

- (ii) Explain in brief, the various methodologies used in computer system development.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
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Total number of printed pages-12

63/2 (SEM-3) MCO303 (N/O)

2023

COMMERCE

Paper : MCO303

(Microfinance and Rural Development /
Operation Research and Computer
Application)

Full Marks : 80

Pass Marks : 32

Time : Three hours

The figures in the margin indicate
full marks for the questions.

(New Course)

(Microfinance and Rural Development)

- Choose the correct answer : $1 \times 6 = 6$
 - The nature of collateral under microfinance is :
 - physical
 - social
 - emotional
 - stock

Contd.

(ii) Interest rate under microfinance is :

- (a) affordable and subsidised
- (b) low and subsidised
- (c) reasonable and flexible
- (d) low and affordable

(iii) Under which microfinance model, loans are given to individuals (not to the groups) :

- (a) SHG model
- (b) Grameen model
- (c) NBFC model
- (d) Co-operative model

(iv) According to the RBI, ultra small branches can be operated by :

- (a) banks
- (b) NBFCs
- (c) Business correspondence
- (d) Insurance companies

(v) The main institution to promote SHGs since 1992 in India is :

- (a) NABARD
- (b) EDI
- (c) IIE
- (d) SIDBI

(vi) Pradhan Mantri Gram Sadak Yojana was initiated :

- (a) to provide all weather road in rural area
- (b) to provide all weather road in urban area
- (c) to provide all weather road in semi-urban area
- (d) to provide transport services in rural area

2. Answer the following questions : 2×5=10

(i) What is microfinance ?

(ii) What is micro-insurance ?

(iii) Write *any two* initiatives of Government of Assam to promote SHGs in rural areas of the state.

(iv) Mention *any two* features of SHG.

(v) What do you mean by rural development ?

3. Answer **any six** questions : 5×6=30

(i) Explain the services of microfinance.

(ii) Write a short note on Joint-Liability Group.

(iii) Who are the participants in Indian microfinance system? Show with a suitable diagram.

(iv) How is the repayment management of SHG? Explain.

(v) Discuss the objectives of MFI.

(vi) Distinguish between Commercial banks and Microfinance institutions.

(vii) Write a note on Microfinance Incentive and Relief Scheme of Government of Assam.

(viii) Elucidate the role of NABARD for promotion of microfinance in India.

(ix) What are the obstacles in rural development? Discuss.

4. Answer **any two** questions : 10×2=20

(i) What type of innovations have taken place in Indian microfinance? Explain.

(ii) Discuss the role of SHGs in rural development.

(iii) Write a detailed note on Group dynamics in case of SHG.

5. Answer **any one** question : 14×1=14

(i) Summarise the rural development policies of Government of India.

(ii) Review the various models of microfinance and the best practices of microfinance in Asian countries.

(Old Course)

(Operation Research and Computer Application)

1. Answer the following multiple choice questions : $1 \times 6 = 6$

- (i) The term 'Operation Research' refers to the application of
- (a) traditional analysis in the decision-making process
 - (b) modern analysis in the decision-making process
 - (c) scientific analysis in the decision-making process
 - (d) All of the above

(ii) A new technique of operation research used to solve certain problems by dividing the total problem into a number of subsidiary problems is called—

- (a) Simulation
- (b) Dynamic programming
- (c) Decision theory
- (d) Allocation model

(iii) The arrangement by which maximum utilization of limited resources is possible is known as

- (a) Feasible solution
- (b) Corner points
- (c) PP Curve
- (d) Linearity

(iv) The problem which is related with reduction in transportation cost of transporting goods from sources of origin to a specific destination of their demand is called—

- (a) Assignment problem
- (b) Distribution problem
- (c) Optimum solution
- (d) Transportation problem

(v) Which of the following is not an example of E-commerce ?

- (a) Crowd funding
- (b) Drop shipping
- (c) Phone-Pe
- (d) Services

(vi) Which of the following is not an Accounting software?

- (a) QuickBooks
- (b) TallyPrime
- (c) Wave
- (d) MSExcel

2. Answer the following short questions : $2 \times 5 = 10$

(i) What is meant by 'Iconic Model' in operation research?

(ii) Define the term 'Feasible Solution'.

(iii) What do you mean by transportation problem?

(iv) Distinguish between Balance and Unbalance assignment problem.

(v) Mention any two features of e-commerce.

3. Answer **any six** of the following questions : $5 \times 6 = 30$

(i) Briefly explain the various phases of operation research.

(ii) Explain in brief, any five importance of linear programming.

(iii) State with example how an unbalance assignment problem is being solved.

(iv) Briefly explain any five importance of application of computer in business.

(v) State the procedures of solving transportation problem by Vogel's Approximation Method.

(vi) Briefly explain the various types of E-commerce.

(vii) A and B are two products to be manufactured. Unit profits are Rs. 40 and Rs. 35 respectively. Maximum material available is 60kgs and labour hours is 96. Each unit of A needs 2kg of material and 4 manhours, whereas each unit of B needs 3kg of materials and 3 manhours. Find optimal level of A and B to be manufactured with the help of graphical method.

- (viii) Solve the following linear programming problem by graphical method :

$$\text{Maximize } Z = 3x_1 + 4x_2$$

$$\text{Subject to, } 2X_1 + X_2 \leq 10$$

$$X_1 + 3X_2 \leq 12$$

$$X_1 + X_2 \leq 6$$

$$\text{where } X_1, X_2 \geq 0$$

- (ix) Solve the following transportation problem by North-West Corner Rule to find out the minimum cost of transportation :

	D_1	D_2	D_3	D_4	Supply
S_1	60	40	50	40	150
S_2	30	90	30	70	160
S_3	40	30	60	30	50
S_4	55	25	40	20	140
Demand	100	150	100	150	

4. Answer **any two** of the following questions :
 $10 \times 2 = 20$

- (i) Describe how simplex algorithm method of linear programming is formulated.

- (ii) Discuss the advantages and disadvantages of E-commerce.

- (iii) A tourist company has one car at each of five depots V, W, X, Y and Z. A passenger requires a car in each city, namely P, Q, R, S and T. Distance (in kms) between depots and cities are given in the following distance matrix :

Cities	Depots				
	V	W	X	Y	Z
P	160	130	175	190	200
Q	135	120	130	160	175
R	140	110	155	170	185
S	50	50	80	80	110
T	55	35	70	80	105

Find the assignment of cars to such positions so as to minimize the distance travelled.

5. Answer **any one** of the following questions :
 $14 \times 1 = 14$

- (i) Discuss the various techniques available in the field of operation research.