Model Answer: Summer- 2019

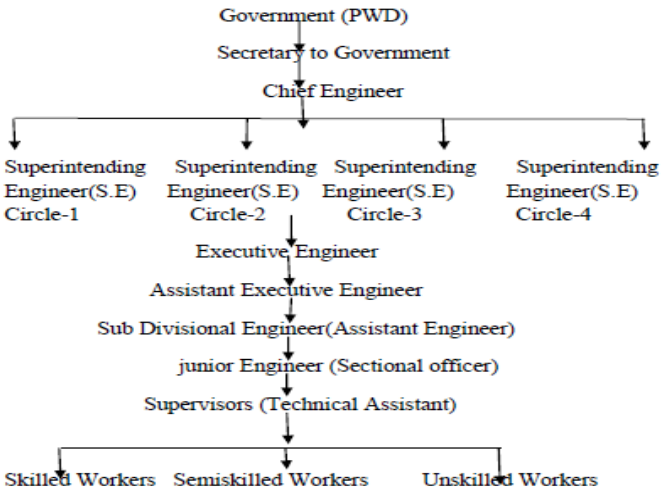
Subject: (Contract and Accounts) | **Sub. Code: 17603**

Important Instructions to Examiners

1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
3) The language errors such as grammatical, spelling errors should not be given more importance. (Not applicable for subject English and Communication Skills.)
4) While assessing figures, examiner may give credit for principal components indicated in the figure. The figures drawn by the candidate and those in the model answer may vary. The examiner may give credit for any equivalent figure drawn.
5) Credits may be given step wise for numerical problems. In some cases, the assumed constant values may vary and there may be some difference in the candidate's answers and the model answer.
6) In case of some questions credit may be given by judgment on part of examiner of relevant answer based on candidate's understanding.
7) For programming language papers, credit may be given to any other program based on equivalent concept.

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.1	**a)**	**Attempt any THREE of the following:**		**(12)**
	(i)	**Define** 1. Administrative Approval. 2. Technical Sanction.		
	Ans.	**Administrative Approval:** For any work, project it is necessary to take formal acceptance with respect to cost, and work called as administrative approval.	**2**	**4**
		Technical Sanction: Technical sanction means the sanction of detailed estimate, design, rates and cost of work.	**2**	
	(ii)	**Define contract and state the objects of contract.**		
	Ans.	**Contract :** Contract is an undertaking by person or firm to do work under certain terms and condition.	**1**	
		Objects of Contract: 1. To execute the work by experienced persons. 2. To execute work with most competitive rate. 3. To do work as per specification. 4. To use latest machineries and techniques. 5. To have free hand for a supervisor to check the work done by contractor without interference.	**1 each (any three)**	**4**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.1	(iii) Ans.	**State any four requirements of valid contract.** **1. Contract in writing:** Contract should be in writing and should be signed by both the parties i.e. owner and contractor **2. Subject matter:** The subject matter of agreement must be legal and definite. It should be easy to understand not to complex to understand and execute. **3. Can be enforced in court of law:** All terms, conditions words should be according to law. **4. Parties must be competent:** The parties signing the contract should be competent enough to carry out work. **5. Free consent of parties:** Both parties must give their free consent to do the work as per agreement contract. **6. Attested by witness:** Contract should be attested by responsible person or officer.	**1 each (any four)**	**4**
	(iv) Ans.	**State purpose of calling tender.** **The purpose of calling tender are as follows.** 1. To execute work within specified time limit according to specification. 2. To supply materials. 3. For transportation of materials. 4. To supply labours. 5. for construction of repair of work	**1 each (any four)**	**4**
	(v) Ans.	Describe in brief secured advance. An advance payment made to the contractor on the basis of the security of materials brought by the contractor to the site of work under construction is called as secured advance. • Authority to make the secured advance is in the hand of Divisional Engineer upto the amount not exceeding 75% of the value of the materials brought to the site by contractor. • Amount of secured advance is adjusted in the next running account bill within proportion to that of actual consumption of the materials.	**2** **1** **1**	**4**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.1	b)	**Attempt any ONE of the following :**		(06)
	(i)	**Draw an organization chart of a state PWD.**		
	Ans.	 **Organization chart of a state PWD**	**6**	**6**
	(ii)	**State functions of Executive Engineer and junior Engineer.**		
	Ans.	**Function of Executive Engineer (EE):** 1. Inspect sub divisional office once in a year. 2. Execution of work under him. 3. Ensures all tools plants and machinery are properly maintained. 4. Invite tender for work valued within his power. 5. Maintenance of accounts. 6. He is responsible for preparation of project design, estimate etc. 7. Keep close watch on expenditure.	**1 each (any three)**	
		Functions of Junior Engineer (JE): 1. Supervision of work in his charge. 2. Maintain attendance of daily worker, labours. 3. Taking measurement of all work in MB. 4. Preparation of bills running and final bills for work in his charge. 5. Prepares estimates for all types of works in his section. 6. Carry out field survey for proposed project 7. Carry out half yearly check of all stores in his charge and submit report to SDO. 8. Report to higher authorities for irregularities in contract, specification, shortage of supply of departmental materials or any difficulty during execution.	**1 each (any three)**	**6**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.2		**Attempt any FOUR of the following:**		(16)
	a)	**Define item rate contract. State its suitability.**		
	Ans.	**Item Rate Contract:**		
		In this contract contractor are required to quote rates for each individual items of work on the basis of schedule of quantities supplied by department.	2	4
		Suitability:		
		1. This type of contract is suitable for work executed by Government, PWD, Railways department.	2	
		2. This contract is also suitable for building roads, bridges etc.		
	b)	**State advantages and limitations of negotiated contract.**		
	Ans.	**Advantages:**		
		1. No dispute between parties 2. Reliable, efficient contractor is selected for work. 3. Time and cost savings involved in removing the tendering process. 4. Contractor's costs is transparent as they are not seeking to win the bid	1 each (any two)	4
		Limitations:		
		1. Choice of contractor is not free and fair 2. Healthy competition is not possible 3. Not suitable for PWD 4. Contractor may demand higher rates for extra items.	1 each (any two)	
	c)	**Define petty advance and temporary advance.**		
	Ans.	**Petty Advance:**		
		A small amount given in advance to the engineer in charge in case of emergency needs is called as "Petty Advance".	2	4
		Temporary Advance:		
		The amount which is advanced by disbursing officer to a sub-ordinate officer so as to make the specific payment is called as temporary advance.	2	

