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SYLLABUS OF C.B.G-III COURSE (Duration: 09 Months)

FIRST SEMESTER

(A) RADIO THEORY

(TOTAL PERIODS - 200)

S.NO.	TOPIC	DESCRIPTION	PERIODS
1.	BATTERIES	PRIMARY AND SECONDARY BATTERIES, TYPES OF BATTERIES, SERIES AND PARALLEL COMBINATION OF BATTERIES, CHARGING AND DISCHARGING. FAULT AND REMEDY FOR THE LEAD ACID BATTERIES. EFFECT OF OVER CHARGING AND DISCHARGING, SULPHATION, NI-MH BATTERIES-THEIR CONSTRUCTION & MAINTENANCE. VRLA & TUBULAR BATTERIES.	20
2.	REPEATER	SIMPLEX, SEMI-DUPLEX & DUPLEX WORKING REPEATERS, DMR REPEATER	25
3.	ORGANIZATION FUNCTIONALITY	3.1 INTRODUCTION OF MP POLICE TELECOM ORGANIZATION STRUCTURE.	06
		3.2 IMPORTANT PARA OF POLICE REGULATION 1860	10
		3.3 ROLE, FUNCTIONS & DUTIES OF DIFFERENT SECTIONS I.E. COMMUNICATION, PURCHASE, PLANNING, M.T., PRC, WORKSHOP, ADMIN. ETC. AT PDS HQ, ZONAL HQ, RANGE HQ & DISTRICT LEVEL.	15
		3.4 STORE WORK - VOUCHER CREATION, STOCK ENTRY, MER CREATION, DEMAND LIST, RECOVERY PROCESS OF LOST EQUIPMENT, CONDEMNATION PROCESS, PURCHASE RULES, GEM PORTAL, INVENTORY PORTAL	20
		3.5 GEOGRAPHICAL INFORMATION OF DISTRICTS, POINT OF INTEREST.	10
4.	ANALOG & DIGITAL COMMN.	BASIC CONCEPT, MERIT & DEMERIT, DIFFERENCES	10
5.	RADIO TRUNKING SYSTEM & TETRA SYSTEM	RADIO TRUNKING SYSTEM : INTRODUCTION, OPERATION, WORKING, FUNCTION OF MAIN COMPONENTS, ADVANTAGES ETC. INTRODUCTION OF TETRA SYSTEM & APCO 16	11
6.	BIO-METRIC ATTENDANCE SYSTEM	BIO-METRIC ATTENDANCE SYSTEM : INTRODUCTION, OPERATION & WORKING OF BIO-METRIC ATTENDANCE SYSTEM	04
7.	SOLAR SYSTEM	SOLAR SYSTEM : - AUTO SWITCH / PCB / MPPT CHARGE CONTROLLER / INTELLIGENT CHARGE CONTROLLER, BTY CHARGING SYSTEM.	06
8.	GEOGRAPHIC INFORMATION SYSTEM	GIS : INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEM, POI & GIS MAPPING	08
9.	DIAL-100	DIAL 100 INTRODUCTION AND OPERATION, LBS, AWAYA /PHONE, DIAL 100/112 APP, INTRODUCTION AND OPERATION OF AUTOMATIC VEHICLE LOCATION SYSTEM (AVLS)	15
10.	CCTV	CCTV INTRODUCTION, OPERATION AND OTHERS CAMERAS	10

11.	APCO-25	INTRODUCTION , OPERATION , COMPONENTS ADVANTAGES ARCHITECTURE AND	10
12.	DIGITAL MOBILE RADIO (DMR)	INTRODUCTION, FDMA, TDMA, MODES OF DMR, DISPATCHER, MICROWAVE LINK, ADVATAGES AND DISADVANTAGES. INTRODUCTION OF LTE BASED RADIO	12
13.	PERSONALITY DEVELOPMENT	13.1 HOW TO DEAL / MANAGE PUBLIC 13.2 HOW TO TALK WITH PRESS AND MEDIA 13.3 LEADERSHIP QUALITIES IN A POLICEMAN 13.4 SELF HEALTH MANAGEMENT 13.5 MONEY INVESTMENT & MANAGEMENT LIC / POST OFFICE 13.6 SOCIAL WELFARE ACTIVITIES/CAMP AT NEARBY VILLAGE	08

(B) WORKSHOP :-

(TOTAL PERIODS = 280)

