

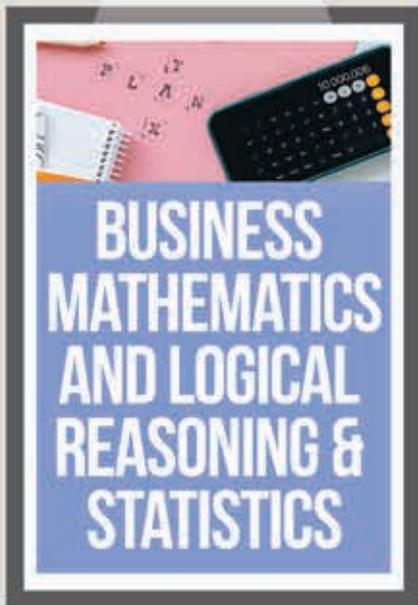


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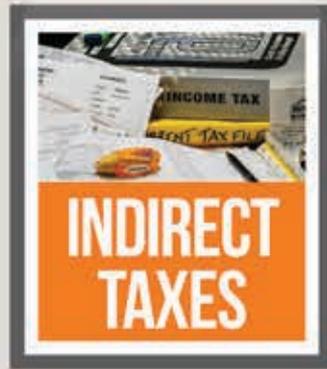
# The Chartered Accountant **STUDENT**

Your monthly guide to CA news, information and events

Foundation



Intermediate



Final



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### Correspondence with regard to advertising and writing articles

Email: writesj@icai.in

### Non-receipt of Students' Journal

Email: nosj@icai.in

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### Office

Board of Studies, The Institute of Chartered, Accountants of India, ICAI Bhawan, A-29, Sector-62, Noida-201 309. Phone : 0120-3045907

### Head Office

The Institute of Chartered Accountants of India, ICAI Bhawan, Indraprastha Marg, New Delhi-110 104.

### Editorial Support

Dr. Ruchi Agarwal, Assistant Secretary  
 Ms. Taruna Kohli, Assistant Secretary

**EDITOR: CA. JAY CHHAIRA**

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**SWACHH BHARAT - A STEP TOWARDS CLEANLINESS**



My Dear Students,

I greet you all on the momentous occasion of our great nation India's 75<sup>th</sup> Independence Day on August 15, 2021. Our heart fills with pride, reverence and nationalism as we reminisce the noble sacrifices of the innumerable freedom fighters. Just two years after the hard-earned independence, our institute came into existence with an objective to regulate the accountancy profession and help the fledgling economy during its evolution. Since then, ICAI has always upheld national interest, contributed in nation building throughout the past seven decades and continues to endeavour towards strengthening the nation. We are indeed proud of the legacy left by our predecessors that inspires us to strive towards ushering the nation into the coveted league of 5 trillion economies.

## CA Day Celebrations 2021

On the auspicious occasion of CA Day on July 1 this year, a 3-day Virtual CA programme on the theme '**Remembering the Glorious Existence and Envisioning the Future**' was organised, from June 29 to July 1, 2021 comprising sessions by eminent speakers sharing their rich experience that covered the entire gamut of myriad contributions that the profession is making towards the society.

The 'CA Day' main function on July 1, 2021 witnessed the benign presence of **Chief Guest Hon'ble Minister of Commerce and Industry CA. Piyush Goyal** who, in his thought provoking address, urged upon the fraternity to think big and scale up to the global levels. He added that in the next 2 years, when the ICAI turns 75, we must look at having our own first set of global world class chartered accountancy firms, serving clients worldwide. He also emphasised upon the significance of active engagement with the start-up ecosystem for sustainable growth. Lauding the profession, he highlighted that the institute continues to deliver the onerous responsibilities to serve the economy, carrying out professional duties and imparting quality accounting education. He remarked that the ICAI should reflect the highest standards of Integrity, Commitment, Accountability, and Intellect.

Delivering the keynote address on '**Post Covid Scenario: Roadmap for growth' recovery**, renowned senior advocate **Shri Harish N. Salve**, attributed the pandemic to the growing **Urban Decay**, and stressed upon implementation of stringent town planning laws. He further emphasised upon long term planning, spanning the next 3 to 10 years to completely neutralise the ill effects of the pandemic. He highlighted the business sectors/industries of utmost relevance viz. healthcare services, infrastructure, insurance, equipment and instruments, pharmaceuticals, biotechnology, virtual communication technology and e-commerce and retail.

Drawing curtains to the three day celebrations, in another keynote address, the **Vaccine Man of India**, creator of India's own **indigenous Covid vaccine, Covaxin** and CEO of **Bharat Biotech Dr. Krishna Ella** spoke about '**India's ability in developing as world Health Capital**'. He proudly proclaimed that India is an innovator and not just manufacturer of generic medicine. He

assured that currently available vaccines in India are effective in neutralising all known variants of the Covid virus and that the pandemic will be contained in the next 5-6 months. He urged everyone to be optimistic about the future and reiterated that by next year the economy will be back to the growth path.

During the programme, ICAI launched **Financial & Tax Literacy Drive** to educate the common man about financial planning and tax related matters. A dedicated multilingual portal "[www.VitiyaGyan.icaai.org](http://www.VitiyaGyan.icaai.org)" was also launched in 9 vernacular languages.

Earlier in the day, after the customary Flag Hoisting in the ICAI headquarters, we launched Mega Tree Plantation Drive through the august hands of **Shri Arjun Ram Meghwal, Hon'ble Minister of State for Parliamentary Affairs, Heavy Industries and Public Enterprises**. In our continuous efforts towards sustainable future, the Institute plans to plant 10 lakh trees during the year through its network, members and students. Accordingly, the Regional Councils and Branches of ICAI from all over India also joined in the launch ceremony by planting trees at their respective place.

In the sessions organised on 29<sup>th</sup>-30<sup>th</sup> June, 2021 topics of pertinent importance such as Sustainable Development Goals, Sustainability Reporting Maturity Model, Opportunities for CAs in Sustainability Reporting and Assurance, Emerging Technologies and opportunities for CAs, Cyber Security, Forensic Accounting & Investigations, CA as Vitiya Mitra in Nation Building, CSR to Individual Social Responsibility, Global Minimum Alternate Tax and Startups: Journey of Ideation to Execution were addressed by galaxy of eminent speakers. The complete three-day programme is now available at the ICAI Youtube channel. In case you missed the event, you can view it at your own convenience.

## Fee Waiver

In order to extend a helping hand in times of need and offering financial relief to our students who have lost either or both parent/s to Covid-19 pandemic, the waiver of fee was announced on July 1, 2021. Complete registration fee for the CA Course (all levels) including ICITSS (Information Technology Course (IT) and Orientation Course (OC) and AICITSS (Advanced Information Technology course (Advanced IT) and Management and Communication Skills (MCS)) has been exempted. Such students will have to submit the requisite documents at the time of registration.

## 'ICAI, BOS' Mobile App: Delivering through Technology

It is a matter of delight that the mobile app launched on the CA Day July 1, 2021 has become popular amongst our students in a short span of time. I am sure that the application is delivering up to the expectations of our students. With several new features already under development, it will soon become the most accessed tool by all the students that will provide instant solution for all their queries/problems.

## Capsule contents

Current issue comprises inclusive capsules for **Business Mathematics and Logical Reasoning & Statistics in Foundation, Indirect Taxes in Intermediate and Financial Reporting in CA Final**. These capsules provide summarised details of the subject matter, appropriate for revision purposes.

The great thinker and philosopher **Socrates** said: "**The secret of change is to focus your energy, not on fighting the old but building the new.**" So, work on your present to build your future!

All the Best,

**CA. Nihar N Jambusaria**  
PRESIDENT, ICAI



**My Dear Students,**

*"The advancement and diffusion of knowledge is the only guardian of true liberty."*

*- James Madison*

As our beloved nation marks its 75<sup>th</sup> Independence Day on August 15, 2021, I feel proud to reminisce the rise of our country just like a phoenix in the past few decades. The occasion reminds us of the sacrifices made by the great Indian leaders and the enormous efforts made by them. The growth and advancement earned over the years, signifies the benefits of democratic leadership and parliamentary system bestowed upon us by our forefathers.

