

**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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### ગુજરાતી

- પ્રશ્ન. ૧ અ (i) IJUTJFZ \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 IJXQ8 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\ \NZ GL NLJF,MG\] %,F:8Z SFD GL ZFXL U6MP **07**  
બ VFS'IT ! DF\ NXF"J[, DSFG DF8[ 5FIFDF\ VG[ %,LgY DF\ ;LD[g8 SM, (1:4) DF\ .\8 SFDGL ZFXL U6MP **07**
- અથવા  
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;AWL VG[ %,LgY 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**
- અથવા  
પ્રશ્ન. ૪ અ VFS'IT Z DF\ NXF"J[, VFZP;LP;LP ALD 5ZYL 20mm jIF; GF VG[ 8 mm jIF; GF ,MB\0 GF ;/LIF GL ZFXL U6MP **07**  
બ TOFJT ,BM o **07**  
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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\ EFIJVF]QI 18 JQF" K[P jIFHGM NZ 5% K[P HDLGGI ISDT Rs. 50,000/- ,. GF6F E\0M/GF JFIQF"S C%TFGL U6FTZL SZMP **07**

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ପୁଞ୍ଜ. ୫	ଅ	GLR[GL IJUTM p5ZYL GJF A\WFI[, DSFGG\] DFI;S EF0] U6Mo (i) HDLGGL ISDT - Rs. 7.00 lacs (ii) AFWSFD 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%	07
	ଓ	(i) VFH[ J[RFI[, ID<STGF HM 5 JQF” 5KL Rs. 5.00 lacs D/JFGF CMI TM 6% jIFHGF NZ 5 DF6[ VFH GL IS\DT XMWMP (ii) HM ;[IJU IMHGDF\ ZMS[, GF6F 6 JQF”DF\ AD6F YTF CMI TM jIFH GM NZ XMNMP	03 04

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