

-: 1 :-

Accounting – Logical Reasoning – ICAI Module – Depreciation

Amit Ltd. purchased a machine on 01.01.2003 for Rs 1,20,000. Installation expenses were 1. Rs 10,000. Residual value after 5 years Rs 5,000. On 01.07.2003, expenses for repairs were incurred to the extent of Rs 2,000. Depreciation is provided @ 10% p.a. under written down value method. Depreciation for the 4th year = ____ a. 25,000 b. 13,000 c. 10,530 d. 9,477 Ans. Cost of machine = 1,20,000 + 10,000 = Rs. 1,30,000 Steps on calculator for Depreciation in 4th year: 1,30,000 -10% -10% -10% X 10% = Rs. 9,477 Hence correct option: d 2. Original cost = Rs.1,26,000; Salvage value = Nil; Useful life = 6 years. Depreciation for the first year under sum of years digits method will be (a) Rs.6,000 (b) Rs. 12,000 (c) Rs. 18,000 (d) Rs. 36,000 Remaining life of the asset Sum of digits Ans. Depreciation under sum of digits method = X (Cost - estimated scrap) 6 +1X 1,26,000 = Rs. 36,000 Hence correct option: d Obsolescence of a depreciable asset may be caused by I. Technological changes. II. Improvement in production method. III. Change in market demand for the product or service output. IV. Legal or other restrictions. (a) Only (I) above (b) Both (I) and (II) above (c) All (I), (II), (III) and (IV) above (d) Only (IV) above Ans. Obsolescence (asset no longer usable even though the asset is in working condition) can be caused by any of the 4 factors mentioned. Hence correct option: d Amit Ltd. purchased a machine on 01.01.2003 for Rs 1,20,000. Installation expenses were 4. Rs 10,000. Residual value after 5 years Rs 5,000. On 01.07.2003, expenses for repairs were incurred to the extent of Rs 2,000. Depreciation is provided under straight line method. Depreciation rate = 10%. Annual Depreciation = ____. a. 13,000 b. 17.000 c. 21,000 d. 25,000 Cost – Estimated scrap 120000 + 10000 – 5000 Estimated life **Ans.** Annual depreciation under SLM = 5 = Rs.25,000 Rate of depreciation is irrelevant. Expenses for repair, being of revenue nature, is irrelevant. Hence correct option: d (In some of the modules the answer is incorrectly mentioned as "a") Original cost = Rs.1,26,000; Salvage value = Nil; Useful life = 6 years. Depreciation for the 5. fourth year under sum of years digits method will be (c) Rs. 12,000 (a) Rs.6,000 (c) Rs. 18,000 (d) Rs. 24,000

		-: 2 :-	rinin a lifa a	DEPREC	IATION/ICAI/MCQs LR
Ans.	Depreciation under sum of digits metho scrap)	d =	Sum of di	gits	X (Cost – estimated
	$=\frac{4}{6(\frac{6+1}{2})}$ X 1,26,000 = Rs. 24,000				
	Hence correct option: d				
6.	Amit Ltd. purchased a machine on 01.02 Rs 10,000. Residual value after 5 years R incurred to the extent of Rs 2,000. Depr Annual Depreciation =	1.2003 for Rs 5,000. O reciation is	Rs 1,20,000. 1 n 01.07.2003, provided ui	Installation e expenses for nder straight	xpenses were repairs were line method.
	a. 13,000 b. 17,000	С	21,000	d. 25,0	000
Ans.	Please refer Q1.				
7.	Which of the following statements is/are	false?			
	I. The term 'depreciation', 'depletion' a	and 'amort	ization' conve	ey the same :	meaning.
	II. Provision for depreciation a/c is debite	ed when pi	ovision for de	preciation a/	c is created.
	III. The main purpose of charging the pro- is to spread the cost of an asset or determination.	ofit and los ver its us	s a/c with the eful life for	e amount of d the purpose	lepreciation of income
	(a) Only (I) above	(b)	Only (II) abo	ove	
	(c) Only (III) above	(d)	All (I) (II) an	nd (III) above	
Ans.	When Provision for Depreciation A/c is created	ated, the a	ccounting ent	ry passed is:	
	Depreciation A/c Dr				
	To Provision for Depreciation A/c Cr.				
	Thus Provision for Depreciation A/c is CREE	DITED.			
	Hence correct option: b				

 Original cost = Rs 1,26,000. Salvage value = 6,000. Depreciation for 2nd year @ Units of Production Method, if units produced in 2nd year was 5,000 and total estimated production 50,000.

	a. 10,800	b. 11,340	c. 12,600	d. 12,000
Ans	Rate of depreciation -	Cost - Scrap value	1,26,000 - 6,000	- Rs 2 1 per unit
A115.		Estimatedoutput	50,000	- K3. 2.4 per unit.
	Depreciation for the 2 ⁿ	^d year = Output X Rate	e of depreciation = 5	5,000 X 2.4 = 12,000

- 9. The number of production or similar units expected to be obtained from the use of an asset by an enterprise is called as
 - (a) Unit life (b) Useful life
 - (c) Production life (d) Expected life

Ans. (a) Unit life

- 10. Which of the following is not true with regard to fixed assets?
 - (a) They are acquired for using them in the conduct of business operations
 - (b) They are not meant for resale to earn profit
 - (c) They can easily be converted into cash
 - (d) Depreciation at specified rates is to be charged on most of the fixed assets

Hence correct option: d

Ans. Expenditure on Fixed assets is a capital expenditure. Fixed assets are held by the business to use them in conduct of the business and not for resale in ordinary course of business. Usually Fixed assets are depreciable assets. Liquid assets like bank balance, marketable securities etc. (not the Fixed assets) are easily convertible in cash.
 Hence correct option: c

- Original cost = Rs 1,26,000. Salvage value = 6,000. Useful Life = 6 years. Annual depreciation under SLM =
 - (a) 21,000 (b) 20,000 (c) 15,000 (d) 14,000

Ans. Annual Depreciation = $\frac{\text{Cost} - \text{Scrap value}}{\text{Estimated life (years)}}$

 $=\frac{1,26,000-6,000}{6}$ = Rs. 20,000.