The Accountancy profession has been mindful of the necessity to consistently upskill and update the knowledge and skill sets of its incumbents. The profession has always contributed immensely towards the objective of nation building and has been a true companion in turbulent times. We shall carry forward this practice in the years to come.

I can very well understand the anxiety experienced, while waiting for the results. I am sure that many of you would have fared well in the examinations and would succeed with flying colours. However, in case some of you do not fare well, I would advise not to lose heart and start your preparations again and refresh your subjects.

The Institute has always been very proactive in its approach and initiatives towards the professional growth of our students. I advise the students to make the optimum use of all the opportunities and facilities being provided and keep growing.

### **Board of Studies: Committed to your success**

The BoS has been striving to not only enhance the existing knowledge resources and services but also introducing new initiatives from time to time to ensure that our students always stay ahead of the learning curve. Would like to share some of the important developments:

- The Board of Studies (A), ICAI launched mobile application "ICAI BOS" for all levels on the CA Day 1<sup>st</sup> July 2021. Currently, over 90,000 students have downloaded the Mobile App and count is on the rise everyday. Students are utilising the mobile app and all the available educational contents of BoS at the click of a button. Presently, the mobile app is available for android users. Furthermore, the Board will shortly come up with "ICAI BOS" mobile application for iOS users with additional features such as 'Ask Your Query'.

- The on-going **Free Virtual Coaching Classes** is one initiative that has positively engaged our students at all levels, across all locations within India and beyond, exhorting them to study regularly, utilising their time productively, and learning newer concepts every day. These classes have been instrumental in connecting students in rural areas with the mainstream, providing them equal learning opportunity and thus creating knowledge parity amongst students.

The Board has started **CA Foundation Live Coaching classes from 12<sup>th</sup> July 2021** for the attempt of November 2021 exams. These classes are available on mobile app and students are benefiting from these classes. Students can also clear their doubts in live classes and get benefits of uninterrupted live streaming videos, notes, learning materials, etc.

It is heartening to note that most of you are sincerely attending the sessions and participating actively. The same is evident from your appreciating remarks and feedback given. I urge you to encourage your peers to attend these classes and hope that many more students will join and get the benefits.

- On the educational front, the new Committee for Review of Education and Training (CRET) has been established this year to study the existing scheme of education and practical training and identify the modifications required in the context of global economic environment, technology and policies of the Government.

The pandemic has made us face many challenges. The Institute is committed to working towards converting every challenge into an opportunity and ensuring that the students can take full advantages of opportunities in a fast-changing world. I would like to draw your attention that since everything has changed post pandemic, so are the demands of our economy and industry from the skilled professionals like Chartered Accountants. It would be a perfect occasion while waiting for our results, to revisit the concepts and subject areas that you feel you are weak in and gain a good grasp over them. We need to remember that we never have to give up and should pursue our dreams earnestly.

*"Many of life's failures are people who did not realize how close they were to success when they gave up."*

*- Thomas Edison*

Wish you all the best for your future endeavours.

Stay Safe, Stay Healthy

Yours sincerely

**CA. (DR.) DEBASHIS MITRA**  
VICE PRESIDENT, ICAI



**My Dear Students,**

I would like to convey my greetings to you and every citizen of India for our 75<sup>th</sup> Independence Day, a national festival celebrated on August 15 with much fanfare. Close on the heels of independence, our beloved institute, since its inception in 1949, helped our nation attain economic independence. Over the years, it has contributed in the development of our economy. It has further been a catalyst for entrepreneurial revolution, thus helping in not just creating wealth but employment opportunities across all spheres from large to medium and even small scale businesses. We are proud of the contributions of our alma mater ICAI and our esteemed member fraternity for having worked shoulder to shoulder with industrial stakeholders and the exchequer in framing policies and provisions with respect to many an economic reform such as **Company Law, Insolvency & Bankruptcy Code and GST** touted to be the biggest Indirect Tax reform. They continue to strive to bring about amendments in the provisions as per requirements, at the same time ensuring their uniform and universal implementation leading to inclusive growth to strengthen the economy. Thus, rightfully earning the sobriquet *'Partners in Nation Building'*.

As budding, new-age accountants, you have a profound role to play, to help accelerate the economy and chart the growth path for the future. For most of you who recently appeared for the July 2021 examination, it is time to plan ahead. While the students who appeared in CA Intermediate now have the time to register and complete ICITSS to join articleship at the earliest, those of you who are already in the third year of articleship can now enrol for AICITSS. Simultaneously, you can start preparations for the May 2022 Final. I advise you to join the on-going Live Coaching Classes like scores of your peers who are already benefiting from the sessions. The ones who appeared for CA Final must prepare ahead for the tremendous transition of joining the profession.

### Board of Studies: Harnessing technology for student empowerment

We at BoS are committed to your growth by not only striving to improve the existing knowledge resources and services network but also introducing new initiatives in an incremental manner to develop an ecosystem most conducive to learning. Some of our recent and upcoming initiatives are:

- **Free Live Coaching Classes for CA Foundation, November 2021 examination:** With an objective to engage the young aspirants who have just finished school, these classes have been organized from July 12, 2021. Being rendered by competent faculty, the classes will cover the entire syllabus and support aspirants across the nation and even abroad, in their preparation. These will be instrumental in connecting students in mofussil areas with the mainstream, providing equitable learning opportunities thereby, breaking the knowledge barrier.

- **Mobile App 'ICAI BOS':** It gives me immense pleasure to announce that the recently launched application has been very well received by the entire student fraternity. The application is touted to be a *one stop study station* as well as single window to access status information. It is heartening to note that more than **90,000** students and growing are already drawing benefits, connecting to the BoS through its numerous applications, foremost amongst those are the learning resources like the on-going Live Coaching Classes, and recorded lectures. After each live session for all the levels, the subject faculty uploads MCQs based on the topics/contents taught. These are readily available for regular practice and the compiled question bank can be utilised later for revision. I exhort you to attempt these regularly to assess your concept clarity, identify and fill the learning gaps to improve your overall score. We are already working towards adding more features such as *'Ask your Query'* to enrich your experience. I urge you to encourage your peers to make use of this App and hope that many more students will join and make this initiative a tremendous success.
- **Practical Training Modules:** In order to bridge/reconcile the knowledge differential created amongst our students pursuing articleship in CA firms on the basis of core area, scale/size of the firm, clientele, location etc., the BoS is working to commence live classes in the core areas of **audit, accounting, law, taxation and finance**. These classes to be held during the weekends will be organized for students undergoing articleship or practical training in all the 3 years of training. This aims at imparting uniform training to our students to ensure that they achieve the minimum level of knowledge in all the significant areas to make a smooth transition into the profession. Details will be announced shortly.

### Subject Capsules

This issue comprises inclusive subject capsules on **Business Mathematics and Logical Reasoning & Statistics for CA Foundation, Indirect Taxes for Intermediate and Financial Reporting for Final**. These provide vital concepts succinctly presented in a lucid and illustrative manner for easy comprehension and revision.

As students of this coveted course, you must remember that you need to be committed, consistent and conscientious. ***Commitment is what you promise to yourself; Being consistent is making efforts day in and day out towards your goal; To be conscientious is to do everything with great care and attention.***

Inculcate these into your personality. Whenever you look back, you will be glad for the effort that you put into yourself!

Best Wishes,

**CA. JAY CHHAIRA**  
CHAIRMAN, BOARD OF STUDIES (ACADEMIC)

## DEVELOPMENTS IN TAXATION OF CHARITABLE & RELIGIOUS INSTITUTIONS



**Arsh Gupta**  
ICAI Student Reg.No. CRO0632537

It would not be an overstatement to say that revolutionary steps have been taken by the Government through a series of significant amendments in the taxation of "Charitable & Religious Institutions" (hereinafter referred as 'Institutions'), especially in the last few years. Amendments were undertaken on the basis of outcomes of various Income-tax proceedings, supported by the undermentioned recommendations & suggestions of Comptroller and Auditor General of India (CAG). CAG in its reports highlighted various issues relating to taxation of these Institutions. Certain recommendations made by CAG are as under:

**CAG Audit Report (20 of 2013) -**  
Performance Audit of Exemptions to Charitable Trusts and Institutions of Union Government, Direct Taxes

Recommended to -

- Make PAN a requisite condition for registration
- Streamline treatment of depreciation, deficit and repayment of loans
- Ensure Compliance of TDS by these Institutions.
- Issue instructions to verify 80G donations
- Bring suitable changes in Forms

**CAG Audit Report (27 of 2017) -**  
Assessment of Private Hospitals, Nursing Homes/Medical Clinics, Medical Colleges/Research, etc.