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.2	d) Ans.	**Draw formats of schedule A and schedule B. State purposes of both.**		

Schedule A

Sr. No.	Particulars of materials	Approximate quantity	Rates		Unit	Place of delivery
			In Figure	In words		

Sign of contractor **Signature of Owner/EE**

Date

1

4

Purpose of schedule A:

Schedule A is statement showing details of materials supplied to contractor by PWD store, and the rate at which materials are to be charged

1

Schedule 'B'

List of items of work to executed.

Item No.	Description of item	Estimated Qty.	Tender Rate		Per	Amount
			in figures	in words		

1

Note :

1. _____
2. _____
3. _____

Signature of Contractor Signature of

Date : Owner / Executive Engineer

Purpose of schedule B:

Schedule 'B' consist of description of each item, approximate estimate quantity, rate per unit, the amount of each item and total amount of all the items. A contractor has to insert his rates on schedule 'B' only.

1

	e) Ans	**State types of payments made to a contractor.**		

Types of payment made to contractor are as below:

1. **First and Final Payment:** The term indicates a single payment made for a job or contract on its completion. In this case the payment finished by one payment after the completion of the work. This is usually applicable for small work.

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.2	e)	2. **Running or interim 'on account' payment:** This means payment made on a running account to a contractor for works done or supplies made by him, duly measured and entered in measurement book. 3. **Final Payment:** This is the last payment made to a contractor on a running account, on completion of this contract and the full settlement of the account. 4. **Advance Payment:** This means the payment made on a running account to a contractor for work done by him but not measured. 5. **Secured Advance Payment:** This payment is made on the security of materials brought by the contractor to the site of work, when the contract is for the completed items of work. This type of payment may be allowed by the Executive Engineer in the interest of work up to an amount not exceeding 75% of imperishable materials.	**1 each (any four)**	**4**
	f)	**Define retention money and reduced rate payment.**		
	Ans	**Retention Money:** Some amount to be hold from the security deposit of contractor by the Engineer-in-charge, when there is any claim for the payment arises out of or under the contract against the contactor is called as "Retention Money".	**2**	**4**
		Reduced Rate Payment: The payment which may grant by the engineer with the reduced rate when contractor completes an item or work not as per the specifications, drawings given in contracts terms and conditions is called as "Reduced Rate Payment".	**2**	

