



WINTER – 2015 EXAMINATION

Subject: Contracts and Accounts

Subject 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.

Model Answer

Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.1	a)	Attempt any <u>THREE</u> of the following:		12
	i)	State any four methods used in P.W.D. for execution of work. Explain any one. Ans. The following are the various methods for executing a work by P.W.D. i) Rate list method ii) Piece work method iii) Day's work method iv) Employing labour on daily wages	2 marks	2
		i) Rate list method: 1. This method is suitable for petty work when the cost is small. Hence various contracting firms are not interested in carrying out work and advertisement in newspaper is not justified for work of small magnitude. 2. For such petty work list of petty workers are kept in the office of executive engineer. 3. Cost of any individual work to be executed does not exceed Rs.3000/- 4. The petty workers will quote rate and lowest offer is accepted.	2 marks (Any one)	2
		OR		



Que. No.	Sub. Que.	Model Answers	Total Marks
Q.1	a)	<p>ii) Piece work method:</p> <ol style="list-style-type: none">1. This method is suitable for maintenance and repair work.2. Piece work is the agreement which involves the payment for work done at agreed rate without reference to total quantity of work to be done or time of completion.3. Agreement contains only description of item to be executed.4. Form shall be invited from piece worker. The agreement is made on A1 form for percentage basis and A2 form for item rate basis.5. The piece worker has to arrange all material and labour required for carrying out work. <p style="text-align: center;">OR</p> <p>iii) Day's work method:</p> <ol style="list-style-type: none">1. There are certain works of special nature which cannot be measured hence their valuation is made on basis of actual material and labour used. For e.g. decorative plaster work2. In such cases day work method is adopted for valuation of above items on basis of actual material used and number and class of labour employed and tools and plants required for work.3. In this method contractor has to maintain day to day account of material consumed, the labour, types of labour, the hours for which each labour is employed is filled in day work sheet.4. Contractor is paid on the basis of net cost of various material required and wages paid to the labour plus 20- 25 % as his profit. <p style="text-align: center;">OR</p> <p>iv) Employing labour on daily wages:</p> <ol style="list-style-type: none">1. In this method department purchase material directly from supplier and engage labour on daily wages on muster as and when required.2. The material is supplied by department or can be purchased directly from market.3. The attendance of total number of labour employed is maintained in muster roll form No.21 by Junior engineer and it is checked by assistant engineer. The payment is made weekly, fortnightly or monthly as per requirement.4. When muster roll is closed for payment it is necessary to measure the work during that period and enter it in measurement book.	



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks	
Q.1	a)	Explain any three requirements of valid contract. Ans. Following are the requirements of valid contract; 1. Contract should be in writing and should be signed by both the parties i.e. owner and contractor. 2. The subject matter of agreement must be legal and definite. 3. If situation arises the contract can be enforced in court of law. 4. Parties should be competent enough to carry out work. 5. Both parties must give their free consent to do work. 6. Contract should be attested by responsible officer.	1 mark each (Any four)	4	
	ii)				
	iii)		Define 'Contract'. State objects of contract. Ans. Definition: Contract is an undertaking by person or firm to do work under certain terms and conditions. Objects of contract : 1. To execute the work by experienced persons. 2. To execute the 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	2 marks	4
	iv)		List out any eight points to be included while drafting tender notice. Ans. Following points should be included while drafting a tender notice: 1. Name of the authority inviting tender 2. Name of work and its location 3. Estimated cost 4. Time limit of completion 5. Earnest money required along with tender 6. The availability of data and forms 7. The last date, place and time of receipt of tender 8. The right to reject the tender.	1/2 mark each	
	v)		Give meaning of terms- 1) Defect liability period 2) Time limit Ans. 1) Defect liability period: It is the period during which any defect in the work is noticed, and then contractor has to rectify this defect at his cost up to the satisfaction of site engineer. The period is usually first monsoon season, or six months after the virtual completion of the work later. 2) Time limit: For civil engineering work it should be completed within fix period beyond that period the contractor is liable for penalty. The contract includes, the period of completion specifying the date, month and number of working days. The allowed time for completion of work includes also the rainy season.	2 marks	