Recommended to -

- Prescribe parameters for assessment of private hospital trusts for granting exemptions.
- Introduce automatic generation of 80G certificates

With a view to streamlining the provisions relating to taxation of the Institutions, strengthening the compliance mechanism, enhancing transparency and accountability, significant amendments have been made in the related Income-tax provisions.

Following are certain noteworthy amendments:

Finance Act	Amendments
2016	115TD - Exit tax on accreted income w.e.f. 01.06.2016
2017	Mandatory re-registration upon modification in objects w.e.f. 01.04.2018
	Filing of ROI within due date as per section 139(4A) for claiming exemption w.e.f. 01.04.2018
	Restriction on Corpus donation given to other institutions w.e.f. 01.04.2018
	Cash Donations more than Rs. 2000 not eligible for 80G deduction w.e.f. 01.04.2018 (Earlier the said limit was Rs. 10,000)

2018	Applicability of section 40(a)(ia) & 40A(3) w.e.f. 01.04.2019
2019	Procedure for registration and cancellation of registration provided under section 12AA amended. Also applicable to Institutions referred under section 10(23C) w.e.f. 01.09.2019.
2020	Re-registration/New Registration scheme applicable w.e.f. 01.04.2021 - u/s10(23C), 12AB, 80G
	If the Institution gets approval under section 10(23C) or 10(46), the registration granted under section 12AA becomes inoperative, w.e.f. 01.06.2020.
2021	New Compliance form for filing annual return for donations received u/s 80G w.e.f. 01.04.2021 (section 80G(5)(viii), Rule 18AB)
	Application out of corpus not treated as application of income w.e.f. 01.04.2021.
	Repayment of loan to be treated as application of income w.e.f. 01.04.2021.
	No carry forward and set off of excess application w.e.f. 01.04.2021.
	Corpus donations to be invested in section 11(5) modes to claim exemption w.e.f. 01.04.2021.

**Let us understand the basics of taxation of these Institutions:**

Income-tax Act, 1961 (Act), provides tax exemption to the Institutions engaged in charitable or religious activities subject to fulfilment of conditions prescribed under sections 11, 12 and 13 of the Act. **Following conditions are to be complied:**

1. Institution is registered u/s 12AA or w.e.f. 1.4.2021 u/s 12AB
2. Application of income to the tune of 85%
3. Audit Report is furnished in Form 10B
4. Return of Income is furnished as per section 139(4A)

**Application of income to the tune of 85% i.e. 'The Main Condition'**

Income derived from property held under trust and voluntary contributions should be applied to the extent of 85% in charitable or religious purposes in India. Any amount lesser than 85% shall be included in Total Income for computation of tax.

**In this article, we will analyse the rationality of certain core amendments and also try to explore the best way of application of income, within four corners of the law.**

1. **Excess application of income in previous years** is now not allowed to be set off against the income. (*Amendment brought in 2021 by way of an explanation*) – Let us understand with the help of an example:

Particulars		Amount (Rs. in Lacs)
<b>A.Y. 2020-21</b>		
Income		100
Expenses		500
<b>Excess Application</b>	<b>A</b>	<b>400</b>
<b>Taxable Income</b>		<b>0</b>
<b>A.Y. 2021-22</b>		
Income		300
Expenses		0
Previous Years Excess Application – A		400
Considered as application of income		300
<b>Balance of Excess Application of Previous Years</b>	<b>B</b>	<b>100</b>
<b>Taxable Income</b>		<b>0</b>
<b>A.Y. 2022-23</b>		
Income		300
Expenses		0
Previous Years Balance of Excess Application – B (Due to amendment – No set off allowed)		100
<b>Considered as application of income</b>		<b>0</b>
<b>Taxable Income</b>		<b>300</b>

**2. Repayment of Loan to be considered as application of income** - Earlier, many Institutions used to claim both expenses (capital expenses) and repayment of borrowing (raised for the said expenses), as application of income. However, now, if expenditure is incurred out of loan taken, the same can be considered as application of income only on repayment of loan. *(Amendment brought in 2021)*

**ADVANCE BUDGETING AND PLANNING FOR CAPITAL EXPENSES – A STEP FORWARD w.r.t above two amendments:**

The Institutions need to restructure the existing planning and budgeting methodologies and align the same with Income-tax Act, to ensure continual availment of exemption benefits.

**For Eg. (Ignoring the Concept of Mutuality)** Gokuldham Society is planning a capital expenditure of Rs.1 crore. The total income generated by the Society in that financial year is Rs. 30 lacs only. If the Society undertake capital expenditure of Rs. 1 crore in single financial year only, then, excess of expenditure of Rs. 70 lacs shall never be available to the society as application of funds.

**Recommended course of action:**

a) Gokuldham Society can take a loan of Rs. 70 lacs and use Rs. 30 lacs from own funds. In this case, repayment of loan can be claimed as application of income in the subsequent years by the Society. The interest on loan can also be claimed as application of income.

**But, if members of the society are reluctant in taking loan, then, is there any other remedy available?**

**Yes, below mentioned amendment can be suggested to Society, as a tool for deferment of application of income:**

b) **Either Capital Expense or Depreciation** - If acquisition of any asset has been claimed as application of income, then, the assessee cannot claim depreciation on such asset and vice-versa. [refer section 11(6)]. The Institutions have asset-wise option to claim either capital expense or depreciation as application of

income, as provided in section 11(6).

*Therefore, in this case, Gokuldham Society can avail depreciation for the capital expense of Rs. 1 crore, which can be claimed as application of income for subsequent financial years over the useful life of asset.*

Earlier, certain institutions claimed both capital expenses and depreciation, which is not possible now.

3. **Accumulation of Income** - If in case the Institution intends to spend the amount in a bigger capital project, then it can set aside or accumulate the income for a maximum of 5 years and the said amount shall be considered as application of income in the previous year it is so accumulated. It should file Form 10 for the same.

The amount so accumulated must be invested in the modes prescribed u/s 11(5). In case of any default mentioned below, the income shall be included in Total Income for taxation purposes.

Clause	Cases of Default	Deemed Income of the year
(a)	If income accumulated is applied for other than charitable or religious purpose.	Previous year in which default is made.
(b)	Ceases to be invested or deposited in the modes specified in section 11(5).	
(c)	Accumulated amount is not utilized in the specified period [not exceeding 5 years] as declared in Form 10 or in the year immediately following the expiry of said period	Will be deemed as income of the previous year immediately following the expiry of said period as declared in Form 10.
(d)	Any income which is accumulated as above, is paid or credited to other trust.	In the previous year in which such income is credited or paid, as the case may be.

4. **Deemed Application of Income** - It is also a possibility that income is accrued but not received by the Institution or could not be spent due to some other reason. Then, such income shall be deemed to be applied, if the Institution has disclosed the same in Form 9A [to be filed before due date of filing ROI u/s 139(4A)]. However, such income has to be applied in the following manner:

If income was not applied due to	Time limit for application
Non-receipt of income	In the previous year of receipt or in the year immediately following the said previous year. <b>For eg.</b> Income accrued but not received in P.Y. 2019-20, was received in P.Y. 2020-21. Then, Income has to be applied in the P.Y. 2020-21 or P.Y. 2021-22.
Other Reason	In subsequent year.