Hence correct option: b

12. Original cost = Rs 1,26,000. Salvage value = 6,000. Depreciation for 2nd year @ 10% p.a. under WDV method =

	a. 10,800	b. 11,340	c. 15,000	d. 14,000
Ans.	Depreciable value = Cost -	Scrap = 1,26,000 – 6,000 =	= Rs. 1,20,000	
	Depreciable value		1,20,000	
	Year 1 - Depreciation @ 10	% under WDV method	12,000	
	WDV at the end of Year 1		1,08,000	
	Year 2 - Depreciation @ 10	% under WDV method	10,800	
	Hence correct option: a			
	Calculator Shortcut 120000) - 10% X 10%		

- 13. Which of the following expenses is **not** included in the acquisition cost of a plant and equipment?
 - (a) Cost of site preparation (b) Delivery and handling charges
 - (c) Installation costs
 - (d) Financing costs incurred subsequent to the period after plant and equipment is put to use.
- Ans. All the expenses incurred to put the asset in present condition and location and to make it ready to use are capitalized (i.e. included in the cost of acquisition). Thus the financing cost incurred after the asset is put to use is not eligible to be included in the acquisition cost.
 Hence correct option: d
 - 14. For charging depreciation, on which of the following assets, the depletion method is adopted?
 - (a) Plant & machinery (b) Land & building
 - (c) Goodwill (d) Wasting assets like mines and quarries

Ans. The word 'deplete' means 'reduce or decrease'. Depletion method of depreciation is adopted for the assets where in the extraction etc. are involved - wasting assets.
 Hence correct option: d

- 15. If a concern proposes to discontinue its business from March 2005 and decides to dispose off all its assets within a period of 4 months, the Balance Sheet as on March 31, 2005 should indicate the assets at their
 - (a) Historical cost (b) Net realizable value
 - (c) Cost less depreciation (d) Cost price or market value, whichever is lower

- Ans. Fixed assets are held by the business to use them in conduct of the business and not for resale in ordinary course of business. Thus when 'Going concern assumption' is true, Fixed assets are shown at the book value (i.e. Cost less Depreciation).
 However, when the business is no longer going concern, the assets are shown at the value which they are expected to fetch on their disposal i.e. Net realizable value.
 Hence correct option: b
- 16. In the case of downward revaluation of an asset which is for the first time revalued, the account to be debited is
 - (a) Fixed Asset (b) Revaluation Reserve
 - (c) Profit & Loss account (d) General Reserve
- Ans. When the asset is revalued for the first time, and the revaluation is downward, value of the asset is reduced and the loss on revaluation is debited to P&L A/c. The Accounting entry in this case is: P&L A/c Dr.

To Asset A/c

Hence correct option: c

- 17. In which of the following methods, is the cost of the asset written off in equal proportion, during its useful economic life?
 - (a) Straight line method (b) Written down value method
 - (c) Units-of-production method (d) Sum-of-the-years'-digits method
- **Ans.** Under Straight Line Method, the depreciable amount of an asset is spread over the useful life of the asset in equal proportion.

Under WDV method the amount of depreciation shows a decreasing trend year on year.

Under unit of production (depletion) method, the amount of depreciation depends upon the number of units extracted during the period.

Under Sum of digits method, the amount of depreciation depends upon the remaining useful life of the asset.

Hence correct option: a

- 18. The portion of the acquisition cost of the asset, yet to be allocated is known as
 - (a) Written down value (b) Accumulated value
 - (c) Realisable value (d) Salvage value
- Ans. When the assets are acquired they are recorded at their acquisition cost (historical cost).
 Depreciation is provided on the depreciable value of the asset (Cost less estimated scrap value).
 The value after depreciation is called written down value and indicates the value of the asset yet to be depreciated. It is known as Book value or Written down value.
 Hence correct option: a

		-: 5 :-	DEPRECIATION/ICAI/MCQs LR
1.	Original Cost = Rs 1,00,000. Lif	e = 5 years. Expected sal	vage value = Rs 2,000.
	(i) Depreciation for 3rd year a	s per straight line metho	d is
	a. Rs 12,800 b. Rs 1	.9,600 c. Rs 20	d. Rs 20,400
	(ii). rate of depreciation p.a. =		
	a. 20.0% b. 19.8	% c. 19.6%	d. 19.4%
Ans.	Annual Depreciation = $\frac{\text{Cost} - \text{Scrap value}}{\text{Estimated life (y)}}$	$\frac{\text{alue}}{\text{years}} = \frac{1,00,000 - 2,000}{5}$) <u>0</u> = Rs. 19,600
	(i) Hence the correct option: b		
	Annual depreciation = Rate of deprecia Annual D	tion X Cost price epreciation 19,600	1
	Thus Rate of depreciation = Cost	$x_{100} = \overline{1,00,00}$	0 X 100 = 19.6%
	Alternate way:		
	Rate of Depreciation under SLM = $\frac{100}{100}$	$\frac{\% - (\% \text{ of scrap value to } \cos \theta)}{life}$	t of asset)
	$=\frac{100\% - \left(\frac{2,000}{1,00,000} \times 100\right)\%}{100,000} = 19.65$	% on cost i.e. 19.6% on Rs.1.00	0.000
	5 (ii) Hence the correct option: c		,