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.1	b) i)	<p>Attempt any <u>ONE</u> of the following:</p> <p>Explain the procedure of initiating the government work by P.W.D.</p> <p>Ans.</p> <ol style="list-style-type: none">1. For any work it is necessary to prepare proposal for proposed project justifying the project, its necessity etc. for fever of consideration.2. The department then studies proposal giving considering all respect and when it is fund the project is really important and can be feasible then gives administrative approval.3. After getting administrative approval, engineering department prepares a detailed drawing, design and estimates and submit it for technical sanction.4. A competent authority study drawing design and estimate, then within rules and regulations sanctions the same called technical sanction.5. Ones project is technically sanctioned budget provision are made as per government plan.6. Then work is taken for execution.	1 mark each	6
	ii)	<p>State meaning of terms :</p> <ol style="list-style-type: none">1. Advance payment2. Secured Advance3. Mobilization Advance <p>Ans.</p> <p>1. Advance payment: The payment made on a running account to a contractor for work done but not measured is known as Advance payment.</p> <p>2. 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 constructions called as Secured Advance.</p> <p>3. Mobilization Advance: It is the amount of money given to the contractor for establishment purpose such as approach roads site office godown for storage material etc. is known as Mobilization Advance.</p>	2 marks 2 marks 2 marks	6



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.2	d)	<p>Give meaning of B.O.T. State objects of B.O.T.</p> <p>Ans. B.O.T. is a form of project where government grants permission to private firm to construct and administrate certain public infrastructure by financing and authorizing them to pay off loans reclaim investment by allowing them to collect tools, fees, rent as stated in contract and after concession period is over, ownership is transferred back to government.</p> <p>Objects of B.O.T.</p> <ol style="list-style-type: none">1) To encourage private investment.2) To promote foreign investment, techniques and technology in country.	2 marks	4
	e)	<p>What is indent and invoice? State use of each.</p> <p>Ans. Indent: Materials from the stock are issued on demand in a proper form no.7 is termed as Indent which is prepared by Sub-Divisional Officer or Assistant Engineer. Indent form is in triplicate consist of counter foil, indent and invoice; and is kept in a book serially numbered.</p> <p>Invoice: The counter foil and indent are filled by intending officer and along with invoice, it is sent to issuing officer. The issuing officer issues the material available in stores and then fills the invoice as actual goods issued. He then returns the invoice to intending officer who signs and returns the same to issuing officer as a token of acknowledgement of the receipt of goods.</p>	2 marks	
	f)	<p>Enlist the different account forms used in P.W.D. Explain any one.</p> <p>Ans. Following are the various account forms used in P.W.D. –</p> <ol style="list-style-type: none">1) Measurement Books (Form No.23)2) Nominal Muster Roll (NMR, Form No. 21)3) Imprest Cash Account (Form No. 2)4) Indent (Form No.7)5) Invoice6) Bills (Form No. 24 to 27)7) Vouchers8) Cash book (Form NO.1)9) Temporary Advance Form <p>Measurement Book:-</p> <p>M.B. is a special type of book in which measurement of all the construction work done; and supplies with respect to a sanctioned estimate are recorded. It is the very important record because all the payment of all works are done based on the entries done in M.B. M.B. includes the following three particulars;</p> <ol style="list-style-type: none">a) Instructions for writing the columns for various particulars.b) Contents of areac) Details of the actual measurement of the work in the form of number (No), length (L), breadth (B) and depth (D). <p>Note: Any other account forms can be considered.</p>	2 marks	