**Certain examples of above situations:**

- Interest on Fixed Deposits (accrued but not received)
- TDS Receivable
- Income received in last week of the year or on last day of the year
- Income received but the project on which it is to be expensed, is

# ARTICLE ||

- not yet finalized
- Bank account seized by Income-tax Authorities

5. **Corpus Donations** - Income in the form of voluntary contributions made with a specific direction that they shall form part of the corpus of the trust or Institution. They shall be 100% exempt, only if, the said amount kept in the mode prescribed u/s 11(5) or utilized for the said purpose, as per the specific direction.

### Application of Income Spent out of Corpus Donation (amendment brought in 2021)

Application for charitable or religious purposes from the corpus fund shall not be treated as application of income.

Such amount not treated as application, or part thereof, shall be treated as application for charitable or religious purposes in the previous year in which the amount, or part thereof, is invested or deposited back, into one or more of the forms or modes specified in section 11(5) maintained specifically for such corpus, from the income of that year and to the extent of such investment or deposit.

#### **Query:**

XYZ Trust received a corpus donation of Rs 25 lacs for construction of building and there are no other receipts. The trust paid off Rs. 5 lacs out of the said corpus fund as salary and the remaining amount was invested in modes specified in section 11(5). What would be the tax implication of the same?

#### **Answer:**

The position here is quite ambiguous, as to whether Rs. 5 lacs will be taxed, or will it be considered as applied on the ground that Institution's only source of funds is corpus donation, received for construction.

*Prima Facie* view suggests that such Rs. 5 lacs shall be taxed in the year of utilisation and it shall be considered as application whenever such amount is ploughed back in the modes specified in section 11(5) maintained specifically for that corpus.

But what if no other income is received by the trust, then assuming that all of the resources of the trust are primarily involved in construction alone, the same should be considered as applied and therefore should be completely exempt.

6. **Amount paid or credited to trust registered u/s 12AA or trust or fund or institutions and others referred u/s 10(23C) out of the current year income**

(Amendment brought in 2017 & 2020)

CASE	TREATMENT
Donated as Voluntary Contribution	Will be treated as application of income
Donated for utilization for specific purpose being <b>Corpus Donation</b>	Will <b>not be treated</b> as application of income

7. **Applicability of sections 40(a)(ia), 40A(3), 40A(3A) mutatis mutandis on the Institutions.**

(Amendment brought in 2018)

Any violation of TDS provisions or excess cash payments than specified limits shall lead to disallowances of expenses and would lead to reduced application of income.

### **NEW ERA of Charitable Institution – Demanding Systematic Corporate Governance**

The increased complexities involved in the accounting and taxation requires institutions to adopt good governance practices.

In the series of amendments, one can expect more amendments in future, in taxation of these Institutions, like:

1. Introduction of concept of rating the charity institutions on the basis of performance (many countries are already following this practice).
2. More reporting requirements in Form 10B.

Thus, the scheme of taxation of charitable trusts is continually changing on account of the amendments brought in over a period of time, thereby necessitating changes in the manner of investment and application of their income for availing the beneficial regime under the Act.

**Disclaimer: The views expressed or implied in the article are that of the author and may not necessarily represent the views of ICAI.**

# NEWS UPDATES ||

## ECONOMIC UPDATES

- The National Company Law Tribunal (NCLT) has cleared the Kalrock-Jalan plan to revive Jet Airways, while rejecting the consortium's demand for historicity of airport slots. The Naresh Goyal-founded airline was shut down in April 2019 under heavy debt.  
Source: [https://www.business-standard.com/article/companies/jet-airways-resolution-plan-approved-by-nclt-with-riders-121062200702\\_1.html](https://www.business-standard.com/article/companies/jet-airways-resolution-plan-approved-by-nclt-with-riders-121062200702_1.html)
- MCA raises threshold of small and medium companies in updated accounting standards rules companies in updated accounting standards rules.  
Source: <https://mca.gov.in/bin/dms/getdocument?m ds = R K k 4 3 B m g 9 9 k s f V 0 b U G r 6 X A % 2 5 3 D % 2 5 3 D & type = open>
- Growth in 2021 is forecast to be strongest in East and South Asia, and more moderate in Central and Southeast Asia and the Pacific. Prolonged unemployment and disrupted education caused by the

pandemic could have long-term consequences.

Source: <https://www.adb.org/publications/asian-development-outlook-2021>

- It has been decided by RBI that if a Term Deposit (TD) matures and proceeds are unpaid, the amount left unclaimed with the bank shall attract rate of interest as applicable to savings account or the contracted rate of interest on the matured TD, whichever is lower.  
Source: <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/DOMESTICDEPOSITSA3FC0C70AA B34 ADB918679E9B052C210.PDF>
- The Reserve Bank of India (RBI) issued an advisory to banks and other RBI-regulated entities emphasizing the need for preparedness for the transition away from London Interbank Offered Rate (LIBOR)  
Source: <https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/PR50570D9D39CC25848A5AF9CD23A8C7AF869.PDF>

CA FINAL - PAPER 1 - FINANCIAL REPORTING

In a pursuit to provide quality academic inputs to the students to help them in grasping the intricate aspects of the subject, the Board of studies bring forth a crisp and concise capsule on Final new course Paper 1 : Financial Reporting.

The syllabus of this paper covers almost all Indian Accounting Standards. Earlier in July, 2018, May, 2019, August, 2019, October, 2019 and November, 2020 issues, we have covered the concepts on many other Ind AS. For a comprehensive revision of the Ind AS, students should also refer to these capsules along with the amendments notified after their release, if any.

This is part 2 of the sixth capsule in the series of Final Paper 1 : Financial Reporting. Part 1 of the sixth capsule was published in July, 2021 issue of this Journal. In continuation to Part I, this capsule contains remaining concepts of Ind AS 116 : Leases.

Students are advised to refer the study material or bare text of Ind AS 116 for comprehensive study and revision. Under no circumstances, this capsule substitute the detailed study of the material provided by the Board of Studies.

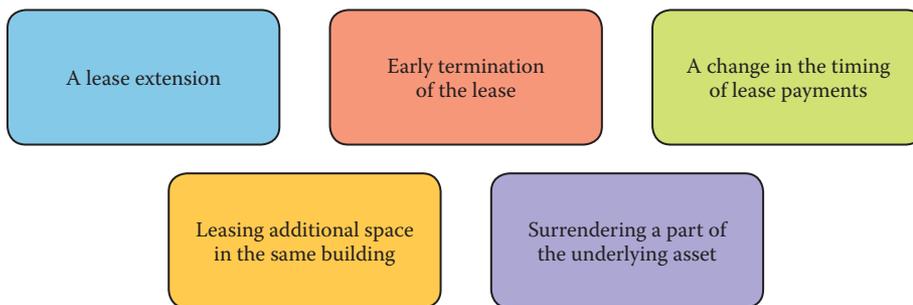
Further, students are advised to enhance their ability to address the issues and solve the problems based on Ind AS by working out the examples, illustrations and questions given in the study material, revision test papers and mock test papers.

INDIAN ACCOUNTING STANDARDS (IND AS) 116 : LEASES - PART II

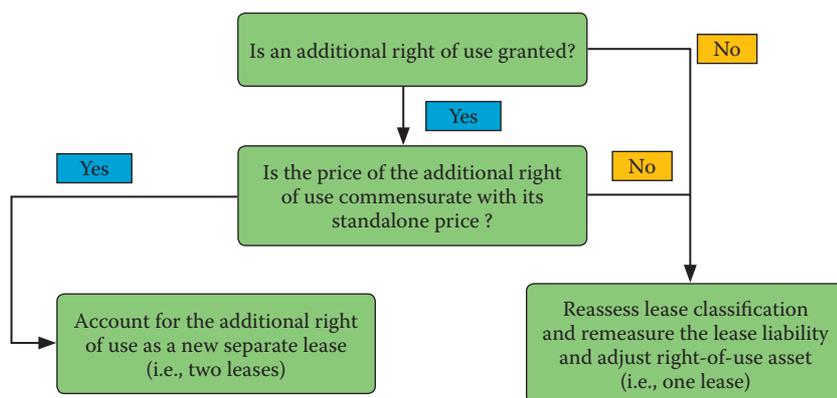
Lease Modifications in the Books of Lessee

A 'lease modification' is a **change** in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease.