2. On April 01, 2004 the debit balance of the machinery account of A Ltd. was Rs.5,67,000. The machine was purchased on April 01, 2002. The company charged depreciation at the rate of 10% per annum under diminishing balance method. On October 01, 2004, the company acquired a new machine at a cost of Rs.60,000 and incurred Rs.6,000 for installation of the new machine. The company decided to change the system of providing depreciation from the diminishing balance method to the straight-line method with retrospective effect from April 01, 2002. The rate of depreciation will remain the same. The company decided to make necessary adjustments in respect of depreciation due to the change in the method in the year 2004-2005.

(i)	Cost of machinery	on 01.04.2002 =	·	
	a. Rs 5,67,000	b. Rs 6,30,000	c. Rs 7,00,000	d. Rs 7,77,778
(ii)	Depreciation provi	ded in 2002-03 =		
	a. Rs 56,700	b. Rs 63,000	c. Rs 70,000	d. Rs 77,778
(iii)	Depreciation provi	ded in 2003-04 =		
	a. Rs 51,030	b. Rs 56,700	c. Rs 63,000	d. Rs 70,000
(iv)	Depreciation unde	r new method for 2002	-03 and 2003-04 = _	·
	a. Rs 1,33,400	b. Rs 1,26,000	c. Rs 1,40,000	d. Rs 1,55,556
(v)	Further depreciatio	n to be provided =		
	a. Rs 5,670	b. Rs 6,300	c. Rs 7,000	d. Rs 7,778
(vi)	Balance in Machine	ery A/c on 31.03.2004	=	
	a. Rs 5,67,000	b. Rs 6,30,000	c. Rs 7,00,000	d. Rs 7,77,778
(vii) Depreciation for t	he year 2004-05 =	·	
	a. Rs 3,300	b. Rs 7,000	c. Rs 10,300	d. Rs 73,300
(vii	i) The balance outs after effecting th	tanding to the debit of e above changes was	machinery account	as on March 31, 2005
	a. Rs.5,45,700	b. Rs.5,52,700	c. Rs.5,46,000	d. Rs.5,49,400

			<u>BEINEON (INCO)</u>
Ans.	Let the purchase price of machinery	/ (01.04.02) be 100. WDV as on 01.04.04 = 100 – 10% - 10% = 81
	Cost V	V DV	
	100 8	1	
	? 5	,67,000	
		5,67,00 0	
	Thus purchase price of machinery =	81	X 100 = Rs. 7,00,000
	(i) Hence the correct option: c		

Depreciation in 2002-03 = 7,00,000 X 10% = Rs. 70,000 (ii) Hence the correct option: c

Depreciation in 2003-04 = 7,00,000 – 10% X 10% = Rs. 63,000

(iii) Hence the correct option: c

Annual Depreciation under new method (SLM) = 7,00,000 X 10% = 70,000 Thus Depreciation for 2002-03 and 2003-04 under SLM = 70,000 X 2 = Rs. 1,40,000

(iv) Hence the correct option: c

Further depreciation = Depreciation that should have been provided - Depreciation already provided

= 1,40,000 - (70,000 + 63,000) = Rs. 7,000

(v) Hence the correct option: c

(vi) The change in method of depreciation is effective 2004-05. Thus the method of depreciation in 2003-04 will be the old method (WDV) and the book value = Rs. 5,67,000 (as given in the first sentence of the question)

Dr		Machine	ry A/c		Cr
01-04-02	To Cash/ Bank A/c	700,000			
	(Machinery A)		31-03-03	By Depreciation A/c	70,000
			31-03-03	By Balance c/d	630,000
		700,000			70,000
01-04-03	To Balance b/d	630,000			
			31-03-04	By Depreciation A/c	63,000
			31-03-04	By Balance c/d	567,000
		630,000			630,000
01-04-04	To Balance b/d	567,000			
01-10-04	To Cash/ Bank A/c	66,000	31-03-05	By Depreciation A/c	7,000
	(60,000 + 6,000)			(Short provision)	
	(Machinery B)		31-03-05	By Depreciation A/c	70,000
				(Machinery A, SLM)	
			31-03-05	By Depreciation A/c	3,300
				(Machinery B)	
				(66,000 X 10% X 6 /	
				12)	
			31-03-05	By Balance c/d	552,700
		633,000			633,000