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.3	a)	Attempt any <u>FOUR</u> of the following Define tender state types of tender Ans. The tender is defined as an offer in writing for execution of certain specified work or for supply of specified materials subject to certain terms and conditions such as rates, time limits etc.	1 mark	16
		The various types of tenders are, a) Local tender b) Global tender c) Open tender d) Limited tender e) Negotiated tender	1 mark each (Any three)	4
		b) Define Earnest money and security deposit Ans. Earnest money deposit: While submitting tender contractor has to deposit certain amount about 1 to 2% of estimated cost with department. This amount is termed as earnest money deposit. It ensures guarantee of the tender, so that contractor may not refuse to accept work or run away when his tender is accepted.	2 marks	4
		Security deposit: After acceptance of tender, contractor has to deposit a certain amount with the department or owner is called as security deposit, it varies from 5 to 10% of total estimated cost of work.	2 marks	
c)		State any four conditions under which lowest tender are rejected. Ans. The following are the situation when the lowest tender is rejected; 1. When tender is not submitted in particular form sold by department. 2. The lowest tenderer may lack in experience for work. 3. Earnest money is not enclosed along with tender. 4. Unsatisfactory reputation of lowest tender. 5. Inadequate finance to execute work. 6. Inadequate connection of fair rates is not received. 7. Tender is not signed by contractor. 8. If any page is removed from document. 9. If contractors is black listed by any department.	1 mark each (Any four)	4
		d) List out various documents required for registration of contractor Ans. The applicant has to submit the following documents along with his application. 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 marks each	4



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.3	e)	<p>State two advantages and disadvantages of item rate contract</p> <p>Ans. Advantages of item rate contract:</p> <ol style="list-style-type: none">1. Quality of work is assured as there is no risk for contractor.2. This contract allows extra items.3. Contractor will be paid as per actual measurement thus method proves economical.4. Variation in the quantities can be made during progress of work.5. This contract is balanced as chances of excessive profit or loss is very less. <p>Disadvantages of item Contact:</p> <ol style="list-style-type: none">1. Total cost of work is not known before completion of work.2. Contractor can submit unbalanced tender.3. Both parties need to appoint large number of staff for taking measurement.4. Classification of material results in to disputes between owner and contractor.	<p>2 marks (Any two)</p> <p>2 marks (Any two)</p>	4



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.4	a) iii)	<p>Enlist points to be observed in framing specifications of a work item.</p> <p>Ans. Following are the various important points to be observed in framing the specifications:</p> <ol style="list-style-type: none">1. Clear facts of the quality of material and workmanship mentioned in the specification should be observed.2. Specification depends upon the site conditions; hence it is to be observed the nature of work and purpose for which the work is carried out.3. Well-known or familiar abbreviations in building industry are to be used without giving information.4. Proper and suitable words with required meaning should only be used. Unfamiliar words should not be used in specification.5. Prepare the specification by observing the rules of grammar.6. The information about quality of the material and procedure of workmanship to be adopted should be complete and accurate.7. Avoid cross-references.8. The specification should state looking to view that what the contractor shall or shall not do and not what the contractor should or should not do.9. The subject matter mentioned in the specification should relate to the information required when the contract is given to the contractor.10. Unfair specifications are not desirable, meaning that throwing all the possible risks on the shoulders of contractors is unfair and hence such specification should not be mentioned.11. The sentences of the specification should be simple and short so as to avoid the risk of legal difficulties and allegations.12. Specifications of various items should be framed by keeping the practical limitations of materials and workmanship in mind.	1 mark (Any four)	4



