IND AS – 36
IMPAIRMENT OF ASSETS

(1) SCOPE

This Standard is applicable for the impairment of all assets - except the following:—

(a) Inventories (as it is valued at the lower of cost or NRV as per Ind-AS 2);

(b) contract assets and assets arising from costs to obtain or fulfill a contract that are recognised in accordance with Ind-AS 115, Revenue from contracts with customers;

(c) Deferred tax assets (as covered by Ind-AS 12);

(d) assets arising from employee benefits (see Ind-AS 19 - Employee Benefits); (As per Ind-AS 19, Plan assets are measured a fair value)

(e) Financial assets which are covered by Ind-AS 109 - Impairment of these assets are given in the same Ind-AS;

(f) biological assets related to agricultural activity within the scope of Ind-AS 41 (Agriculture that are measured at fair value less costs to sell - NRV);

(g) deferred acquisition costs, and intangible assets, arising from an insurer's contractual rights under insurance contracts within the scope of Ind-AS 104, Insurance Contracts; and

(h) non-current assets (or disposal groups) classified as held for sale in accordance with Ind-AS 105 - (As per the standard, non-current assets are valued at Book value or NRV whichever is lower)

(2) DEFINITIONS

(a) Impairment Loss

It is the amount by which the carrying amount of an asset exceeds its recoverable amount (**Carrying amount > Recoverable amount**). Impairment loss = Carrying amount - recoverable amount;

Recoverable amount → is higher of → Fair value less costs of disposal OR Value in use

(b) Value in use

It is the **present value of estimated** future cash flows

↓

Arising from

(a) Continuing usage of the asset during its useful life;

+

(b) Sale of asset at the end of its useful life

(c) Fair value

It is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See Ind-AS 113 - Fair Value Measurement)

(d) Costs of disposal

These are incremental (additional) costs directly attributable to the disposal of an asset, excluding finance costs and income-tax expense.

Examples are legal costs, stamp duty and similar transaction taxes, costs of removing the asset, and direct costs to bring an asset into condition for its sale. However, termination benefits to employees (as per Ind-AS 19) and costs associated with reorganising a business following the disposal of an asset are **not direct incremental** costs to dispose of the asset.

(e) Carrying amount (Book value)

Cost of the asset	xxx
Less: Accumulated depreciation/amortisation	xx
Less: Accumulated impairment losses (which were recognised in previous years)	xx
Carrying amount (This should be compared with recoverable amount)	xxx

(3) IMPAIRMENT TESTING

Indicator and Impairment

External Source of Information	Internal Source of Information
(a) Asset's market value has declined significantly more than would be expected as a result of the passage of time or normal use; (because of this fair value less costs of disposal will be reduced)	(a) Obsolescence or Physical damage of an asset;
(b) Significant adverse effects on the technological, market, economic or legal environment in which the entity is operating; e.g. recession, technology obsolescence, ban of products by the government, restrictions because of change in laws, etc.;	(b) The asset becoming idle or Any restructuring activity i.e., as part of the plans to discontinue or restructure an asset may be disposed off before the previously expected date or the asset may not be used in the manner in which it was used - it may affect the cash flows; (But remember once the asset meets the criteria to be classified as held for sale - it will be scoped out of this Ind-AS and governed by Ind-AS 105)

(c) market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially;	(c) Reassessing the useful life of an asset as finite rather than indefinite; (that leads to decrease in cash flows during the limited life and have an impact on value in use and its market value as well)
(d) the carrying amount of the net assets of the reporting entity is more than its market capitalization	(d) The economic performance of an asset is worse than expected;
	(e) Actual net cash flows or operating profit or loss flowing from the asset that are significantly worse than those budgeted; and
	(f) Cash flows for acquiring the asset, or subsequent cash requirements for operating or maintaining it, that are significantly higher than those originally budgeted.

EXCEPTION TO IMPAIRMENT TESTING :

It means the entity should **test for impairment every year irrespective of any indication.**
It is with respect to the following items:

(a) Intangible asset with an indefinite useful life;

(b) Intangible asset not yet available for use (Intangible asset under development);

With respect to (a) & (b) -

- This impairment test may be performed at any time during an annual period, but it should be performed at the same time every year.
- Different intangible assets may be tested for impairment at different times.
- If such an intangible asset [(a) & (b)] was initially recognised during the current annual period, that intangible asset shall be tested for impairment before the end of the current annual period.