WORKSHOP PRACTICAL PART – I

S.NO.	TOPICS	DESCRIPTION	PERIODS
1.	OPERATION OF DIFFERENT TYPES OF RADIO SETS AND RT TALK	HF/VHF RADIO SET ON/OFF, KNOB, BUTTON SPECIFICATION STUDY AND RT TALK PRACTICE	17
2.	VHF AND DMR RADIO SET INSTALLATION	TESTING OF RADIO SET AND EQUIPMENTS, SELECTION OF PLACE, INSTALLATION OF AERIAL/ANTENNA, SWR MEASUREMENT, CONNECTION OF ALL ACCESSORY, CHECK COMM., PRECAUTIONS	30
3.	HF RADIO SET INSTALLATION	TESTING OF RADIO SET AND EQUIPMENTS, SELECTION OF PLACE, INSTALLATION OF AERIAL/ANTENNA, DESIGNING OF ANTENNA, CONNECTION OF ALL ACCESSORY, CHECK COMM., PRECAUTION	10
4.	TOWER CLIMBING	REQUIRED TOOL AND ACCESSORIES AND PRECAUTION	06
5.	AERIAL MAST INSTALLATION	REQUIREMENTS, SELECTION OF PLACE & DERRICK, MEASUREMENT OF HOLE, ERECTION OF MAST, TOOLS, SWR MEASUREMENT, PRECAUTIONS	20
6.	PROGRAMMING OF DIFFERENT TYPES VHF ,HF & DMR /APCO RADIO SETS	ALL TYPES HF ,VHF AND DMR RADIO SET FREQUENCY AND PIN ACCESSORY	20
7.	RADIO TRUNKING SET	OPERATION RADIO SET ON/ OFF, KNOB, BUTTON STUDY AND RT TALK PRACTICE.	4
8.	RADIO TEST SET	PARAMETER TESTING - RX & TX PARAMETER TESTING	16
9.	REPEATER FABRICATION & INSTALLATION	VHF NETWORKING TYPES, FABRICATION, INSTALLATION AND MAINTENANCE	30
10.	FABRICATION OF RECTIFIERS	ALL TYPES OF RECTIFIER AND POWER SUPPLY	32

WORKSHOP PRACTICAL PART - II

S.NO.	TOPICS	DESCRIPTION	PERIODS
1	COMPONENT TESTING & ELECTRIC FITTING	ALL TYPES OF ELECTRONIC AND ELECTRIC COMPONENTS, ELECTRIC BOARD WIRING AND FITTING, FAN, TUBE LIGHT ETC.	22
2	BATTERY CHARGER	CIRCUIT ANALYSIS AND FAULT DIAGNOSIS OF DIFFERENT SECTIONS & REMEDY	10
3	BATTERY CHARGING AND DISCHARGING	TYPES OF CHARGING, LOAD TESTING, CHARGING PROCEDURE, CALCULATION OF CHARGE RATE, BTY. COMBINATION FOR CHARGING AND DISCHARGING	07
4	SOLAR POWER PACK/BANK	REQUIREMENTS, CALCULATION OF CONSUMPTION POWER, INVERTER, BATTERY BACKUP, SOLAR PANEL WIRE, MCB, MPPT CHARGER/SOLAR AUTO-CUT SWITCH, MAINS AUTO SWITCH AND BATTERY BANK	08
5	GPS AND GIS MAPPING	REQUIREMENTS, WAY POINT, ROUTE, TRACK, MAP, WAY POINT PROJECTION, COMPASS AND NAVIGATION, LATITUDE LONGITUDE AND GIS MAPPING	06
6	RMS	REQUIREMENT, MAP PROPERTIES, UNIT PROPERTIES, NETWORK PROPERTIES, SYSTEM RADIO LINK, VISUAL COVERAGE	10
7	DIAL-100	MDT AND NET-VIEWER	10
		LOCATION BASED SERVICE (L.B.S.)	06
		DIAL 100/112 APP AND FEEDBACK PORTAL	04
8	CCTV	CONNECTION, BACKUP, CONTROL AND SURVEILLANCE	04
9	RADIO SET DISTRIBUTION	RADIO SET AND EQUIPMENT DISTRIBUTION PRACTICE	05
10	BIO-METRIC SYSTEM	BIO-METRIC SYSTEM PRACTICE	03

(C) FIELD EXPOSER

S.NO.	PLACE	PURPOSE	DURATION
1	DIAL-100 BHOPAL	CALL DISPATCHER, NET-VIEWER, MDT, SOP ETC.	01 WEEK
2	ZONAL WORKSHOP	R/SET & EQUIPMENT REPAIRING, JOB REGISTER, MER ETC.	01 WEEK

(D) MONTHLY TEST

S.NO.	PARTICULARS	MARKS	REMARK
1	MONTHLY TEST (TOTAL 04 TESTS IN A SEM.)	300 MARKS (100 FOR EACH SUBJECT)	BEST OF 3 FORMULA IS USED FOR FINAL RESULT VALUATION.