Examples of lease modifications that may be negotiated after the lease commencement date:

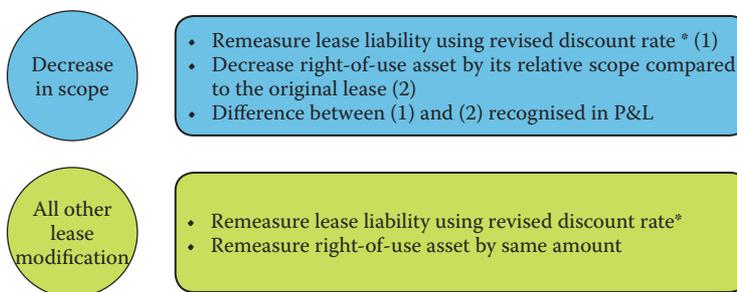


Lessee's Analysis of a Change in Lease



The exercise of an existing purchase or renewal option or a change in the assessment of whether such options are reasonably certain to be exercised are **not lease modifications but can result in the remeasurement** of Lease Liabilities and ROU Assets.

## Accounting Treatment for Lease Modifications that are not Accounted for as Separate Leases



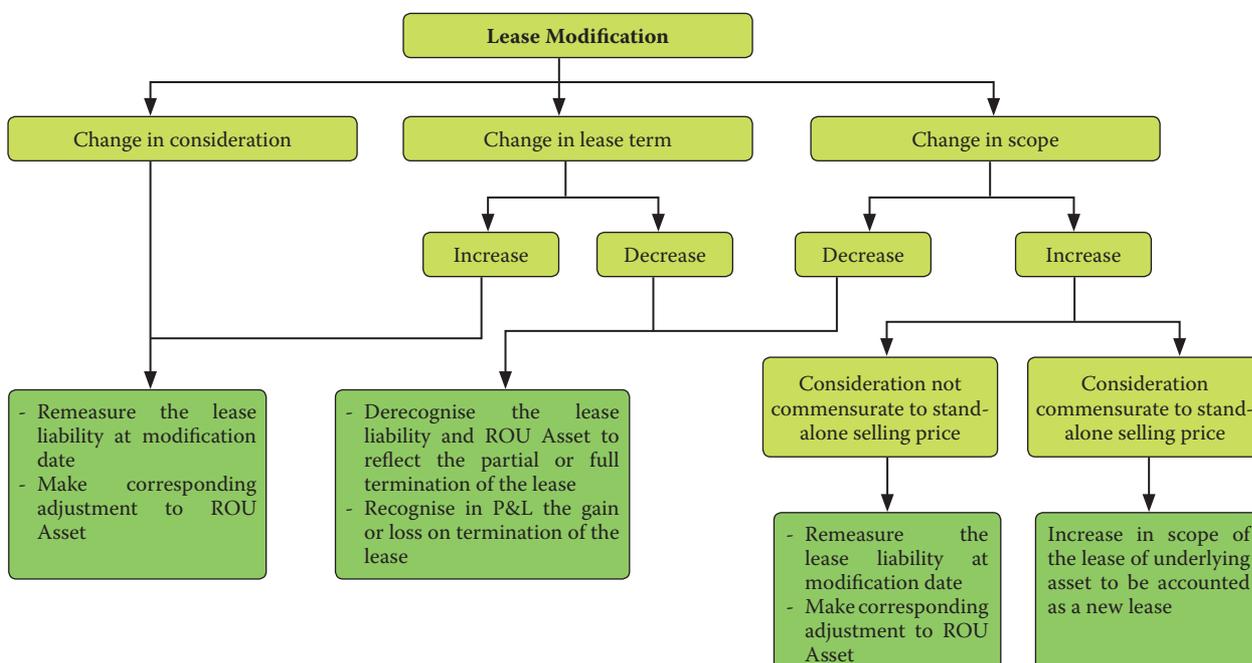
\* The implicit rate in the lease is to be used. If it cannot be readily determined, the incremental rate of borrowing is to be used.

- The re-measurements occur as of the effective date of the lease modification on a prospective basis.
- In some cases, the lessee and lessor may agree to a modification to the lease contract that starts at a later date (i.e., the terms of the modification take effect at a date later than the date when both parties agreed to the modification). This can be understood with the help of a following example:

**Case study:** A lessee enters into a lease arrangement with a lessor to lease an asset for 10 years. At the beginning of year 8, the lessee and lessor agree to a modification to the contract that will take effect from the beginning of year 9.

Scenario 1 (Increase in scope – Not a Separate Lease)	Scenario 2 (Increase in scope – Separate Lease)	Scenario 3 (Decrease in scope)
Lessee will re-allocate the consideration in the modified contract to each of the existing lease and non-lease components and Remeasure the lease liability <b>at the date both parties agreed to the modification</b> (the beginning of year 8).	Lessee will <b>allocate the consideration</b> in the modified contract <b>to each of the existing and new lease and non-lease components</b> at the date both parties agreed to the modification (the beginning of year 8). The lessee will <b>remeasure the lease liability for the existing lease components</b> at that date as well. However, <b>recognition of the lease liability and ROU Asset for any new lease component occurs at the commencement date of the new lease component</b> (the beginning of year 9).	Lessee will <b>re-allocate the consideration</b> in the modified contract <b>to each existing lease and non-lease component</b> and <b>remeasure the lease liability and ROU Asset at the effective date of the modification</b> (the beginning of year 8).

### Summarised Flowchart for Lease Modification in the Books of Lessee:



## Presentation in the Books of Lessee

Balance Sheet	Statement of profit and loss	Statement of cash flows
<p><b>ROU Assets:</b> They are presented either:</p> <ul style="list-style-type: none"> <li>- Separately from other assets (e.g., owned assets) <b>OR</b></li> <li>- Together with other assets as if they were owned, with disclosures of the balance sheet line items that include ROU Assets and their amounts</li> </ul> <p>ROU Assets that meet the definition of investment property are presented as investment property</p> <p><b>Lease Liabilities:</b> They are presented either:</p> <ul style="list-style-type: none"> <li>- Separately from other liabilities <b>OR</b></li> <li>- Together with other liabilities with disclosure of the balance sheet line items that includes lease liabilities and their amounts</li> </ul>	<p><b>Depreciation and Interest:</b> Depreciation on Right of use asset and interest expense accreted on lease liabilities are presented <b>separately</b> (i.e., they <b>CANNOT</b> be combined).</p> <p>This is because interest expense on the lease liability is a component of <b>finance costs</b></p>	<p><b>Principal portion of the lease liability:</b></p> <ul style="list-style-type: none"> <li>- These cash payments are presented within <b>financing activities</b></li> </ul> <p><b>Interest portion of the lease liability:</b></p> <ul style="list-style-type: none"> <li>- These cash payments are presented within <b>financing activities</b></li> </ul> <p><b>Short-term leases and leases of low-value assets:</b></p> <ul style="list-style-type: none"> <li>- Lease payments pertaining to them (i.e., not recognised on the balance sheet as per Ind AS 116) are presented within <b>operating activities</b></li> </ul> <p><b>Variable lease payments not included in the lease liability:</b></p> <ul style="list-style-type: none"> <li>- These are also presented within <b>operating activities</b></li> </ul> <p><b>Non-cash activity:</b> Such activity is disclosed as a supplemental non-cash item (e.g., the initial recognition of the lease at commencement)</p>

## Disclosures in the Books of Lessee

Ind AS 116 requires lessees to present all disclosures in:

- a single note **OR**
- separate section in the financial statements.

Quantitative Disclosure Requirement		
Balance Sheet	Statement of profit and loss	Statement of cash flows
<ul style="list-style-type: none"> <li>- Additions to right-of-use assets</li> <li>- Carrying value of right-of-use assets at the end of the reporting period by class</li> <li>- Maturity analysis of lease liabilities separately from other liabilities based on Ind AS 107 requirements</li> </ul>	<ul style="list-style-type: none"> <li>- Depreciation for assets by class</li> <li>- Interest expense on lease liabilities</li> <li>- Short-term leases expensed*</li> <li>- Low-value leases expensed*</li> <li>- Variable lease payments expensed</li> <li>- Income from subleasing</li> <li>- Gains or losses arising from sale and leaseback transactions</li> </ul>	<ul style="list-style-type: none"> <li>- Total cash outflow for leases</li> </ul>

\* These disclosures need not include leases with lease terms of one month or less.