(vii) Hence the correct option: d

(viii) Hence the correct option: b

- -: 7 :-DEPRECIATION/ICAI/MCQs LR The balance in the accumulated provision for depreciation account of a company as at the 3. beginning of the year 2004-2005 was Rs. 2,00,000 when the original cost of the assets amounted to Rs.10,00,000. The company charges 10% depreciation on a straight line basis for all the assets including those which have been either purchased or sold during the year. One such asset costing Rs.5,00,000 with accumulated depreciation as at the beginning of the year of Rs.80,000 was disposed off during the year. (i) Depreciation for the year is a. Rs 40,000 b. Rs 50,000 c. Rs 60,000 d. Rs 1,00,000 (ii) The balance of the accumulated depreciation account at the end of the year considering the current year's depreciation charge would be (b) Rs.1,70,000 (c) Rs.1,20,000 (a) Rs.2,20,000 (d) Rs.2,50,000 Ans. Annual depreciation Annual depreciation under SLM = Rate of depreciation X Cost price = 10,00,000 X 10% = Rs. 1,00,000 Hence the correct option: d (i) Journal entries relating the disposal of the asset: Asset Disposal A/c Dr. 5,00,000 To Asset A/c 5,00,000 80,000 Provision for Depreciation A/c Dr To Asset Disposal A/c 80,000 Depreciation A/c Dr. 1,00,000 To Provision for Depreciation A/c 1,00,000 Posting the same: Provision for Depreciation A/c Cr Dr By Balance b/d 200,000 To Asset disposal A/c 80,000 By Depreciation A/c 100,000 To Balance c/d 220,000 300,000 300,000 (ii) Hence the correct option: a B Limited has been charging depreciation on the straight line method. It charges a full year depreciation even if the machinery is utilized only for part of the year. An equipment which was purchased for Rs.3,50,000 now stands at Rs.2,97,500 after depreciating at the
 - rate of 5% on a straight line basis. Now the company decides to change the method of depreciation with retrospective effect. The applicable reducing balance rate for this machinery would be 8% p.a. Assuming that before the effect of this change could be accounted, depreciation for the current year is already charged based on straight line method and is reflected in the depreciated value of Rs.2,97,500.
 - (i) Straight line depreciation per annum is a. 15,000 b. 17,500 c. 35,000 d. 52.500 (ii) Number of years for which depreciation has been charged on this basis is a. 2 b. 3 c. 4 d. 5 (iii) If 8% depreciation was charged by the reducing balance method, WDV at the end of 1st year is a. Rs 2,72,541 b. Rs 2,96,240 c. Rs 3,22,000 d. Rs 3,60,000 (iv) If 8% depreciation was charged by the reducing balance method, WDV at the end of 2nd year is a. Rs 2,72,541 b. Rs 2,96,240 c. Rs 3,22,000 d. Rs 3,60,000 (v) If 8% depreciation was charged by the reducing balance method, WDV at the end of 3rd year is a. Rs 2,72,541 b. Rs 2,96,240 c. Rs 3,22,000 d. Rs 3.60.000 (vi) The extra depreciation to be provided based on the changed method during the year is (a) Rs.24,959 (b) Rs.17,500 (c) Rs.10,500 (d) Rs.46,763

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Ans. Annual depreciation under SLM = Cost price X Rate of depreciation = 3,50,000 X 5% = Rs. 17,500 **Hence the correct option: b**

Accumulated Depreciation = 3,50,000 – 2,97,500 = 52,500

Annual Depreciation = Rs. 17,500

Thus number of years = 52,500 / 17,500 = 3

Hence the correct option: b

Dr		Machine	ry A/c	Cr	_
Year 1	To Cash/ Bank A/c	350,000			
			By Depreciation A/c	28,000	
			By Balance c/d	322,000	(iii): c
		350,000		350,000	_
Year 2	To Balance b/d	322,000			-
			By Depreciation A/c	25,760	
			By Balance c/d	296,240	(iv): b
		322,000		322,000	_
Year 3	To Balance b/d	296,240			-
			By Depreciation A/c	23,699	
			By Balance c/d	272,541	(v): a
		296,240		296,240	_

(vi) Depreciation already provided under SLM = Rs. 17,500 X 3 = Rs. 52,500
 Depreciation that should have been provided = 28,000 + 25,760 + 23,699 = 77,459
 Extra depreciation to be provided = 77,459 - 52,500 = 24,959
 Hence the correct option: a

5.	In tl in r	ne year 2004- 200 elation to it:	5, C Ltd. p	urchased a ne	ew machine and m	ade the follo Rs.	wing payments Rs.
	Cos	t as per supplier′	s list			5,20,000	
	Less	s: Agreed discou	nt			<u>50,000</u>	4,70,000
	Del	ivery charges					10,000
	Ere	ction charges					20,000
	Anı	nual maintenanc	e charges				30,000
	Ado	litional compone	ents to incr	ease capacity	of the machine		40,000
	Anı	ual insurance p	remium				5,000
	(i)	The cost of the	machine is				
		(a) Rs.5,40,000	(b) R	s.5,45,000	(c) Rs.4,70,0	00 (d) R	s.5,50,000
	(ii)	If depreciation i	s provideo	ł @ 10% p.a.	SLM, depreciation	for 3rd year	r is
		(a) Rs.54,000	(b) R	s.54,500	(c) Rs.47,000	0 (d) R	s.55,000
	(iii)	If depreciation i	is provideo	ł @ 10% p.a.	WDV, depreciatio	n for 3rd yea	ar is
		(a) Rs.43,740	(b) R	s. 44 ,145	(c) Rs.38,070	(d) R	s.44,550
Ans.	(i)	Cost of machine	ry:				
	Purc	hase price	4,70,000	Note: Mainte	enance charges & In	surance are r	evenue expenditure
	Deliv	ery charges	10,000				
	Erect	tion charges	20,000				