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.4	a) iv)	State any six necessities of valuation. Ans. 1. The various necessities of valuation are as follows: 2. Buying and selling the property. 3. Taxation. 4. Rent fixation. 5. Security of loans or mortgage. 6. Compulsory acquisition. 7. Insurance. 8. Wealth tax and estate duty. 9. Assessment of stamp fees. 10. Gift tax. 11. Partition.	4 marks (Any six)	4
	b) i)	Attempt any ONE of the following: i) Enlist types of engineering contract and explain cost plus fixed fee contract Ans. Following are different types of contract, 1. Lump sum contract. 2. Item rate contract. 3. Percentage rate contract. a) Cost plus percentage rate contract. b) Cost plus fixed fee contract. c) Cost plus variable fee contract. d) Cost plus variable percentage. 4. Labour contract. 5. Demolition contract. 6. Fee contract. 7. Target contract. 8. Negotiated contract. 9. Material supply contract. Cost plus fixed fee contract: In this type of contract owner agrees to pay contractor the actual cost of work plus a certain fixed amount as his fee. Contractor receives fixed fee irrespective of the cost of work. Advantages of 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.	2 marks (Any four) 2 marks 1/2 mark each (Any two)	6 6



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.4	b)	<p>Disadvantages of cost plus fixed fee contract</p> <ol style="list-style-type: none">1. No incentive to contractor for early and economic completion of work.2. Total cost is not known till completion of work3. Not suitable for government work4. Employment of large staff for keeping accounts	$\frac{1}{2}$ mark (Any two)	
	ii)	<p>Explain the following</p> <ol style="list-style-type: none">1) First and final bill3) Petty Advance2) Retention money <p>Ans.</p> <ol style="list-style-type: none">1) First and final bill A single payment made for a small job or small work on its completion is called as “first and final payment”.2) Retention money Some amount is 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 contractor is called as “Retention Money”.3) Petty Advance A small amount given in advance to the engineer in charge in case of emergency needs is called as “Petty Advance”.	2 marks each	6



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks												
Q.5	a)	<p>Attempt any <u>TWO</u> of the following:</p> <p>Draft a tender notice for construction of Girls Hostel at your polytechnic campus costing Rs. 150 lakhs.</p> <p>Ans.</p> <p>Tender Notice</p> <p>No:</p> <p>Date: 25/11/2015 Sealed B1 tenders are invited by Executive Engineer XYZ institute from registered contractors of class- VI and above for the following work.</p> <table border="1"><thead><tr><th>Sr. No.</th><th>Name of work</th><th>Estimated cost</th><th>Earnest money</th><th>Security deposit</th><th>Time</th></tr></thead><tbody><tr><td>1</td><td>Construction of Girls Hostel</td><td>150 Lakhs</td><td>1,50,000/-</td><td>7,50,000,-</td><td>18 months (including monsoon)</td></tr></tbody></table>	Sr. No.	Name of work	Estimated cost	Earnest money	Security deposit	Time	1	Construction of Girls Hostel	150 Lakhs	1,50,000/-	7,50,000,-	18 months (including monsoon)	2 marks	16
Sr. No.	Name of work	Estimated cost	Earnest money	Security deposit	Time											
1	Construction of Girls Hostel	150 Lakhs	1,50,000/-	7,50,000,-	18 months (including monsoon)											
		<p>Blank tender form at non-refundable cost of Rs. 1000/- (Rs. 1100/- If required by post) can be obtained from the office secretary, XYZ institute, 10.00 a.m. to 5.00 p.m. during working hours of all working days (Except Sundays & Holidays) From 25/11/2015 to 2/12/2015. Tenders will be received in office of secretary up to 3.00 pm. On 2/12/2015. & shall be opened on the same day at 4.00 p.m. in presence of contractors who may like to attend.</p> <p>The authorities reserve the right to reject any or all tenders without assigning any reason.</p> <p style="text-align: right;">Sd/- Executive Engineer Building division XYZ Institute</p>	3 marks	8												
	b)	<p>A person purchases a plot measuring 100 sq.m. at a rate of Rs. 1000/- per sq.m. He constructs a building of built up area 70 sq.m. The cost of construction is Rs 1100/- per sq.m. He desires net return of 7 % on land cost and 9 % on building cost. He deposits Rs. 4000 per year as sinking fund. Assuming all other outgoing as 20 % of gross income. Suggest monthly rent for the property.</p> <p>Ans.</p> <p>To find cost of land:</p> <p>Cost of land = 100 x 1000 = Rs. 1,00,000/-</p> <p>To find cost of construction:</p> <p>Cost of construction = 70 x 1100 = Rs. 77,000/-</p> <p>To find net return:</p> <p>Net return on cost of land = $7/100 \times 100000 = \text{Rs. } 7000/-$</p> <p>Net return on cost of construction = $9/100 \times 77000 = \text{Rs. } 6930/-$</p> <p>Annual sinking fund = 4000/-</p>	1 mark 1 mark 1 mark													