- All of the above disclosures are required to be presented in tabular format, unless another format is more appropriate.
- The amounts disclosed include costs that a lessee has included in the carrying amount of another asset during the reporting period.
- Other disclosure requirements also include:
  - ▶ Commitments for short-term leases if the current period expense is dissimilar to future commitments.
  - ▶ For right-of-use assets that meet the definition of investment property, the disclosure requirements of Ind AS 40, *Investment Property*, with a few exclusions.
  - ▶ For right-of-use assets where the revaluation model has been applied, the disclosure requirements of Ind AS 16, *Property, Plant and Equipment*.
  - ▶ Entities applying the short-term and / or low-value lease exemptions are required to disclose that fact.

Qualitative Disclosure Requirements
<ul style="list-style-type: none"> <li>- A summary of the nature of the entity's leasing activities;</li> <li>- Potential cash outflows the entity is exposed to that are not included in the measured lease liability:                             <ul style="list-style-type: none"> <li>• Variable lease payments;</li> <li>• Extension options and termination options;</li> <li>• Residual value guarantees;</li> <li>• Leases not yet commenced to which the lessee is committed;</li> <li>• Restrictions or covenants imposed by leases;</li> <li>• Sale and leaseback transaction information.</li> </ul> </li> </ul>

# FINANCIAL REPORTING ||

In providing additional information, lessees are required to consider:

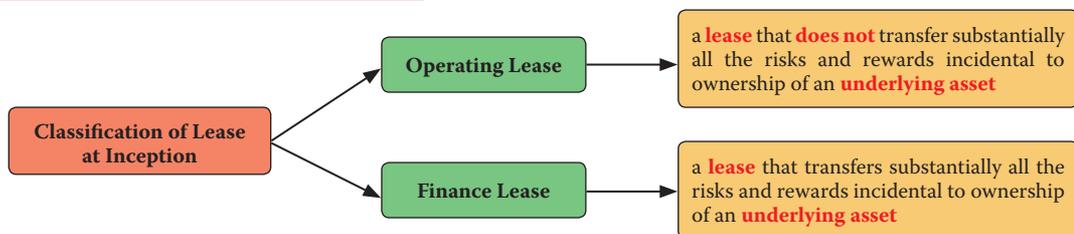
- (a) Whether that information is relevant to the users of the financial statements. The additional information is included **ONLY IF** that information is **expected to be relevant** to users of financial statements. For e.g., this is likely to be relevant if it helps those users to understand:

The flexibility provided by leases	for e.g., a lessee can reduce its exposure by exercising termination options or renewing leases with favourable terms and conditions
Restrictions imposed by leases	for e.g., by requiring the lessee to maintain particular financial ratios
Sensitivity of reported information to key variables	for e.g., future variable lease payments
Deviations from industry practice	for e.g., unusual or unique lease terms and conditions that affect a lessee's lease portfolio
Exposure to other risks arising from leases	

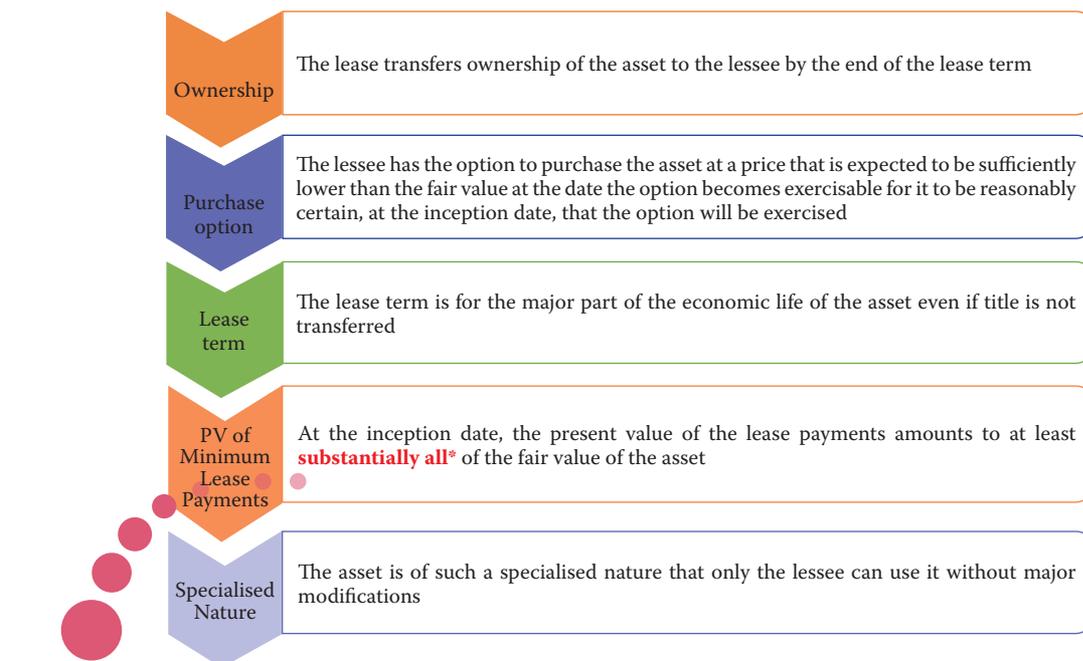
- (b) Whether that information is apparent from information either presented in the primary financial statements or disclosed in the notes.

**Note:** A lessee need not duplicate information that is already presented elsewhere in the financial statements.

## Accounting in the Books of Lessor

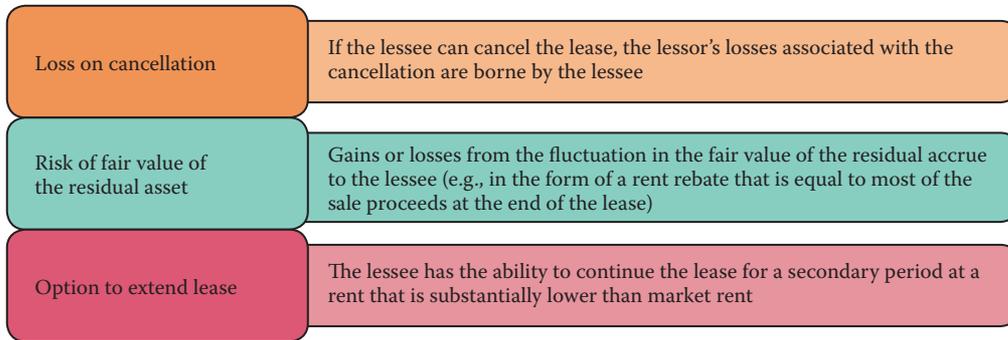


## Examples that Individually, or in Combination, would normally Lead to a Lease being Classified as a FINANCE LEASE



\*The term "substantially all" is not defined in Ind AS 116.