			-: 9	:- [DEPRECIATION/ICAI/MCQ
	Ad	ditional componen	ts <u>40,000</u>		
	Tot	tal	5,40,000		
	Не	nce the correct op	tion: a		
	(ii)	Annual Depreci	ation under SLM = Cost X R	ate of depreciation = 5,40	0,000 X 10% = Rs. 54,000
	He	nce the correct op	tion: a		() (A O O () D () A O T A O
	(111)	Depreciation to	r 3 th year under WDV @ 10	% = 5,40,000 - 10% - 10%	% X 10% = Rs. 43,740
	пе	nce the correct op	lion: a		
6.	Аn	ew machine costin	og Rs 1 lakh was purchased	by a company to manu	facture a special
1	pro	duct. Its useful life	is estimated to be 5 years an	d scrap value at Rs.10000	. The production
]	plar	n for the next 5 yea	ars using the above machir	ne is as follows:	
	Yea	r 1	5000 units		
	Yea	r 2	10000 units		
	Yea	r 3	12000 units		
	Yea	r 4	20000 units		
	Yea	r 5	25000 units		
	(i)	The depreciation	expenditure for the 1st yea	r under units-of-product	tion method will
	. ,	be	1	*	
		(a) Rs.6,250	(b) Rs.12,500	(c) Rs.15,000 (d)	Rs.25,000
	(ii)	The depreciation	expenditure for the 2nd y	ear under units-of-produ	action method
		will be			
		(a) Rs.6,250	(b) Rs.12,500	(c) Rs.15,000 (d)	Rs.25,000
	(iii)	The depreciation	expenditure for the 3rd yea	ar under units-of-produc	tion method will
		be			
		(a) Rs.6,250	(b) Rs.12,500	(c) Rs.15,000 (d)	Rs.25,000
(iv)	The depreciation of	expenditure for the 4th vea	r under units-of-produc	tion method will
(_)	be			
		(a) Rs.6,250	(b) Rs.12,500	(c) Rs.15,000 (d)	Rs.25,000
(V)	The depreciation of	expenditure for the 5th yea	r under units-of-produc	tion method will
		be	(1) D 10 500	() D 15 000 (1)	D 01 050
_	_	(a) Ks.6,250	(b) Ks.12,500	(c) Ks.15,000 (d)	Ks.31,250.
Ans.	Exp	ected production =	= 5,000 + 10,000 + 12,000 + 10,000 +	20,000 + 25,000 = 72,00	0 units
	Rat	e of depreciation =	$= \frac{\cos t - \operatorname{scrap value}}{\operatorname{Extinuit}} = \frac{1,00}{100}$	$\frac{1000 - 10000}{72000}$ = Rs. 1.2	5 per unit
	D		Estimatedouiput	72,000	
Voor	Dep	rectation = Product	Depresiation calculation	Depresiation Amount	Correct Option
1	P	5 000		6 250	
2		10 000	10,000 X 1.25	12 500	b
3	+	12.000	12,000 X 1.25	15.000	~C
4		20,000	20,000 X 1.25	25,000	d
5	1	25,000	25,000 X 1.25	31,250	d

72,000

Total

90,000

- 7. Consider the following information:
 - I. Rate of depreciation under the written down method = 20%.
 - II. Original cost of the asset = Rs.1,00,000.
 - III. Residual value of the asset at the end of useful life = Rs.40,960.
 - (i) The estimated useful life of the asset, in years, is
 - (a) 4 (b) 5 (c) 6 (d) 7 (ii) Depreciation for 1st year =
 - (a) 20,000 (b) 16,000 (c) 12,800 (d) 10,240
 - (iii) Depreciation for 2nd year =
 - (a) 20,000 (b) 16,000 (c) 12,800 (d) 10,240 (iv) Depreciation for 3rd year =
 - (a) 20,000 (b) 16,000 (c) 12,800 (d) 10,240
 - (v) Depreciation for 4th year = (a) 20,000 (b) 16,000 (c) 12,800 (d) 10,240

Ans. (i) Rate of depreciation under WDV method = $1 - \sqrt[n]{\frac{r}{c}}$ r = Scrap value and c = Cost

$$20\% = 100\% - \sqrt[n]{\frac{40,960}{1,00,000}}$$

Thus ⁷√0.4096 = 80%

Calculator steps: 0.4096 $\sqrt{\Box}$ $\sqrt{\Box}$ = 0.8

This means 4^{th} root of 0.4096 is 80%. Thus n = 4.

Hence the correct option: a

Common sense approach: For the same rate of depreciation, the life of asset is less under WDV method as compared to that under SLM method. The life of asset under SLM @ 20% is 5 years. Thus life under WDV is less than 5. The only such option is a.

Dr		Asset A/c		Cr	_
Year 1	To Cash/ Bank A/c	100,000			_
			By Depreciation A/c	20,000	(ii): a
			By Balance c/d	80,000	_
		100,000		100,000	_
Year 2	To Balance b/d	80,000			-
			By Depreciation A/c	16,000	(iii): k
			By Balance c/d	64,000	_
		80,000		80,000	_
Year 3	To Balance b/d	64,000			-
			By Depreciation A/c	12,800	(iv): c
			By Balance c/d	51,200	
		64,000		64,000	-
Year 4	To Balance b/d	51,200			-
			By Depreciation A/c	10,240	(v): d
			By Balance c/d	40,960	_
		51,200		51,200	-

- -: 11 :-
- 8. On October 1, 2001 two machines costing Rs.20,000 and Rs.15,000 respectively, were purchased.

