18	HOLIDAY	
DAY7 DATE 5-2-18	ELEMENTS OF FORTRAN LANGUAGE AND PROGRAMME ORGANIZATION: DATA TYPES	-----
DAY8 DATE 6-2-18	-----	ALGORITHM OF LEAST SQUARE CURVE FITTING
DAY11 DATE 9-2-18	ASSIGNMENT 1	-----
DAY12 DATE 10-2-18	HOLIDAY	
DAY13 DATE 12-2-18	ARITHMETIC AND LOGICAL EXPRESSIONS	-----
DAY14 DATE 13-2-18	HOLIDAY	
DAY19 DATE 19-2-18	NUMERICAL INPUT / OUTPUT STATEMENTS	-----
DAY20 DATE 20-2-18	-----	FLOW CHART OF LEAST SQUARE CURVE FITTING
UNIT/PART III	TOPIC	
	THEORY	PRACTICAL
DAY2 DATE 26-2-18	TRANSFER OF CONTROL THROUGH LOGICAL STATEMENTS	-----
DAY3 DATE 27-2-18	TEST & SEMINAR (PG CLASSES)	PROGRAM OF LEAST SQUARE CURVE FITTING
DAY4 DATE 28-2-18	HOLIDAY	
DAY5 DATE 1-3-18	HOLIDAY	
DAY6 DATE 2-3-18	HOLIDAY	
DAY7 DATE 3-3-18	HOLIDAY	
DAY8 DATE 5-3-18	ARRAYS AND SUBSCRIBED VARIABLES	-----
DAY9 DATE 6-3-18	-----	FABRICATION OF OPTICAL EQUILATERAL PRISM (PITCH NUMBER -100, 120, 220, 302, 304)
DAY13 DATE 10-3-18	ASSIGNMENT 2	-----
DAY 14 DATE 12-3-18	USE OF FUNCTIONS AND SUBROUTINES	-----
DAY15 DATE 13-3-18	-----	ALGORITHM OF SIMPSON 1/3 AND 3/8 RULE
DAY20	COMMON STATEMENT	-----

DATE 19-3-18		
DAY21 DATE 20-3-18	-----	FLOW CHART OF SIMPSON 1/3 AND 3/8 RULE
DAY22 DATE 21-3-18	CONDITIONAL TEST	-----
DAY23 DATE 22-3-18	CONDITIONAL TEST	-----
DAY 24 DATE 23-3-18	HOLIDAY	
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 26-3-18	DEVELOPING OF COMPUTER PROGRAMME FOR VARIOUS NUMERICAL PROBLEMS	-----
DAY2 DATE 27-3-18	-----	PROGRAM OF SIMPSON 1/3 AND 3/8 RULE
DAY4 DATE 29-3-18	HOLIDAY	
DAY7 DATE 2-4-18	DEVELOPING OF COMPUTER PROGRAMME FOR VARIOUS NUMERICAL PROBLEMS	-----
DAY8 DATE 3-4-18	-----	ALGOGRITHM OF BISECTION METHOD
DAY13 DATE 9-4-18	TESTING OF COMPUTER PROGRAMME FOR VARIOUS NUMERICAL PROBLEMS	-----
DAY14 DATE 10-4-18	-----	FLOW CHART OF BISECTION METHOD
DAY18 DATE 14-4-18	HOLIDAY	
DAY19 DATE 16-4-18	SOLUTION OF LINEAR AND QUADRATIC EQUATIONS	-----
DAY20 DATE 17-4-18	-----	PROGRAM OF BISECTION METHOD
DAY21 DATE 18-4-18	HOLIDAY	