(c) Goodwill acquired in a business combination for impairment annually.

(4) RECOGNITION AND MEASUREMENT

Recognition of an impairment loss for an individual asset

If recoverable amount of an asset is less than carrying amount, the impairment loss equal to excess of carrying amount over recoverable amounts is recognized as impairment loss in profit or loss and carrying amount of an asset is reduced to its recoverable amount. The amount of impairment loss to be recognized in profit or loss will differ if asset is carried at historical cost and if carried at revalued price.

If asset is carried at historical cost

Impairment losses will be recognized only when recoverable amount of an asset is less than the carrying amount (historical cost less depreciation)

Amount of impairment loss, which is equal to carrying amount of asset minus recoverable amount, this amount of loss, will be debited to Profit or Loss as an expense.

If asset is carried at revalued amount

If asset is carried at revalued amount the amount of impairment loss is calculated in the same way i.e.:

Carrying amount of Assets minusrecoverable amount

(Which is revalued price less depreciation)

However the recognition of impairment loss shall be as under:

- Impairment loss upto revaluation reserve (surplus) is recognized in other comprehensive income and reduces the revaluation surplus.
- Impairment loss in excess of revaluation surplus balance shall be recognized as an expense in statement of profit and loss.

(5) CASH GENERATING UNIT

Impairment loss for cash generating unit (CGU)

What is cash generating unit - Till this time we have discussed how the impairment loss for an individual asset is determined and recognized. However generally, it becomes difficult to calculate the recoverable amount for an individual asset because cash flows to be derived from individual asset cannot be calculated separately, as this individual asset in itself without the help of other assets cannot generate the cash flows. Therefore for the purpose of

identifying cash flows, asset can be grouped into a smallest unit and such a grouping of assets to facilitate the identification of cash flows gives a new concept of cash generating unit (CGU).

Recoverable amount of CGU

A CGU includes the carrying amount of only those assets which are attributed directly or allocated on a reasonable and consistent basis to it. When assets are grouped for recoverability assessments, it is important to include in the CGU all assets that generate or are used to generate the relevant stream of cash inflows. This might include goodwill or corporate assets at head office.

However a liability is not included in CGU unless the recoverable amount of the CGU cannot be determined without consideration of this liability. This may occur if the disposal of a CGU would require the buyer to assume the liability. Example is decommissioning and restoration liability attached to Property, Plant and Equipment.

In allocating impairment loss as explained above, the carrying amount of an asset should **not be reduced below the highest of:**

(a) its fair value less costs of disposal (if determinable);

(b) its value in use (if determinable); and

(c) zero.

If any particular asset carrying amount becomes zero after impairment, the remaining impairment loss should be allocated to other assets on pro-rata basis as if that asset does not exist.

(6) GOODWILL :

Only acquired goodwill should be recognised in financial statements. Goodwill does not generate cash flows independently, therefore recoverable amount of goodwill as an individual asset cannot be determined.

ONLY for impairment testing, Goodwill acquired in a business combination should be allocated from the date of acquisition to each of the **acquirer's CGUs or group of CGUs, that EXPECT TO GET BENEFIT from the synergies of the combination** irrespective of whether other assets or liabilities of the acquiree are assigned to those units or group of units. (Read again carefully)

One should remember that, this process is only for impairment testing. The entity should decide which CGU or group of CGU is getting the synergy benefit from the

business combination. This involves significant professional judgement at the time of the acquisition (i.e. the acquisition date). It can be allocated to the existing CGUs of the entity before acquisition OR to the new CGUs OR in some proportion.

Purchased goodwill may be related to a single or a group of CGUs.

Each unit or group of units to which the goodwill is so allocated shall:

(a) represent the lowest level within the entity at which the goodwill is **monitored for internal management purposes;** and

(b) **not be larger than an operating segment** as defined by Ind-AS 108, Operating Segments, before aggregation.

If the above two conditions are not satisfied, goodwill should not be allocated such CGU or group of CGU. (remember this - useful at the time of testing for impairment); it means there will be CGUs, for which goodwill is related but the same is not allocated due to the above conditions.