On March 31, 2005, both the machines had to be discarded because of damage and had to be replaced by two machines costing Rs.25,000 and Rs.20,000 respectively.

One of the discarded machine was sold for Rs.10,000 and against the other it was expected that Rs.5,000 would be realized. The firm provides depreciation @15% on written down value

- (i) Depreciation for the 2003-04 year = (a) 2,625 (b) 4,856 (c) 4,128 (d) 3,509
- (ii) The total amount of depreciation written off on the two machines till they were discarded is
 - (a) Rs.21,000 (b) Rs.15,118 (c) Rs.13,595 (d) Rs.18,194

Ans. Cost of both the machines = 20,000 + 15,000 = Rs. 35,000 Machine A/c till the machines are discarded:

Dr		Machin	e A/c		Cr
01-10-01	To Cash/ Bank A/c	35,000			
	(Machinery A&B)		31-03-02	By Depreciation A/c	2,625
				(Cost x 15% X 2/12)	
			31-03-02	By Balance c/d	32,375
		35,000			35,000
01-04-02	To Balance b/d	32,375			
			31-03-03	By Depreciation A/c	4,856
			31-03-03	By Balance c/d	27,519
		32,375			32,375
01-04-03	To Balance b/d	32,375 27,519			32,375
01-04-03	To Balance b/d	32,375 27,519	31-03-04	By Depreciation A/c	32,375 4,128
01-04-03	To Balance b/d	32,375 27,519	31-03-04 31-03-04	By Depreciation A/c By Balance c/d	32,375 4,128 23,391
01-04-03	To Balance b/d	32,375 27,519 27,519	31-03-04 31-03-04	By Depreciation A/c By Balance c/d	32,375 4,128 23,391 27,519
01-04-03	To Balance b/d To Balance b/d	32,375 27,519 27,519 27,519 23,391	31-03-04 31-03-04	By Depreciation A/c By Balance c/d	32,375 4,128 23,391 27,519
01-04-03	To Balance b/d To Balance b/d	32,375 27,519 27,519 27,519 23,391	31-03-04 31-03-04 31-03-05	By Depreciation A/c By Balance c/d By Depreciation A/c	32,375 4,128 23,391 27,519 3,509
01-04-03	To Balance b/d To Balance b/d	32,375 27,519 27,519 23,391	31-03-04 31-03-04 31-03-05	By Depreciation A/c By Balance c/d By Depreciation A/c	32,375 4,128 23,391 27,519 3,509

Thus the depreciation for 2003-04 is Rs. 4,128.

(i) Hence the correct option: c

The depreciation provided till the time of discarding = 2,625 + 4,856 + 4,128 + 3,509 = Rs. 15,118

- (ii) Hence the correct option: c
- 9. In the books of D Ltd. the machinery account shows a debit balance of Rs.60,000 as on April 1,2003. The machinery was sold on September 30,2004 for Rs.30,000. The company charges depreciation @20% p.a. on diminishing balance method.

(i)	Depreciation for 20	03-04 =			
	a. 6,000	b. 9.000	c. 4,800	d. 12,000	
(ii)	i) Depreciation for 2004-05 =				
	a. 6,000	b. 9.000	c. 4,800	d. 12,000	
(iii)	ii) Profit / Loss on sale =				
	a. 13,200 Profit	b. 13,200 loss	c. 6,800 profit	d. 6,800 loss	

Dr		Machinery A/c		Cr	
01-04-03	To Balance b/d	60,000			
			31-03-04	By Depreciation A/c	12,000
			31-03-04	By Balance c/d	48,000
		60,000			60,000
01-04-04	To Balance b/d	48,000			
			30-09-04	By Depreciation A/c	4,800
				(For 6 months)	
			30-09-04	By Cash / Bank A/c	30,000
			31-03-04	By P&L A/c	13,200
				(Loss)	
		48,000			48,000

(i) Hence the correct option: d

(ii) Hence the correct option: c

(iii) Hence the correct option: b

10. Consider the following data pertaining to M/s. E Ltd. who constructed a cinema house:

Particulars	Rs.	
Cost of second hand furniture	90,000	
Cost of repainting the furniture	10,000	
Wages paid to employees for fixing the furniture	2,000	
Fire insurance premium	1,000	
The amount debited to furniture account is		

The amount debited to furniture account is

(a) Rs.90,000 (b) Rs.91,000 (c) Rs.1,00,000 (d) Rs.1,02,000

Ans. The amount to be debited to Furniture A/c is the cost of furniture and cost of its repainting i.e. 90,000 + 10,000 = 1,00,000. As the wages are paid to the existing employees, there is no additional cost involved, hence not to be capitalized. Fire insurance premium is a revenue expenditure, hence not to be capitalized.