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.3		**Attempt any FOUR of the following:**		(16)
	a)	**State list of documents required for a registration as a contractor with state government.**		
	Ans.	**List of documents required for a registration as a contractor with state government are as follows:** 1. Latest income tax clearance certificate. 2. Proof of financial status. 3. Solvency certificate 4. List of machinery with their condition. 5. List of technical staff employed along with qualification and experience. 6. Professional capacity and experience certificate 7. Attested copies of partnership deed if any 8. Registration fee	½ each	4
	b)			
	Ans.	**Define BOT project. State any three advantages of BOT project**.		
		It is form of project where government grants permission to private firm to construct and administrate certain public infra structure by financing and authorizing them, to pay off loans reclaim investment by allowing them to collect tools, fees, rental as states in contract and after concession period is over, ownership is transferred back to government without any expense.	1	4
		Advantages of BOT: 1. Fast completion of intra structure is possible. 2. Encourage private investment. 3. Peoples will be benefited from such projects. 4. Releases burden on public budget. 5. Promotes foreign investment, techniques and technology to the country. 6. Quality of work is assured	1 each (any three)	

<table>
<tr><th>Que. No.</th><th>Sub. Que.</th><th>Model Answer</th><th>Marks</th><th>Total Marks</th></tr>
<tr><td>Q.3</td><td>c)

Ans.</td><td>Draw format of measurement book. State any two precautions to be taken while writing in MB.

Form 23, measurement Book (M.B)
<table><tr><th>Particulars</th><th colspan="4">Details of Actual measurement</th><th>Contents of area</th></tr><tr><td></td><td>No.</td><td>L</td><td>B</td><td>D</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>
Following are the various precautions should be taken in respect of writing Measurement Book:
1. Entries of all the items must be continuous in the measurement sheet with no any blank space in between.
2. Officer should certify with a remark as “measured by me” at the end of each task work or set of measurements and with his full signature with date.
3. Overseer should know or familiar to all the conditions and specifications prescribed in the contract agreement prior to take measurement.
4. Record of all measurement should be done by ink directly in the measurement book itself but nowhere else.
5. If there is any mistake while entering the record then it should not be erased but should be corrected by crossing out the mistake and inserting the corrections with initialed and dated.
6. For cancelled measurements, the cancellation should be supported by the initial of the corresponding officer.
7. Measurement of the items or particulars must be taken in presence of the contractor and at the bottom of the measurements, contractor sign with date should be taken so as to avoid the future disputes and allegations.
8. If any pages left blank by mistake, then these blank pages should be crossed or cancelled by diagonal lines by ink pen with duly initialied, attested and dated of concerned officer.

Describe in brief mobilization advance.

Mobilization advance is the amount of money given to the contractor for establishment purpose.</td><td>2

1 each (any two)</td><td>4</td></tr>
<tr><td></td><td>d)

Ans.</td><td></td><td></td><td></td></tr>
</table>

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.3	d)	Establishment charges consist of the following work to be done on site under construction. i. Approach roads ii. Site office iii. Godown for storage of building material iv. Water tank v. Electric connection and vi. Other facilities which ensure the safety on projects and smooth working.	4	4
	e) Ans.	**State any four purpose of drafting specification.** **Following are the various purpose of the specifications:** 1. In contract document, the specification defines or shows the quality of material and workmanship. 2. Since the specifications are mentioned in the contract agreement, it protect or keep safe the owner from damage due to poor workmanship. 3. Specification is the witness document and hence useful in court to settle the disputes. 4. It is helpful to prepare rate analysis of various items. 5. Specification is an important tool or document and play the important role for arbitration. 6. Specification fixes the responsibilities of owner and contractor. 7. It helps to the contractor in preparing and pricing the tender.	1 each (any four)	4
	f) Ans.	**State types of specification.** **1. Brief specification:** The general specification used for estimating the project are the brief specifications. **2. Detailed specification:** The specification in which detailed information of the various quantities of materials, procedure of workmanship to be adopted, nature and class of work is mentioned. **3. Standard specification:** Detailed specifications for various works are drawn up by an engineering department and these specifications are printed and used as a standard specification. Hence most of the items in works are made to standardized specifications. **4. Manufacturers specifications:** This type of specifications in which the properties of products such as strength, thickness, depth, elasticity, chemical composition etc. are mentioned.	1 each	4