A **'non-arbitrary'** basis for the allocation of goodwill to CGUs (or groups of CGUs) is a matter of judgement depending on facts and circumstances. An example that would be considered 'arbitrary' is allocating goodwill to four individual CGUs on the basis of 25% to each CGU, simply because there are four CGUs. One of the approaches for goodwill allocation is a **relative fair value approach (In the proportion of fair values on the date of acquisition).**

The initial allocation of goodwill should normally take place in the financial year in which acquired. If the **initial allocation** of goodwill acquired in a business combination **cannot be completed before the end of the annual period** in which the business combination is effected, that initial allocation shall be completed before the **end of the first annual period beginning after the acquisition date.**

In accordance with Ind-AS 103 - 'Business Combinations', if the initial accounting for a business combination is determined **only provisionally by the end of the period** in which the combination is effected, the acquirer:

(a) accounts for the combination **using those provisional values**; and

(b) **recognise any adjustments** to those provisional values as a result of completing the initial accounting within the measurement period, which will not exceed **twelve months from the acquisition date.** In this case, the entity should disclose the reason for not allocating.

Testing CGU with goodwill for impairment

The following table explains on when to test the goodwill for impairment L0

Situation	When to test?
When goodwill is **related** to the CGU but **NOT ALLOCATED**	Only when there is an **indication** that it may be impaired;
When goodwill is **ALLOCATED** to the CGU	Test impairment **Annually;** and • Whenever there is an indication that CGU is impaired; **Some important points** • Impairment test can be performed anytime during the year; but it should be at the same time every year; • Different CGUs can be tested at different timings; • If a CGU to which goodwill is allocated, is acquired during the current annual period, it shall be tested for impairment before the end of current annual period;

(7) CORPORATE ASSETS

As defined by the Ind-AS - Corporate assets are assets **other than goodwill** that contribute to the future cash flows of both the CGU under review and other CGUs. Corporate assets include group or divisional assets such as the headquarters building, EDP equipment or a research centre.

Corporate assets do not generate cash inflows independently and their carrying amount **cannot be** fully **attributed to the CGU under review.**

Because corporate assets do not generate separate cash inflows, the recoverable amount of an individual corporate asset cannot be determined unless management has decided to dispose of the asset. As a consequence to the management decision, if there is an indication that a corporate asset may be impaired, recoverable amount is determined for the CGU to which the corporate asset belongs (after allocation of corporate assets to the CGU), compared to the carrying amount of this CGU and any impairment loss is recognised on pro rata basis of corporate assets and other assets of CGU.

Can corporate assets be allocated to CGU on reasonable and consistent basis?

YES	NO
↓	↓
➢ Compare the total carrying amount of CGU along with corporate assets with the recoverable amount;	➢ Compare the carrying amount of CGU (excluding Corporate assets) with its recoverable amount - if any impairment loss - Allocate as usual; goodwill first & remaining on prorate basis;
➢ If there is any impairment loss – If any goodwill allocated to that CGU - Apply the impairment loss first on Goodwill and the remaining loss should be on the assets of CGU (including corporate assets) on prorate basis of its carrying amount;	➢ Identify smallest group of CGUs - to which corporate assets can be allocated on reasonable and consistent basis; and ➢ Compare the carrying amount of CGUs (including corporate assets) with recoverable amount of the group of units. - if any impairment loss Allocate as discussed above;

(8) REVERSAL OF IMPAIRMENT LOSS

An entity should assess on each balance sheet date if impairment loss recognized in prior years for an asset other than goodwill may no longer exist or impairment loss charged earlier has decreased. If there are any indications to this effect the entity should estimate the recoverable amount of that asset, indications may be from:

- External sources
- Internal sources

Topic 1: Reversal of impairment loss in case of INDIVIDUAL ASSET

Was it revalued earlier?