(E) EXAMINATION CHART OF COMBINED BASIC GRADE-III COURSE

S.NO.	SUBJECT	MARKS
1	RADIO THEORY	
2	WORKSHOP PRACTICAL I PAPER (PRACTICAL = 90, VIVA = 10) (S.NO. 1-4 & 6-10)	100
3	WORKSHOP PRACTICAL II PAPER (PRACTICAL = 90, VIVA = 10) (S.NO. 1-8 & 10)	100
	TOTAL	100
		300

SECOND SEMESTER

(A) RADIO PROCEDURE

(TOTAL PERIODS = 140)

S.NO.	TOPIC	DESCRIPTION	PERIODS
1.	RADIO PROCEDURE	DEFINITIONS	12
		PROSIGN, ABBREVIATION	07
		TYPES OF MESSAGE	07
		IN, OUT, THROUGH MESSAGE HANDLING	08
		OPERATING SIGNAL	05
		RADIO LOG, SIGNAL DIARY, ALL METHOD, DUTIES OF	10
		CONTROL STATION, OPERATING RULES	07
		SIGNALS, RT COMMON PHRASES, LAW AND ORDER	07
		MESSAGE CATEGORIES	07
		USE OF PRIORITY, SECURITY, CLASSIFICATION OF	07
		MESSAGE	40
		CLASSIFIED IN/OUT MESSAGE HANDLING DUTIES OF	10
		SENIOR OBSERVER	10
		R.T. TALK	10
		HANDLING OF CIPHER DOCUMENTS	
		RADIO MESSAGE (R/M) DRAFTING	
		RETENTION TEST OF MESSAGES	

(B) COMPUTER & MODERN COMMUNICATION SYSTEM

(TOTAL PERIODS = 340)

S.NO.	TOPIC	DESCRIPTION	PERIODS
1.	FUNDAMENTAL OF COMPUTER	1.1 BASIC STRUCTURE AND BLOCK DIAGRAM	03
		1.2 INPUT AND OUTPUT UNITS	
		1.3 MEMORY, TYPES OF MEMORY	
		1.4 HARDWARE AND SOFTWARE	
		1.5 OPERATING SYSTEMS	
2.	WINDOWS	2.1 USE OF WINDOWS	05
		2.2 TYPES OF WINDOWS	
		3.1 HARDWARE INSTALLATION	
3.	HARDWARE/SOFTWARE INSTALLATION	3.2 SOFTWARE INSTALLATION	14
		4.1 ENGLISH TYPING	
		4.2 HINDI TYPING	
4.	HINDI/ENGLISH TYPING	4.3 ROMAN HINDI TYPING	64