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.4	a)	**Attempt any THREE of the following:**		(12)
	i)	**Describe in brief nominal muster roll.**		
	Ans.	1. The muster roll which is maintained to keep the record of works being done by a labour employed on each day, is called as Nominal Muster Roll. 2. Payment is made to the labours based on presence recorded in the muster roll. Note that the presence of the labours in the muster roll should be marked by a suitable and proper officer. 3. Muster roll should have periodic inspection by the higher authorities. 4. There are two parts included in the muster roll i.e. part I and part II. 5. In Part I, there are columns and spaces kept to mention the name of workers, their designation, date of attendance or presence, rate of wages, total amount for each worker, or labour total amount for the whole signature of the person taking attendance, signature and date of the officer issuing payment. This part I is Nominal Muster Roll (N.M.R). 6. In part II, details of quantity of work being done by labour or workers and progress of work are kept recorded.	**4**	**4**
	ii)	**Define:**		
	Ans.	**1) Imprest** **2) Indent** **3) Invoice** **4) Voucher** **1. Imprest:** A standing advance or advance amount of a fixed sum of money given to Sub- Divisional officer and sub- Assistance Engineer so as to make day to day petty payments is called as an imprest cash. **2. Indent:** Materials from the stock are issued on demand in a proper form no. 7 is termed as Indent. **3. Invoice:** The acknowledgement of the receipts of goods is called as 'invoice'. **4. Voucher**: A legal receipt prepared for the purpose of proof against payment made is called as vouchers.	**1 each**	**4**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.4	iii) Ans.	**State any four legal aspects of a specification.** 1. The tender documents and agreements towards legal aspect are incomplete and invalid without specifications. 2. in case of discrepancy between the drawings and specifications, the specification act as a legal proof. 3. Specification fixes the responsibilities of owner and contractor 4. Specification is an important tool or document and play the important role for arbitration.	**1 each**	**4**
	iv) Ans.	**Define cost and price.** **1. Cost:** Cost is the actual amount incurred in producing a commodity. In case of civil engineering cost of property means land cost plus the construction cost i.e. civil engineering cost of the property = (Land cost + Construction cost) **2. Price:** The cost of the commodity plus profit of the manufacturer is termed as price. In case of civil engineering price of property is the cost of property plus the contractor's profit. i.e. Civil engineering price of the property = (cost of property + profit of contractor)	**2** **2**	**4**
	b) i) Ans.	**Attempt any <u>ONE</u> of the following:** **Draft specification for IInd Class B.B.M. in 1:6 cement mortar.** 1. In case of II class brickwork, bricks shall be of second class and mortar shall be as specified cement mortar of 1:6 proportion. 2. Mortar joints shall not be more than 10mm in thickness. Bricks shall be soaked in water for at least three hours before use. **a) Material of bricks:** 1. The bricks shall be table moulded, well burnt, copper coloured, free from any cracks fissures and defects and with sharp edges. 3. The bricks shall be of uniform shape and size. When two bricks struck with each other, bricks should give clear ringing sound. 4. The crushing strength or compressive strength of brick shall not be less than 10.5 N/mm^2. 5. The bricks shall not absorb water more then one fifth of their weight when soaked in water for one hour.		**(06)**

Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.4	**b) i)**	**b) Mortar:** 1. The brick work shall be worked in cement mortar and mixing of cement, sand and water shall be as per the specified proportion. In case of wet sand, its quantity shall be increased suitably so as to allow for bulkage. 2. In case of cement mortar the unit of measurement shall be a bag of cement (0.035 cu.m.) Sand shall be measured in boxes of suitable size 35cm × 25cm × 40cm as per the specified proportion. **c) Mixing:** 1. Materials of mortar shall be first mixed without water until a uniform colour is obtained. The mixing shall be done on a clean water tight platform. After addition of required fresh potable water, the mixture shall be mixed at least three times with the help of spade. Only the quantity of cement mortar which can be used within 30 minutes shall be prepared at a time. 2. The bricks shall be well soaked in water for at least 3 hours before their use. 3. The broken bricks shall not be used except as closer. The mortar joints shall break for bonding and good key and shall not be more than 10mm in thickness. 4. Bricks shall be laid with frogs upward, except in the top course. Brickwork shall not be carried out more than 1m in height at a time. All joint shall be raked and faces of wall shall be cleaned at the end of each days work. 5. The brickwork shall be cured for at least 15 days. 6. For all exposed brickwork, double scaffolding shall be used. For all other brickwork in building, single scaffolding shall be permitted. **d) Measurement:** The length and height shall be measured as on at site. The thickness of walls shall be paid for as one brick, one and a half bricks, two bricks in cu.m.	**6**	**6**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.4	ii)	**Define depreciation and explain in brief methods of calculating depreciation.**		
	Ans.	**Depreciation:** The loss in the value of the property caused by its use life, wear, tear and decay is called as 'depreciation'.	**2**	
		1. Straight line method: • This is one of the method useful to calculate the depreciation of the property. • In straight line method it is considered that the property loses its value by the same amount every year. • A fixed amount of the original cost is deducted every year, so that at the end of the utility period only the scrap value is left. • $D = \frac{\text{Original cost} - \text{Scrap value}}{\text{life in year}}$		**6**
		2. Constant percentage method or Declining balance method: • This method is also one of the method used to find depreciation of the property. • In such method, it is considered that the property will loose its value by a constant percentage of its value at the beginning of every year.	**1 each**	
		3. Sinking fund method: • This is also one of the method in which depreciation of property is considered to be equal to the annual sinking fund plus the interest on the fund for that year, which is supposed to be invested on interest bearing investment. • Sinking fund method is based on a well established principle of compound interest, however this method do consider the consumption of usefulness of the property.		
		4. Quantity survey method: • This is one of the most useful and widely used method in which the property is studied in detail and loss in value owing to the physical deterioration is worked out. • The amount spent or to be spent to modernization or important changes so as to offset obsolescence is worked out.		

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.5		**Attempt any Four of the following:**		(16)
	a)	**State any four factors affecting a value.**		
	Ans.	**1. Property location:** a. Major factor which affects the valuation of a land and building to a great extent is nothing but property location. b. The value of land which is situated in a busy locality and market is more. **2. Price index:** Value of building goes on increasing because of more inflation. Price index may be controlled by taking the proper and suitable steps by government or by R.B.I. **3. Size:** The prize or rate of large land cannot be compared with the small land. **4. Shape:** The value of the land having regular shape will be more than that of the land with irregular shapes. **5. Frontage and depth:** a. The value of back portion of plot reduces as the distance from street increases. b. Hence a plot with more frontage will have greater value. **6. Return frontage:** a. Since the corner plot gives more light and cross ventilation, its value is more. b. Corner plot gives wide scope developing is more better architectural planning. **7. Nature of soil:** a. The nature of soil play a vital role for the construction point of view. b. No doubt black cotton soil is very good for agricultural point of view but it is very poor for construction of a building. Hence land consisting of black cotton soil will have less value when used for constructing building structure. **8. Level of the ground:** If level of the ground is uneven, then it will have because maximum amount will have to be spent for earthwork.	**1 each (any four)**	**4**
	b)	**Define (i) Speculative value (ii) Distress value**		
	Ans.	**(i) Speculative value:** 1. Speculators purchase properties is that properties where a proposal are made to construct road, water line etc. at a low price. 2. The speculators sell the property again at profit after a short period without spending any amount on its development. 3. The purchase of such properties by speculator at a low price is termed as speculative value **(ii) Distress value:** When it can fetch lower value than the market value, then a property is said to be distress value.	**2** **2**	**4**

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.5	c)	**State meaning of target contract and demolition contract.**		
	Ans.	**Demolition Contract:**		
		In this type of contract owner invites tender for demolition of an existing structure and disposal of demolished material.	2	
		The contract is given to contractor who quotes higher amount, and contractor has to pay full amount before demolishing the existing structure		4
		Target Contract:		
		In this contract contractor is paid on the basis of actual cost of work executed by him and agreed percentage of cost as his profit plus or minus certain amount on the saving or excess against target cost.	2	
	d)	**State advantages of cost plus fixed percentage contract and cost plus fixed fee contract.**		
	Ans.	**Advantages of cost plus fixed percentage contract:**		
		1. Extra item is allowed 2. Suitable for private work 3. Early completion of work is possible 4. Quality of work is assured.	½ each	4
		Advantages of cost plus fixed fee contract:		
		1. Early completion of work 2. Quality of work is assured 3. Extra item dispute can be eliminated 4. As contractor will be paid as fixed amount he will not try to produce fictitious bills.	½ each	
	e)	**Define** **(i) Time limit.** **(ii) Validity of tender.**		
	Ans	**(i) Time Limit:**		
		For any work it should be completed within fix period beyond that period contractor is liable for penalty this period is called time limit.	2	
		(ii) Validity of tender:		4
		It is a period within which the rates quoted by the contractor are valid. Beyond this period the contractor either may agree or he can refuse to accept the rates for executive the work.	2	