NO ↓	YES ↓
(a) Reverse the impairment loss by recording below JE; **Asset a/c Dr.** **To Impairment loss (P&L)**	(a) Reverse the impairment loss by recording the below JE; **Asset a/c Dr.** **To Revaluation surplus a/c (b/f)** **To impairment loss (P&L)**
(b) Due to reversal of impairment loss - the carrying amount should **NOT exceed what it would have been without impairment loss;** (it means, maximum previously recognised loss can be reversed)	(b) Point (b) remains same;
(c) Such reversal profit should be transferred to P&L;	(c) Credit the P&L to the extent it was debited at the time of impairment loss and the remaining reversal should be credited to revaluation surplus. (d) Increase in revaluation is presented in OCI;

After a reversal of an impairment loss—

Depreciation (amortisation) charge for the asset should be computed **prospectively** i.e. the revised carrying amount after deducting residual value, should be depreciated over the remaining useful life of the asset.

Topic 2: Reversal of impairment loss in case of CGU

A reversal of an impairment loss for a CGU should be allocated to ALL assets in CGU **(other than goodwill) on a pro-rata basis** of the carrying amount;

These increase in carrying amounts should be treated as reversals of impairment losses for individual assets as discussed in above **Topic 1.**

In allocating a reversal of an impairment loss for a CGU, the carrying amount of an asset should not be increased above the **LOWER of:**

(a) its recoverable amount (if determinable); and

(b) normal level of carrying amount as if impairment loss had not been recognised previously;

The amount of the reversal of the impairment loss should be allocated to each asset on a pro rata basis.

Topic 3: Reversal of impairment loss in case of Goodwill

An impairment loss recognised for goodwill **SHALL NOT be reversed** in a subsequent period.

As per Ind-AS 38 - 'Intangible Assets' **prohibits the recognition of internally generated** goodwill. Any increase in the recoverable amount of goodwill in the periods following the recognition of an impairment loss for that goodwill is likely to be an increase in internally generated goodwill, rather than a reversal of the impairment loss recognised for the acquired goodwill.

(9) NON-CONTROLLING INTEREST MEASURED INITIALLY AS A PROPORTIONATE SHARE OF THE NET IDENTIFIABLE ASSETS

As discussed earlier, goodwill acquired in a business combination to be allocated to each of the acquirer's CGU, or groups of CGUs, expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units, or groups of units.

If an entity measures non-controlling interests as **its proportionate interest in the net identifiable assets of a subsidiary at the acquisition date,** (rather than at fair value), goodwill attributable to non-controlling interests is included in the recoverable amount of the related CGU but is not recognised in the parent's consolidated financial statements.

As a consequence, **an entity shall gross up the carrying amount of goodwill allocated to the unit** to include the goodwill attributable to the non-controlling interest. This adjusted carrying amount is then compared with the recoverable amount of the unit to determine whether the CGU is impaired.

If a subsidiary, or part of a subsidiary, with a non-controlling interest is itself a CGU, the impairment loss is allocated between the parent and the non-controlling interest in the same proportion of profit or loss allocation.

Example

Parent acquires an 80% ownership interest in Subsidiary for ₹ 2,100 on 1st April, 2018. At that date, Subsidiary's net identifiable assets have a **fair value** of ₹ 1,500 (100% of the entity). Parent chooses to measure the non-controlling interests as the **proportionate interest of Subsidiary's net identifiable assets** of ₹ 300 (20% of ₹ 1,500). Goodwill of ₹ 900 is the difference between the aggregate of the consideration transferred and the amount of the non-controlling interests (₹ 2,100 (paid for 80%) + ₹ 300 (20% worth)) and the net identifiable assets (₹ 1,500).

In the given case, subsidiary as a whole is considered as a CGU. Based on the synergy benefits available, ₹ 400 is allocated to this subsidiary and ₹ 500 is allocated to other CGUs of the parent. As you know, goodwill allocated to the CGU, it should be tested for impairment every year.

At the end of the financial year, parent determines the recoverable amount of the Subsidiary CGU is ₹ 1,000 (100% entity) and carrying amount of the net assets except goodwill are ₹ 1,350.

Parent company recognised only ₹ 400 goodwill which is related only to its proportion and not related to non-controlling interest portion. Hence, as per the standard, carrying amount of subsidiary is grossed up to include goodwill attributable to the non-controlling interests, before being compared with there coverable amount of₹ 1,000. Goodwill attributable to parent i.e. 80% of share = ₹ 400; So goodwill related to non-controlling interest = ₹ 100; Testing impairment loss of subsidiary as follows:-

	Goodwill of subsidiary	Non-identifiable assets	Total
Carrying amount	400	1,350	1,750
Unrecognised Non-controlling interest	100	-	100
Adjusted carrying amount	500	1,350	1,850
Recoverable amount			1,000
Impairment loss			**850**

Therefore, ₹ 500 of the ₹ 850 impairment loss for the unit is allocated to the goodwill.