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks		
Q.5	b)	Outgoing = 20% of gross income = $0.20 \times X$	1 mark	8		
		To find gross rent per month: Net Income = Gross income – Outgoings Gross Income or rent = Net income or rent + Outgoings $X = 17930 + 0.20X$ $X - 0.20X = 17930$ $X = 22412.50$ Gross rent per annum = Rs. 22412.50	1 mark			
		Gross rent per month = $22412.50/12 = \text{Rs. } 1867.708$ Monthly rent for the property is Rs. 1867.708/-	2 marks			
			1 mark			
		c)	i) Calculate book value of an asset costing Rs. 15 lakh at the end of 40 th year, assuming the life of asset as 100 yrs. And salvage value of Rs. 50,000/- Annual Depreciation = (Original cost – Salvage value) / Life in years = $(15,00,000 - 50,000) / 100$ = $(14,50,000) / 100$ = Rs.14,500/- Depreciation for 40 years = $40 \times 14,500$ = Rs. 5,80,000/- Book value after 40 years = $14,50,000 - 5,80,000$ = Rs. 8,70,000/-		1 mark	8
				1 mark		
				2 marks		
	ii) A building was constructed at Rs. 4 lakhs. The salvage value is 10% of cost of construction. The life of building is 75 years. Calculate sinking fund installment if rate of interest is 3 %. Salvage value = 10 % of cost of construction. = $10/100 \times 4,00,000 = 40000$ To find sinking fund to be collected: Sinking fund to be collected for an amount of $4,00,000 - 40000 = \text{Rs. } 3,60,000/-$ Annual sinking fund, $Si = i_s / ((1 + i_s)^n - 1)$ $= 0.03 / ((1 + 0.03)^{75} - 1)$ Where life of building = 75 years and rate of interest = 3 % $Si = 0.00368$ To find sinking fund installment: For Rs. 3,60,000/- Sinking fund installment = $3,60,000 \times 0.00368$ = $1324.8/-$ Installment of Rs. 1324.80/- is to be collected.			1 mark		
					1 mark	
			1 mark			
			1 mark			
		1 mark				
		1 mark				



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.6	a)	<p>Attempt any <u>FOUR</u> of the following:</p> <p>State the importance of specification</p> <p>Ans. The Importance of specification:</p> <ol style="list-style-type: none">1. The cost of a unit quantity of work is governed by its specification. Specification specifies method of doing work; thus specification serves as a guide to the supervising staff.2. Contractor is paid only when the work is carried out according to the specification.3. Any changes in specification changes the tendered rate.4. Tender paper without specification is incomplete and invalid.	1 mark each	4
	b)	<p>Draft a detailed specification for cement plaster 1:6 for a brick wall.</p> <p>Ans.</p> <p>(i)Material:</p> <p>Cement: Ordinary Portland cement shall be used .The cement shall conform to IS: 269 latest versions.</p> <p>Sand: Fine aggregate shall be natural sand obtained from a river bed and shall conform to 15:383-1 and to the relevant portion of IS: 515-1959. Sand shall be clean, hard, strong, durable and free from organic matter, dust, clay, shale, alkali, salts, soft or flaky particles or other injurious substances.</p> <p>Water: Potable water shall be used for mixing the mortar.</p> <p>(ii)Proportion: Cement and sand shall be mixed in the proportion of one part of cement to six parts of sand.</p> <p>Mixing: Mortar shall be mixed in a mechanical mixer of an approved pattern at the site of work The drum shall be rotated for a minimum period of 2 minutes The mortar shall be used within 30 minutes of adding water or by hand mixing</p> <p>(iii)Plastering: The mortar shall be firmly applied on the surface from top to down and well pressed into the joints. The mortar shall then be rubbed and leveled with a flat wooden rule until a perfectly plane and even surface is achieved. All corners shall be finished to their angles, unless otherwise directed by the engineer: The jambs and reveals Of door and window openings shall be finished perpendicular to the sill and lintel bottom. Plastering shall be done in squares or strips as directed by the engineer. Strips or squares shall be so formed that day-to-day breaks are made to coincide with architectural breaks.</p> <p>Finish: While the plastered surface is fresh, a thick coat of cement slurry shall be applied and rubbed smooth.</p> <p>Curing: All plastered surfaces shall be kept continuously damp for -a period of 14 days.</p> <p>(iv)Mode of Measurements: The unit of measurement shall be the square meter as per IS: 1200.</p>	1 mark each	4