Hence the correct option: c

11. H Ltd. purchased a machinery on April 01, 2000 for Rs.3,00,000. It is estimated that the machinery will have a useful life of 5 years after which it will have no salvage value. If the company follows sum-of-the-years'-digits method of depreciation, the amount of depreciation charged during the year 2004-05 was

(a) Rs.1,00,000 (b) Rs.80,000 (c) Rs.60,000 (d) Rs.20,000.
Ans. In the year 2004-05, the remaining life of the asset excluding the current year is 0 year.
Depreciation under sum of digits method =
$$\frac{Cost - Scrap value}{Sum of digits} \times (n+1) = \frac{3,00,000}{5\left(\frac{5+1}{2}\right)} \times (0+1)$$

= Rs. 20,000

= Rs. 20,000 Hence the correct option: d 12. On August 01,2002, K Travels Ltd. bought four Matador vans costing Rs.1,20,000 each. The company expected to fetch a scrap value of 25% of the cost price of the vehicles after ten years. The vehicles were depreciated under the fixed installment method up to March 31, 2005. With effect from April 01, 2005, the company decided to introduce the diminishing balance method of depreciation @ 20% p.a. instead of the fixed installment method. The company sold one of the vans at Rs.70,000 on March 31, 2005. The rate of depreciation charged up to March 31, 2005 was

(a) 10.0% (b) 9.0% (c) 8.5% (d) 7.5%

Ans. Annual Depreciation per matador = (120000 – 30,000) X 10% = 9,000 Annual depreciation = Rate of depreciation X Cost price 9,000 = Rate of depreciation X 1,20,000 Rate of depreciation = 9,000 / 1,20,000 = 7.5%

Hence the correct option: d

- 13. Akhil Ltd. imported a machine on 01.07.2002 for Rs 1,28,000, paid customs duty and freight Rs 64,000 and incurred erection charges Rs 48,000. Another local machinery costing Rs 80,000 was purchased on 01.01.2003. On 01.07.2004, a portion of the imported machinery (value one-third) got out of order and was sold for Rs 27,840. Another machinery was purchased to replace the same for Rs 40,000. Depreciation is to be calculated at 20% p.a.
 - (i) Profit / Loss on sale = ____.
 a. 20,160 (Profit) b. 19,600 (Profit) c. 19,600 (Loss) d. 20,160 (Loss)
 (ii) Closing balance of Machinery = _____.
 a. 1,32,000 b. 1,64,000 c. 1,96,000 d. 2,28,000

Ans. Cost of imported machinery = 1,28,000 + 64,000 + 48,000 = Rs. 2,40,000 1/3rd value of imported machinery = Rs. 2,40,000 / 3 = Rs. 80,000 Accumulated depreciation till 01.07.2004 = (80000 X 20% X 1 / 2) + (80,000 X 20%) + (80000 X 20% X 1 / 2) = Rs. 32,000 Book value as on the date of sale = 80,000 - 32,000 = Rs. 48,000 Profit / (Loss) on sale = 27,840 - 48,000 = Rs. 20,160 (Loss) Hence the correct option: d

Machine A/c Dr Cr 01-07-02 To Cash/ Bank A/c 240,000 31-12-02 By Depreciation A/c 24,000 (Imported machine) (Cost x 20% X 2/12) 31-12-02 By Balance c/d 216,000 240,000 240,000 216,000 01-01-03 To Balance b/d 01-01-03 To Cash/ Bank A/c 80,000 31-12-03 By Depreciation A/c 64,000 (Local Machine) (20% of 2,40,000 + 80,000) 31-12-03 By Balance c/d 152,000 216,000 296,000 01-01-04 To Balance b/d 152,000 40.000 01-07-04 To Cash/ Bank A/c 01-07-04 By Cash / Bank A/c 27.840 (Replaced Machine) 01-07-04 By P&L A/c 20,160 31-12-04 By Depreciation A/c 52,000 (2/3x240000x20%)+(80000x20%)+(40000x20%x1/2) 31-12-04 By Balance c/d 92,000 192.000 192.000

14. On 01.01.2001, a new plant was purchased by Mrs. Shweta Periwal for Rs 1,00,000 and a further sum of Rs 5,000 was spent on installation. On 01.06.2002, another plant was acquired for Rs 65,000. On 02.10.2003, the first plant was totally destroyed and the amount of Rs 2,500 only was realized by selling the scraps. It was not insured. On 20.10.2003, a second hand plant was purchased for Rs 75,000 and a further sum of Rs 7,500 was spent for repairs and Rs 2,500 on its erection. It came into use on 15.11.2003. Depreciation has been provided @ 10% on the original cost annually on 31st December. It was the practice to provide depreciation for full year on all acquisitions made at any time during the year and to ignore the depreciation on any time sold during the year.

In December 2003, it is decided to change the method of depreciation and to follow the rate of 15% on diminishing balance method with retrospective effect in respect of the existing items of plant and to make necessary adjustments on 31.12.2003.