In accordance with **paragraph C6 of Appendix C of Ind-AS 36, if the partially-owned subsidiary is itself a CGU, the goodwill impairment loss is allocated to the controlling and non-controlling interests on the same basis as that on which profit or loss is allocated.** In this example, profit or loss is allocated on the basis of relative ownership interests. Because the goodwill is recognised only to the extent of Parent's 80% ownership in Subsidiary, Parent recognises only 80% of that goodwill impairment loss (i.e. ₹ 400).

The remaining impairment loss of₹ 350 is recognised by reducing the carrying amounts of Subsidiary's identifiable assets in the following manner.

	Goodwill of subsidiary	Non-identifiable assets	Total
Carrying amount	400	1,350	1,750
Impairment loss	(400)	(350)	(750)
Carrying amount after impairment loss	-	1,000	1,000

QUESTIONS

Q.1. Elia limited is a manufacturing company which deals in to manufacturing of cold drinks and beverages. It is having various plants across India.

There is a Machinery A in the Baroda plant which is used for the purpose of bottling. There is one more machinery which is Machinery B clubbed with Machinery A. Machinery A can individually have an output and also sold independently in the open market. Machinery B cannot be sold in isolation and without clubbing with Machine A it cannot produce output as well. The Company considers this group of assets as a Cash Generating Unit and an Inventory amounting to 2 Lakh and Goodwill amounting to 1.50 Lakhs is included in such CGU.

Machinery A was purchased on 1st April 2013 for 10 Lakhs and residual value is 50 thousands. Machinery B was purchased on 1st April, 2015 for 5 Lakhs with no residual value. The useful life of both Machine A and B is 10 years. The Company expects following cash flows in the next 5 years pertaining to Machinery A. The incremental borrowing rate of the company is 10%.

Year	Cash Flows from Machinery A
1	1,50,000
2	1,00,000
3	1,00,000
4	1,50,000
5	1,00,000 (excluding Residual Value)
Total	**6,00,000**

On 31st March, 2018, the professional valuers have estimated that the current market value of Machinery A is ₹ 7 lakhs. The valuation fee was ₹ 1 lakh. There is a need to dismantle the machinery before delivering it to the buyer. Dismantling cost is ₹ 1.50 lakhs. Specialised packaging cost would be ₹ 25 thousand and legal fees would be ₹ 75 thousand.

The Inventory has been valued in accordance with Ind AS 2. The recoverable value of CGU is ₹ 10 Lakh as on 31st March, 2018. In the next year, the company has done the assessment of recoverability of the CGU and found that the value of such CGU is ₹ 11 Lakhs ie on 31st March, 2019. The Recoverable value of Machine A is ₹ 4,50,000 and combined Machine A and B is ₹ 7,60,000 as on 31st March, 2019.

Required:

(a) Compute the impairment loss on CGU and carrying value of each asset after charging impairment loss for the year ending 31st March, 2018 by providing all the relevant working notes to arrive at such calculation.

(b) Compute the prospective depreciation for the year 2018-2019 on the above assets.

(c) Compute the carrying value of CGU as at 31st March, 2019. **(May - 2019)**

Q.2. PQR Ltd. is the company which has performed well in the past but one of its major assets, an item of equipment, suffered a significant and unexpected deterioration in performance. Management expects to use the machine for a further four years after 31st March 20X6, but at a reduced level. The equipment will be scrapped after four years. The financial accountant for PQR Ltd. has produced a set of cash-flow projections for the equipment for the next four years, ranging from optimistic to pessimistic. CFO thought that the projections were too conservative, and he intended to use the highest figures each year. These were as follows:

	₹ 000
Year ended 31st March 20X7	276
Year ended 31st March 20X8	192
Year ended 31st March 20X9	120
Year ended 31st March 20Y0	114

The above cash inflows should be assumed to occur on the last day of each financial year. The pre-tax discount rate is 9%. The machine could have been sold at 31st March 20X6 for 6,00,000 and related selling expenses in this regard could have been 96,000. The machine had been re valued previously, and at 31st March 20X6 an amount of 36,000 was held in revaluation surplus in respect of the asset. The carrying value of the asset at 31st March 20X6 was 660,000. The Indian government has indicated that it may compensate the company for any loss in value of the assets up to its recoverable amount.