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.6	c)	<p>State different types of specifications. Explain any one in brief. Ans. Following are the various types of specification;</p> <p>a. Brief specification b. Detailed specification c. Standard specification d. Manufacturers specification</p> <p>(a) Brief specification: The general specification used for estimating the project is the brief specifications. The specification which gives the brief description of various items of work, specifying the materials, quantities, proportion of materials and gives general idea about the whole work.</p> <p>(b) 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. The details specification describes the item of work in details, accurately and complete in all respects in relation to the drawings of the work.</p> <p>(c) 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.</p> <p>(d) Manufacturers specifications: This type of specifications in which the properties of products such as strength, thickness, depth, elasticity, chemical composition etc. are mentioned.</p>	2 marks	4
	d)	<p>State methods of depreciation and explain any one. Ans. Methods of depreciation:</p> <p>i. Straight line method ii. Constant percentage method or declining Balance method iii. Sinking fund method iv. Quantity survey method.</p> <p>i) Straight line method: Assumption of this method is 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 utility period only the scrap value is left. Annual depreciation (D) = (Original cost - Scrap value) / (Life in years)</p> $D = (C - S) / N$ <p style="text-align: center;">OR</p> <p>ii. Sinking fund method: In this method, the depreciation of the property is assumed 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 being investment.</p>	2 marks	



Que. No.	Sub. Que.	Model Answers	Marks	Total Marks
Q.6	d)	<p style="text-align: center;">OR</p> <p>iii. Constant percentage method: In this method it is assumed that the property will lose its value by a constant percentage of its value at the beginning of every year. Depreciated factor (D) = $1 - (S/C)^{1/n}$</p> <p style="text-align: center;">OR</p> <p>iv. Quantity survey method: In this method, the property is studied in detail and loss in value due to life, wear and tear, decay, obsolescence etc. is worked out. Each and every step is based on some logical ground without any fixed percentage of the cost of property. Only experienced valuer can work out the amount of depreciation.</p>		
	e)	<p>Define 'Year Purchase' and 'Sinking fund'.</p> <p>Ans. Year Purchase: It is the figure which when multiplied by the net income gives the capitalized value of a property on the material date of valuation. Capitalized value = Net Income x Year Purchase Year Purchase is the capital sum required to be invested in order to receive an annuity of Rs. 100, at certain rate of interest.</p> <p style="text-align: center;">$Y.P. = 100 / \text{rate of interest}$</p> <p>Sinking fund: An amount which has to be kept aside at fixed intervals of time, out of the gross income so that at the end of the useful life of building, the fund should accumulate to the initial cost of the property is called as sinking fund.</p> <p style="text-align: center;">$I = Si / (1 + i)^{n-1}$</p> <p>Where, S = amount of sinking fund i = rate of interval in decimal. n = number of years required to create sinking I = annual installment required</p>	2 mark	4
			2 mark	