(i) Closing balance in Plant A/c = ______.
a. Rs 1,40,000 b. Rs 1,50,000 c. Rs 1,60,000 d. Rs 1,70,000
(ii) Closing balance in Provision for Depreciation A/c = ______.
a. Rs 30,788 b. Rs 25,788 c. Rs 20,788 d. Rs 15,788
(iii) Profit / Loss on Plant sold = ______.
a. Rs 71,500 (Profit) b. Rs 71,500 (Loss) c. Rs 81,500 (Profit) d. Rs 81,500 (Loss)
(iv) Depreciation over / under charged = ______.
a. Rs 8,288 (Under) b. Rs 8,288 (Over) c. Rs 9,288 (Under) d. Rs 9,288 (Over)

Ans. (i) As the provision for depreciation A/c method is followed for recording the depreciation, the balance in Plant A/c will be the original cost of Assets purchased in 2002 and 2003 i.e. Plant Account Balance = Rs. (65000 + RS. 85000) = Rs. 150000 Hence the correct option: b

(ii) Closing Balance in Depreciation account can be found as follows:

Dr	Provision for Deprecia	tion A/c			Cr
Date	Particulars	Amount	Date	Particulars	Amount
			31.12.2001	By Depreciation A/c (P1)	15,750
31.12.2001	To Balance C/d	15,750			
		15,750			15,750
			01.01.2002	By Balance b/d	15,750
			31.12.2002	By Depreciation (P1)	13,388
				By Depreciation (P2)	9,750
31.12.2002	To Balance C/d	38,888			
		38,888			38,888
			01.01.2003	By Balance b/d	38,888
02.10.2003	To Asset Disposal A/c	29,138			
			31.12.2003	By Depreciation (P2)	8,288
				By Depreciation (P3)	12,750
31.12.2003	To Balance C/d	30,788			
		59,926			59,926

Hence the correct option: a

(iii) Profit/Loss on Disposal = Original Cost of Asset – Depreciation under SLM – Scrap Value
 = 105000 – (10500 x 2) - 2500
 = Rs. 81500 Loss

Hence the correct option: d

(iv) Over / Under charge of Depreciation:Depreciation that would have been charged under new method (WDV)

Depreciation on Plant 1 under WDV	29,138
Depreciation on Plant 2 under WDV	9,750
Total Depreciation under WDV	38,888
Depreciation charged under old method (SLM)	
Plant 1 (Rs. 105000 x 10%) x 2	21,000
Plant 2 (Rs. 65000 x 10%) x 1 Year	6,500
Total Depreciation under WDV	27,500
Net Depreciation under charged	11,388
The answer does not match with any of the given	options.

15. Glass, Cutlery etc. : Balance on 01.01.2004 is Rs 28,000. Glass, Cutlery, etc. purchased during the year Rs 16,000. Depreciation is to be charged on the above assets as follows -1/5th of their values is to be written off in the year of purchase and 2/5th in each of the next 2 years. Of the stock of Glass, Cutlery, etc. as on 01.01.2004, 1/2 was one year old and ¹/₂ was 2 years old. Purchases are made on 1st January.

-: 15 :-

- (i) Depreciation for 3rd year = _____ c. Rs 20,200 a. Rs 7,000 b. Rs 17,500 d. Rs 24,200
- (ii) Closing Balance in Glass, Cutlery A/c = _____.
 - a. Rs 18,000 b. Rs 18,500

c. Rs 19,800 d. Rs 20,400

Ans.

Particulars	1 st Year	2 nd Year	3 rd year
Glass Cutlery 2 year old			14000
Glass Cutlery 1 year old		14000	
Glass Cutlery Purchased on 01.01.04	16000		
Depreciation on Above	1/5 of 16000	2/5 of 17500	2/5 of 35000
Depreciation Amount	3200	7000	14000
Total Depreciation	24,200		

The balance in Glass Cutlery A/c = Opening balance + Purchases during the year – Depreciation for the year

- = 28,000 + 16,000 24,200 = 19,800
- Hence the correct option: d (i)
- Hence the correct option: c (ii)

- -: 16 :-
- 1. Which of the following is correct? Depreciable assets are those assets which
 - a. Are expected to be used for more than 1 accounting period
 - b. Have a limited useful life
 - c. Are held for use in production of goods and services (*i.e. for the purpose of re-sale*)
 - d. None of the above
- **Ans.** Depreciable assets are held for the use in production of goods and services and NOT for the purpose of resale in ordinary course of business. These assets have limited useful life which is normally more than 1 year.

Hence the options: a, b & c.

Please note that in the option c - (i.e. for the purpose of re-sale) may please be read as (i.e. NOT for the purpose of re-sale).

- 2. Which of the following is of a capital nature?
 - (a) Purchase of a truck
 - (b) Cost of repair
 - (c) Wages paid for installation of machinery
 - (d) Road tax paid
- **Ans.** Purchase of truck is of capital nature. Also, the wages paid for installation of machinery is to be capitalized as a cost of the machinery.

Cost of repairs and road tax are the expenses of revenue nature.

Hence the options: a & c

- 3. In which of the following methods, the cost of the asset is not spread over in equal proportion during its useful economic life?
 - (a) Straight line method
 - (b) Written down value method
 - (c) Units-of-production method
 - (d) All of the above
- Ans. Of the given options, the amount of depreciation remains same year on year only in the case of SLM. Hence the options: b, c & d
- 4. Which of the following statements is false?
 - (a) Depreciation provision is of the discretion of the management
 - (b) Depreciation is a charge against profit
 - (c) Depreciation is provided only when there is profit
 - (d) Depreciation is an appropriation of profit
- Ans. Though the method of depreciation is management's discretion, providing the depreciation is mandatory.

Depreciation is a charge against profit and has to be provided irrespective of profit or otherwise. It is NOT appropriation of profit.

Hence the options: a, c & d.

- 5. Which of the following assets is usually assumed to be **not** depreciating?
 - (a) Land (b) Building (c) Plant (d) Cash
- Ans. Land is usually assumed as a non-depreciating asset.

Also, cash is NOT a depreciable asset.

Hence the correct options: a & d