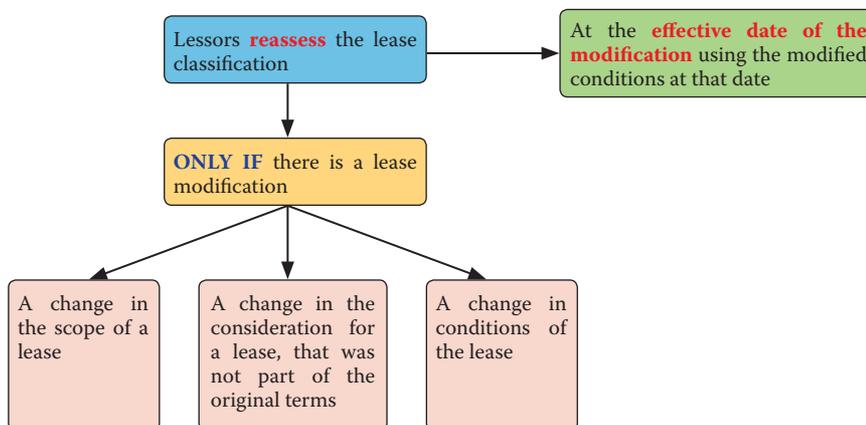
Additionally, Ind AS 116 lists the following indicators of situations that, **individually or in combination**, could also lead to a lease being classified as a **FINANCE LEASE**



## Lease Classification Test for Land and Buildings by the Lessor

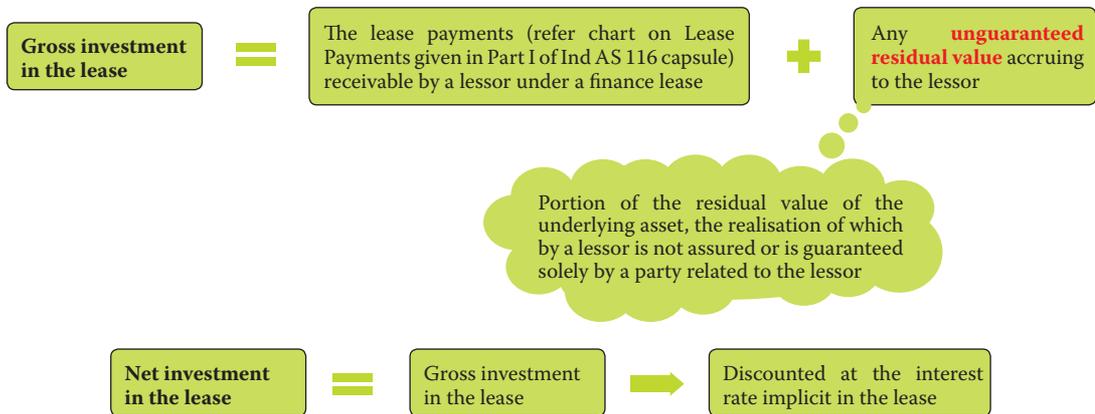
<b>Classification assessment</b>	<ul style="list-style-type: none"> <li>Lessor <b>separately assesses</b> the classification of each element as a finance lease or an operating lease, <b>having fact that land normally has an indefinite economic life</b></li> <li>If the lease payments <b>cannot be allocated reliably</b> between the land and the buildings elements, the <b>entire lease is classified as a finance lease</b></li> <li>If <b>both elements</b> (land and building) of the lease payments <b>are operating leases, the entire lease is classified as an operating lease</b></li> </ul>
<b>Allocation of lease payments</b>	<ul style="list-style-type: none"> <li>Allocate lease payments between the land and the buildings elements <b>in proportion to the relative fair values</b> of the leasehold interests in the land element and buildings element of the lease <b>at the inception date</b></li> </ul>
<b>Single unit - Economic life</b>	<ul style="list-style-type: none"> <li>When the amount for the land element is <b>immaterial</b> to the lease, the lessor may treat the land and buildings as a <b>single unit</b> for the purpose of lease classification and classify it as a finance lease or an operating lease.</li> <li>In such a case, the lessor regards the economic life of the buildings as the economic life of the <b>entire</b> underlying asset</li> </ul>

## Reassessment of Lease Classification by the Lessor



**Note:** If a lease modification results in a separate new lease, that new lease would be classified in the **same manner** as any new lease.

# FINANCIAL REPORTING ||



## Accounting for Initial Direct Costs

By Lessor	
<b>Finance Lease:</b>	<ul style="list-style-type: none"> <li><b>Lessors (other than manufacturer or dealer lessors)</b> are required to include initial direct costs in the initial measurement of their net investment in finance leases and reduce the amount of income recognised over the lease term.</li> <li>The interest rate implicit in the lease is defined in such a way that the initial direct costs are included automatically in the net investment in the lease and they are <b>not added separately</b>.</li> <li>Initial direct costs related to finance leases incurred <b>by manufacturer or dealer lessors are expensed at lease commencement</b>.</li> </ul>
<b>Operating Lease:</b>	<ul style="list-style-type: none"> <li>Ind AS 116 requires lessors <b>to include initial direct costs in the carrying amount of the underlying asset in an operating lease</b>.</li> <li>These initial direct costs are <b>recognised as an expense over the lease term</b> on the same basis as lease income.</li> </ul>

## Finance Leases- Recognition by the Lessor

At the commencement date, a lessor shall recognise assets held under a finance lease in its balance sheet and present them as a receivable at an amount equal to the **net investment in the lease**.

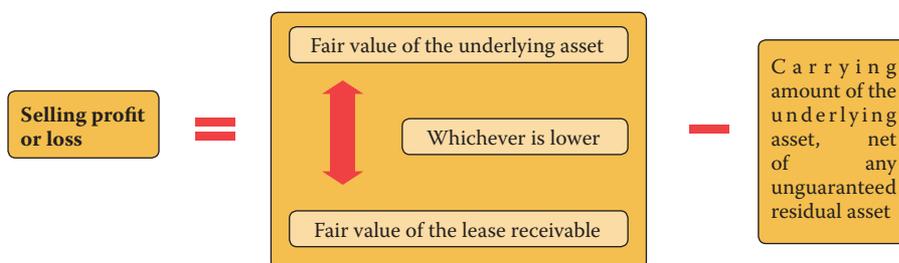
## Initial Measurement by the Lessor

Journal entry for finance lease

Finance lease receivable	Dr.	Net investment
To Underlying asset		Carrying amount

(Balancing figure is profit or loss)

For finance leases (other than those involving manufacturer and dealer lessors), initial direct costs are included in the initial measurement of the finance lease receivable, hence are **not added separately to the net investment in lease**.



## Initial Measurement – Manufacturer or Dealer Lessors

- At the commencement date, a manufacturer or dealer lessor recognises selling profit or loss in accordance with its policy for outright sales to which Ind AS 115 applies.
- Therefore, at lease commencement, a manufacturer or dealer lessor recognises the following:

The fair value of the underlying asset as revenue **OR** the present value of the lease payments discounted using a market rate of interest, whichever is **lower**.

The cost (or carrying amount) of the asset (less) the present value of the unguaranteed residual value, as cost of sale.

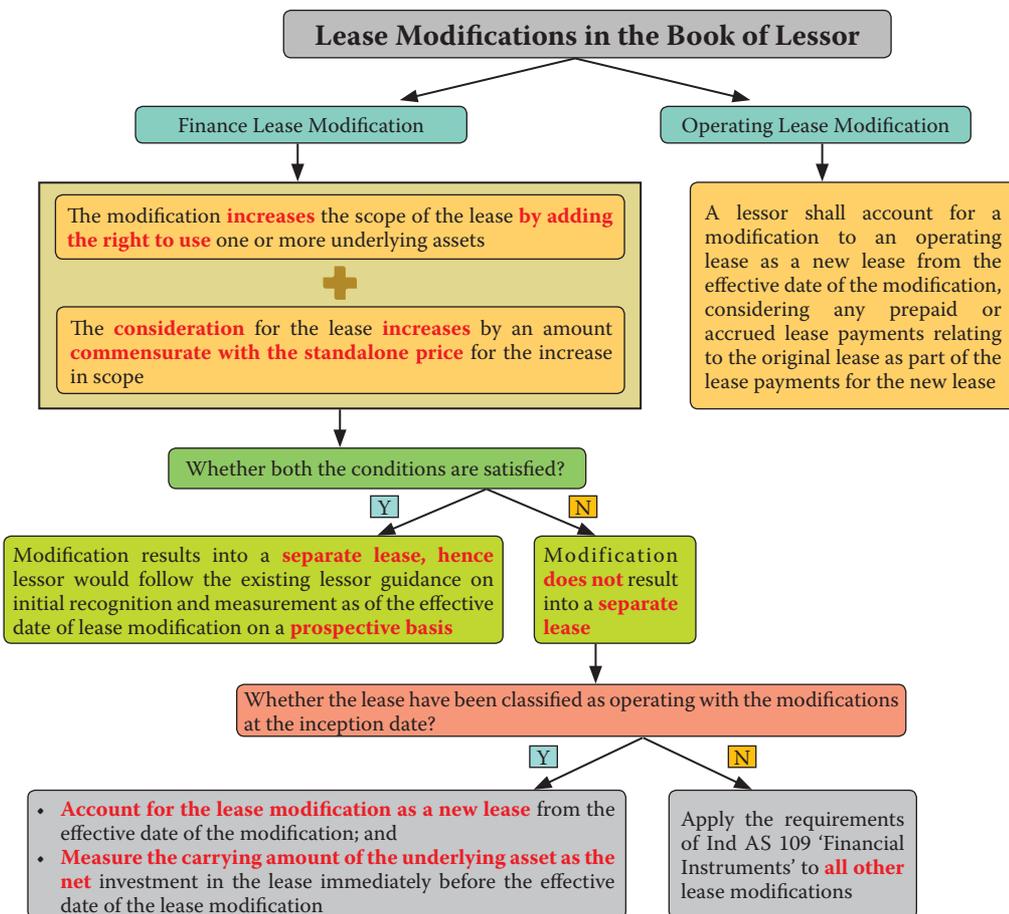
The selling profit or loss in accordance with the policy for outright sales.