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.5	f)	**State the necessity of corrigendum to tender notice.**		
	Ans.	**Corrigendum is necessary under following situations:** 1. When time period to prepare tender for contractor is short. 2. When there is any major change either in design, drawing, specification or in amount. 3. Tender papers are not ready in office. 4. Sufficient number of blank tender forms are not sold	**1 each**	**4**
Q.6	a)	**Attempt any <u>TWO</u> of the following:** **Draft a Tender notice for a construction of a library building in government polytechnic. Estimated cost is Rs. 3 Crs.**		**(16)**
	Ans	**<u>Tender Notice</u>** Sealed item rate tenders in form B-2 are invited from experienced and appropriate class of contractors registered with state-central government. PWD for the work mentioned below :	**1**	
		Sr. No. / Name of Work / Estimated Cost / Earnest Money / Security Deposit / Time Limit 1. / Construction of library building in government polytechnic / 3 crore / 3,00,000 / 15,00,000 / 24 months including rainy season.	**3**	
		1. Cost of blank tender form is 5000 Rs./ each (non refundable.) (Rs. 5600/- if required by post) 2. Period of issue of blank tender _____ to _____ between (11am to 4 pm) except Sunday and holiday. 3. The Tender form with complete sets of blank forms of contract can be obtained from the office of the Executive Engineer___ 4. Last date for receipt of tender is ____ upto 4pm. 5. Tender will be opened on the same day at 6pm in presence of contractor who may like to attend.. 6 The authorities reserve right to reject any or all tenders without assigning any reason.	**2** **1**	**8**
		Date : Sd/- Executive Engineer	**1**	

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.6	b)	**Suggest suitable rent for building 100Sq.m constructed on a plot of 300 sq.m. The rate of construction is Rs 15000 per sq.m. The land is purchased at Rs. 1000 per sq.m owner expects 8% return on land and 12% return on the building. The municipal tax is 25%, other expenses are Rs 1000 per month.**		
	Ans.	**Step 1 : To find cost of land** Cost of land = Area of the plot × rate = 300 × 1000 = 3,00,000	**1**	
		Step 2 : To find cost of building Cost of building = Built up area × Cost of construction = 100 × 15000 = 15,00,000	**1**	
		Step 3 : To find net rent **Net return** 12% on building cost = $\frac{12}{100} \times 1500000 = 1,80,000$ 8% on land cost = $\frac{8}{100} \times 300000 = 24000$	**1**	
		Gross rent = Net rent + outgoings ∴ Net rent = Net return / annum Outgoings = 25% of gross income or gross rent (GR) = 0.25 GR	**1**	**8**
		Other expenses = 1000 x 12 = 12000 Net rent = 180000 + 24000 = 204000	**1**	
		Gross rent = 204000 + 25% GR +12000 100% GR = (216000 + 25% GR) (100% GR – 25% GR) = 216000 75% GR = 216000 ∴ 0.75 GR = 216000 GR = $\frac{216000}{0.75}$ = 288000 / year	**1**	
		Step 4 : To find gross rent per month Gross rent per month = $\frac{288000}{12} = 24000$ = 24000/-	**1** **1**	

Que. No.	Sub. Que.	Model Answer	Marks	Total Marks
Q.6	c) (i) Ans.	**Calculate value of property in the form of a godown which fetches monthly net rent Rs. 6000. the owner expects 10% yield.** **Step 1 : To find years purchase (Y.P.):** Capitalized value = Net income × Y. P.	1	8
		Net income = (6000 × 12) = 72000	1	
		$Y.P = \frac{1}{i} = \frac{1}{0.1} = 10$	1	
		Step 2 : To find capitalized value: ∴ Capitalized value = 72000 × 10 = 7,20,000	1	
	(ii) Ans.	**Calculate sinking fund for JCB. Cost of JCB= 28 lacs. Life 10 years, rate of interest 6%. Assume10% scrap value.** **Scrap value =** $\frac{10}{100} \times 2800000 = 280000$	1	
		S = original cost – scrap value = 2800000 - 280000 = 2520000	1	
		$S = \frac{Sx\ i}{(1+S)^n - 1}$	1	
		$S = \frac{2520000x\ 0.06}{(1+0.06)^{10} - 1}$ = **191187.25**	1	
		Annual installment for sinking fund is Rs. 191187.25		