Calculate impairment loss, if any and revised depreciation of asset. Also suggest how Impairment loss, if any would be set off and how compensation from government be accounted for? **(May - 20)**

Q.3 One of the senior engineers at XYZ has been working on a process to improve manufacturing efficiency and, consequently, reduce manufacturing costs. This is a major project and has the full support of XYZ's board of directors. The senior engineer believes that the cost reductions will exceed the project costs within twenty four months of their implementation. Regulatory testing and health and safety approval was obtained on 1st June 20X5. This removed uncertainties concerning the project, which was finally completed on 20 April 20X6. Costs of ₹ 18,00,000, incurred during the year till 31st March 20X6, have been recognized as an intangible asset. An offer of ₹ 7,80,000 for the new developed technology has been received by potential buyer but it has been rejected by XYZ. Utkarsh believes that the project will be a major success and has the potential to save the company ₹ 12,00,000 in perpetuity. Director of research at XYZ, Neha, who is a qualified electronic engineer, is seriously concerned about the long term prospects of the new process and she is of the opinion that competitors would have developed new technology at some time which would require to replace the new process within four years. She estimates that the present value of future cost savings will be ₹ 9,60,000 over this period. After that, she thinks that there is no certainty about its future. What would be the appropriate accounting treatment of aforesaid issue? **(Nov. - 19)**

Q.4. East Ltd. (East) owns a machine used in the manufacture of steering wheels, which are sold directly to major car manufacturers.

- The machine was purchased on 1st April, 20X1 at a cost of ₹ 500 000 through a vendor financing arrangement on which interest is being charged at the rate of 10 per cent per annum.
- During the year ended 31st March, 20X3, East sold 10 000 steering wheels at a selling price of ₹ 190 per wheel.
- The most recent financial budget approved by East's management, covering the period 1st April, 20X3 – 31st March, 20X8, including that the company expects to sell each steering wheel for ₹ 200 during 20X3-X4, the price rising in later years in line with a forecast inflation of 3 per cent per annum.
- During the year ended 31st March, 20X4, East expects to sell 10 000 steering wheels. The number is forecast to increase by 5 per cent each year until 31st March, 20X8.
- East estimates that each steering wheel costs ₹ 160 to manufacture, which includes ₹ 110 variable costs, ₹ 30 share of fixed overheads and 20 transport costs.

- Costs are expected to rise by 1 per cent during 20X4-X5, and then by 2 per cent per annum until 31st March, 20X8.
- During 20X5-X6, the machine will be subject to regular maintenance costing 50,000.
- In 20X3-X4, East expects to invest in new technology costing ₹ 100000. This technology will reduce the variablecosts of manufacturing each steering wheel from ₹ 110 to ₹ 100 and the share of fixed overheads from ₹ 30 to ₹ 15 (subject to the availability of technology, which is still under development).
- East is depreciating the machine using the straight line method over the machine's 10 year estimated useful life. The current estimate (based on similar assets that have reached the end of their useful lives) of the disposal proceeds from selling the machine is ₹ 80,000 net of disposal costs. East expects to dispose of the machine at the end of March, 20X8.
- East has determined a pre-tax discount rate of 8 per cent, which reflects the market's assessment of the time value of money and the risks associated with this asset.

  Assume a tax rate of 30%. What is the value in use of the machine in accordance with Ind AS 36? **(Nov. - 19)**

Q.5. The UK entity with a sterling functional currency has a property located in US, which was acquired at a cost of US$ 1.8 million when the exchange rate was £1 = US$ 1.60. The property is carried at cost. At the balance sheet date, the recoverable amount of the property (as a result of an impairment review) amounted to US$ 1.62 million, when the exchange rate £1 = US$ 1.80. Compute the amount which is to be reported in Profit & Loss of UK entity as a result of impairment, if any. Ignore depreciation. Also analyse the total impairment loss on account of change in value due to impairment component and exchange component. **(Nov. - 20)**