5.	MS-WORD	5.1 EXPLORING WORD	05
		5.2 HOME MENU	08
		5.3 INSERT MENU	08
		5.4 PAGE LAYOUT MENU	05
		5.6 MAILING MENU	08
		5.7 VIEW, REVIEW, REFERENCE MENU	05
		5.8 OFFICE BUTTON MENU	05
		5.9 MS-WORD EXERCISE	05
		5.10 LETTER DRAFTING	05
6	MS-EXCEL	6.1 SPREADSHEET BASICS	05
		6.2 HOME MENU	06
		6.3 INSERT MENU	06
		6.4 FORMULA MENU	05
		6.5 MAILING MENU	04
		6.6 DATA MENU	04
		6.6 REVIEW, VIEW MENU	05
		6.7 MS-EXCEL EXERCISE	06
7	MS-POWER POINT	7.1 MENU BAR	04
		7.2 TOOL TIPS	04
		7.3 FORMATION OF PPT	04
		7.4 CHANGING TEXT STYLE & ALIGNMENT	04
		7.5 INSERT CLIP ARTS AND PICTURES	03
		7.6 SLIDESHOW AND CUSTOMIZATION	03
		7.7 MS-POWER POINT EXERCISE	04
8	MODERN COMMUNICATION TECHNIQUES	8.1 SATELLITE COMMUNICATION: CONCEPT OF V-SAT, NETWORK SYSTEM STAR, MESH AND HYBRID CONFIGURATION. DISH ANTENNA, V-SAT INDOOR OUTDOOR UNIT, OPERATIONAL BLOCK DIAGRAM OF EARTH STATION AND ADVANTAGES OVER THE OTHER COMMUNICATION.	10
		8.2 DATA COMMUNICATION : INTRODUCTION OF I.D.T	05
		8.3 VIDEO CONFERENCING	10
		8.4 U.A.V. DRONE AND ANTI DRONE SYSTEM	10
		8.5 ROIP :- INTRODUCTION, FEATURES AND OPERATION OF ROIP	08
		8.6 MODERN TECHNOLOGY IN POLICING	05
9	COMPUTER HARDWARE AND NETWORKING	COMPUTER HARDWARE AND BASICS OF COMPUTER NETWORKING	35
10	EMAIL - INTERNET	10.1 INTERNET	06
		10.2 EMAIL	08
11	BULK SMS , SKYPE AND GOOGLE SHEETS	11.1 BULK SMS AND SKYPE	08
		11.2 GOOGLE SHEETS, GOOGLE MEETS, MICROSOFT TEAMS AND CISCO WEBEX	10

12	SOCIAL MEDIA	12.1 FACEBOOK, INSTAGRAM	02
		12.2 X (TWITTER), KOO	02
		12.3 WHATSAPP, TELEGRAM, SIGNAL	02
		12.4 USES AND MISUSES OF SOCIAL MEDIA	02
13.	CYBER CRIME	OVERVIEW OF CYBER CRIME, DIFFERENT RELEVANT TERMINOLOGIES, SOCIAL MEDIA AND ONLINE FINANCIAL FRAUDS, PRECAUTIONS AND SECURITY MEASURES	10

(C) FIELD EXPOSER

S.NO	PLACE	DURATION
1.	DISTRICT CONTROL ROOM	01 WEEK
2.	ZONE P.R.C.	01 WEEK

(D) FIELD VISIT -

AIR TRAFFIC CONTROL (ATC), AKASHVANI, DOORDARSHAN KENDRA, R.R.C.A.T., RAILWAY TRAFFIC CONTROL ETC.

(E) MONTHLY TEST

S.NO.	PARTICULARS	MARKS	REMARK
1	MONTHLY TEST (TOTAL 04 TESTS IN A SEM.)	300 MARKS (100 FOR EACH SUBJECT)	BEST OF 3 FORMULA IS USED FOR FINAL RESULT VALUATION.

(F) EXAMINATION CHART OF COMBINED BASIC GRADE-III COURSE: - (TOTAL 01 WEEK)

S.NO	SUBJECT	MARKS
1	RADIO PROCEDURE	100
2	COMPUTER I PAPER (HINDI & ENGLISH TYPING)	100
3	COMPUTER II PAPER (MS-OFFICE)	100
TOTAL		300


(G) OUTDOOR EXAMINATION (AFTER TRAINING COMPLETION)


SNO.	SUBJECT	MARKS
1	PT	50
2	PARADE	50
3	YOGA	25
4	SPORTS	25
5	EXTRA CURRICULAR ACTIVITIES	25
6	DISCIPLINE	25
TOTAL		200


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(H) SUMMARY:-


S.NO	PARTICULARS	NO. OF PERIODS	DURATION IN WEEKS
A	RADIO THEORY	200	32
B	WORKSHOP	280	
C	RADIO PROCEDURE	140	
D	COMPUTER	340	
E	PT/PARED/YOGA/SPORTS	378	
F	FIELD EXPOSER	-	04
G	MID-TERM BREAK	-	01
H	EXAM	-	02
TOTAL		1338	39 (09 MONTHS)



 ANIL SHUKLA
 SI(R) WORKSHOP
 PRTS INDORE


 AFZAAL KHAN
 I(R) COURSE
 PRTS INDORE


 R.K.SWAMI
 I(R) STORE
 PRTS INDORE


 GHANSHYAM SINGH
 DSP(R) INDOOR TRNG.
 PRTS INDORE


 C.S CHANDRAWAT
 SP (RADIO)
 PRTS INDORE


 एच. एन. अधीकार
 पुलिस अधीक्षक (रेडियो)
 रेडियो मुख्या. भोपाल