GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –V • EXAMINATION – SUMMER 2017

Subject Code: 350602   **Date: 04 - 05 -2017**
Subject Name: Quantity Survey and Valuation
Time: 02:30 PM TO 05:30 PM   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Each question carry equal marks (14 marks)**

Q.1	(a)	(i)	Write the purposes of preparing detailed estimate	**04**
		(ii)	State the different types of measurements units with one example of each.	**03**
	(b)	(i)	State the types of values	**03**
		(ii)	State the rules of deduction in plastering	**04**
Q.2	(a)		Write detailed specification for brick masonry in C.M. (1:6)	**07**
	(b)		Derive the rate analysis for 12mm thick cement plaster in C.M. (1:3)	**07**
			OR	
	(b)		Derive rate analysis for RCC work (1:2:4)	**07**
Q.3	(a)		Calculate quantity of 12mm thick inside plastering in CM (1:4) of residential building as shown in figure 1	**07**
	(b)		Calculate quantity of brick work in C.M. (1:4) in foundation and plinth of a residential building as shown in figure 1	**07**
			OR	
Q.3	(a)		Calculate the quantity of earth work in excavation for foundations of walls of a residential building as shown in figure 1	**07**
	(b)		Calculate the quantity of tile flooring in room no. 1, room no. 2, room no. 3 and earth filling in plinth of a residential building as shown in figure 1	**07**
Q.4	(a)		Calculate quantities of form work and concrete (1:2:4) of beam and total numbers of cement bags required in beam from figure no. 2.	**07**
	(b)		Explain the methods of depreciation in detail.	**07**
			OR	
Q. 4	(a)		Calculate quantities of 20mm dia. and 8 mm dia. steel reinforcement from figure no. 2	**07**
	(b)		Distinguish between	**07**
		(i)	Scrap Value and Salvage Value	
		(ii)	Book Value and Market Value	
Q.5	(a)		A person has purchased a house for Rs. 90,000/-. Scrap value of building is 10% of the construction cost. The life of building is 18 years and rate of interest is 5%. Calculate the installment of sinking fund. Take land cost Rs. 50,000/-.	**07**
	(b)		A loan of Rs. 5,00,000/- is to be repaid in 15 equal installments. Calculate amount of each installment if rate of interest 11.5%	**07**
			OR	
Q.5	(a)		Workout the monthly standard rent for newly constructed building with the	**07**

following data:

(i) Land cost - Rs. 7.00 lacs
(ii) Construction Cost - Rs. 5.00 lacs
(iii) Net return @ 10% on construction
(iv) Net return @ 5% on land
(v) All outgoings including S. F. = 30% of Gross Rent

(b) (i) If a property holder is assumed to get Rs. 5.00 lacs after 5 years from its sale on today, what is the present value of property if the rate of interest is considered 6%. **03**

(ii) If amount invested in saving scheme is double in 6 years. Calculate the rate of interest. **04**

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પ્રશ્ન.૧ અ (i) IJUTJFZ V\NFH AGFJJF DF8[GF C[T]]VM ,BMP **04**
(ii) DF56LGF H]NFvH]NF V[SDM NZ[SGF\ V[S pNFCZ6 ;FY[,BMP **03**

બ (i) J[<I] GF 5|SFZM ,BM **03**
(ii) %,F:8ZL\U SFDDF\ VM5GL\U DF8[GF AFNAFSLGF IGIDM ,BMP **04**

પ્રશ્ન.૨ અ 1:6 GF 5|DF6DF\ R6TZSFD DF8[IJUTJFZ IJIXQ8 IJJZ6 ,BMP **07**

બ 1:3 GF ;LD[\8 SM,DF\ 12mm HF0F. GF ;LD[\8 %,F:8Z DF8[EFJ 5'yYSZ6 SZMP **07**

અથવા

બ VFZP;LP;LP 1:2:4 SFD DF8[EFJ 5'yYSZ6 SZMP **07**

પ્રશ્ન.૩ અ VFS'IT ! DF\ NXF"J[, DSFG DF8[12mm HF0F. G] ;LD[g8 SM, (1:4) DF\ V\NZ GL NLJF,MG\ %,F:8Z SFD GL ZFXL U6MP **07**

બ VFS'IT ! DF\ NXF"J[, DSFG DF8[5FIFDF\ VG[%,Sg Y DF\ ;LD[g8 SM, (1:4) DF\ .\8 SFDGL ZFXL U6MP **07**

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પ્રશ્ન.૩ અ VFS'IT ! DF\ NXF"J[, DSFG DF8[NLJF,M GF 5FIF DF8[VMNF6 SFDGL ZFXL U6MP **07**

બ VFS'IT ! DF\ NXF"J[, DSFG DF8[~D G\AZ !4 ~D G\AZ Z4 ~D G\AZ # DF\ 8F.<; OZ;A\WL VG[%,Sg DF\ DF8LGL EZTLGL ZFXL U6M **07**

પ્રશ્ન.૪ અ VFS'IT Z DF\ NXF"J[, VFZP;LP;LP ALD 5ZYL OMD" JS" GL ZFXL4 SF\S|L8 (1:2:4) SFDGL ZFXL T[DH ALD GF SFD DF8[H~ZL S], ;LD[g8 GL Y[,L U6MP **07**

બ ID,ST GF D}<IDF\ W;FZM U6JFGL 5wWITVM IJUTJFZ ;DHFJMP **07**

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પ્રશ્ન.૪ અ VFS'IT Z DF\ NXF"J[, VFZP;LP;LP ALD 5ZYL 20mm jIF; GF VG[8 mm jIF; GF ,MB0 GF ;/LF GL ZFXL U6MP **07**

બ TOFJT ,BM o **07**
E\UFZ D]<I VG[IH6MwWFZ D]<I
RM50F D]<I VG[DFS["8 D]<I

પ્રશ્ન.૫ અ V[S jIISTLV[Rs. 90,000/- DF\ DSFG BZLN[K[P DSFG GL E\UFZ IS\DT AF\WSFDGF 10% K[P DSFG G\] EFIJVFI]QI 18 JQF" K[P jIFHGM NZ 5% K[P HDLGGL ISDT Rs. 50,000/- ,. GF6F E\0M/GF JFIQF"S C%TFGL U6TZL SZMP **07**

બ Rs. 5,00,000/- GL ,MG 11.5% jIFHGF NZ[15 V[O ;ZBF JFIQF"S 07
C%TFDF\ EZ5F. SZJFGL K[P TM C%TFGL ZSD XMWMP

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પ્રશ્ન. ૫ અ GLR[GL IJUTM p5ZYL GJF A\WFI[, DSFGG\] DFI;S EF0] U6Mo 07
(i) HDLGGL ISDT - Rs. 7.00 lacs
(ii) AF\WSFD ISDT - Rs. 5.00 lacs
(iii) RMbBL VFJS @ AF\WSFD IS\DT p5Z10%
(iv) RMbBL VFJS @ HDLGGL IS\DT p5Z 5%
(v) GF6FE\0M6 ;FY[GF S], IGUF"DL BRF" - JFIQF"S
EF0FGF 30%

બ (i) VFH[J[RFI[, ID<STGF HM 5 JQF" 5KL Rs. 5.00 lacs D/JFGF CMI 03
TM 6% jIFHGF NZ 5|DF6[VFH GL IS\DT XMWMP
(ii) HM ;[IJ\U IMHGFDF\ ZMS[, GF6F 6 JQF"DF\ AD6F YTF CMI TM 04
jIFH GM NZ XMNMP

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