- At the commencement date, a manufacturer or dealer lessor recognises selling profit or loss on a **finance lease**, regardless of whether the lessor transfers the underlying asset as described under Ind AS 115.
- Costs incurred by a manufacturer or dealer lessor in connection with **obtaining a finance lease are recognised as an expense at the commencement date** and are **excluded** from the net investment in the lease.

## Summary-Accounting Treatment in the Books of a Lessor

Particulars	Finance Leases	Operating Leases
<b>Initial measurement</b>		
Balance sheet	<ul style="list-style-type: none"> <li><b>Derecognise the carrying amount</b> of the underlying asset</li> <li><b>Recognise the net investment</b> in the lease i.e. a finance lease receivable (equal to the present value of the lease payments to be received)</li> </ul>	<ul style="list-style-type: none"> <li><b>Continue to present</b> the underlying asset</li> <li><b>Add any initial direct costs</b> incurred in connection with obtaining the lease to the carrying amount of the underlying asset</li> <li>A <b>manufacturer or dealer lessor does not recognise any selling profit</b> on entering into an operating lease because it is not equivalent of a sale</li> </ul>
Statement of Profit and loss	<ul style="list-style-type: none"> <li>Recognise in profit or loss, any <b>selling profit or selling loss</b></li> </ul>	
<b>Subsequent measurement</b>		
Balance sheet	<ul style="list-style-type: none"> <li><b>Reduce the net investment</b> in the lease for lease payments received (net of finance income calculated above)</li> <li><b>After</b> lease commencement, the net investment in a lease is <b>NOT REMEASURED UNLESS</b> either:                             <ul style="list-style-type: none"> <li>The lease is modified and the modified lease is not accounted for as a separate contract</li> </ul> <p style="text-align: center;"><i>OR</i></p> <li>The lease term is revised when there is a change in the non-cancellable period of the lease</li> <li>Recognise any impairment of the net investment in the lease, if there has been a <b>reduction in the estimated unguaranteed residual value</b></li> </li></ul>	<ul style="list-style-type: none"> <li><b>Calculate depreciation</b> in accordance with Ind AS 16 and Ind AS 38</li> <li><b>Apply Ind AS 36</b> to determine whether an underlying asset is impaired and to account for any impairment loss identified</li> </ul>
Statement of Profit and loss	<ul style="list-style-type: none"> <li><b>Apportion the amount received</b> between the finance income and reduction in receivable</li> <li>Finance income will be computed to give a constant periodic rate of return</li> <li><b>Separately recognises income</b> from variable lease payments that are not included in the net investment in the lease in the period in which that income is earned</li> <li><b>Revise the income allocation</b> over the lease term and recognise immediately any reduction in respect of amounts accrued, if there has been a <b>reduction in the estimated unguaranteed residual value</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Recognise lease income</b> over the lease term, typically on a straight line basis</li> <li><b>Recognise depreciation</b> expense related to the underlying asset</li> <li><b>Recognise variable lease payments</b> that do not depend on an index or rate (e.g., performance- or usage- based payments) <b>as they are earned</b></li> </ul>

# FINANCIAL REPORTING ||



## Presentation in the Books of Lessor

Finance Leases	Operating Leases
<ul style="list-style-type: none"> <li>• <b>Recognise assets in the balance sheet</b> and present them as a receivable at an amount equal to the net investment in the lease</li> <li>• Net investment in the lease is subject to the <b>same considerations</b> as other assets in classification as current or non-current assets in a balance sheet.</li> </ul>	<p><b>Present underlying assets</b> according to the nature of that asset in the balance sheet</p>

## Disclosure in the Books of Lessor

The lessor disclosure requirements are more extensive to enable users of financial statements to better evaluate the amount, timing and uncertainty of cash flows arising from a lessor's leasing activities.

Quantitative Disclosure Requirements	
Finance Leases	<ul style="list-style-type: none"> <li>– Selling profit or loss;</li> <li>– Finance income on the net investment;</li> <li>– Income from variable lease payments;</li> <li>– Qualitative and quantitative explanation of changes in the net investment; and</li> <li>– Maturity analysis of lease payments receivable.</li> </ul>
Operating Leases	<ul style="list-style-type: none"> <li>– Lease income, separately disclosing variable lease payments;</li> <li>– Disclosure requirements of Ind AS 16 for leased assets, separating leased assets from non-leased assets;</li> <li>– Other applicable disclosure requirements based on the nature of the underlying asset (eg. Ind AS 36, Ind AS 38, Ind AS 40 and Ind AS 41); and</li> <li>– Maturity analysis of lease payments.</li> </ul>

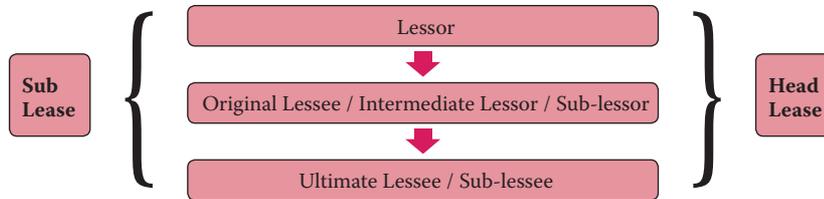
**Note:** The standard prescribes that the quantitative disclosures should be presented in a tabular format, unless another format is more appropriate to be presented.

**Qualitative Disclosure Requirements**

This disclosure include the nature of the lessor's leasing activities and how the lessee manages risks associated with those activities, including risk management on rights retained in underlying assets and risk management strategies including:

- Buy-back agreements;
- Residual value guarantees;
- Variable lease payments for excess use; and
- Any other risk management strategies.

**Sub-Leases**



<b>Definition</b>	A 'Sub-lease' is a transaction for which an underlying asset is re-leased by a lessee ('intermediate lessor' or 'sub-lessor') to a third party, and the original lease ('head lease') between the head lessor and lessee remains in effect.										
<b>Treatment</b>	In some cases, the sublease is a separate lease agreement while, in other cases, though the third party assumes the original lease, yet the original lessee remains the primary obligor under the original lease.										
<b>Recognition and Measurement</b>	<p><b>Intermediate Lessor (sub-lessor)</b></p> <ul style="list-style-type: none"> <li>• The sublease is classified using the classification criteria <b>BUT</b>, it should be by reference to the 'ROU Asset' in the head lease (and <b>NOT</b> the 'underlying asset' of the head lease).</li> </ul> <table border="1"> <thead> <tr> <th></th> <th><i>Sublease is a 'Finance Lease'</i></th> <th><i>Sublease is an 'Operating Lease'</i></th> </tr> </thead> <tbody> <tr> <td>Balance sheet</td> <td> <ul style="list-style-type: none"> <li>• <b>Derecognise the ROU Asset on the head lease</b> at the sub-lease commencement date</li> <li>• <b>Continue to account for the original lease liability</b> in accordance with the lessee accounting model</li> <li>• <b>Recognise a net investment in the sublease</b> and evaluate it for impairment</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• <b>Continue</b> to account for the <b>lease liability and ROU asset on the head lease</b></li> <li>• If the total remaining carrying amount of the ROU asset on the head lease exceeds the anticipated sublease income, this may indicate that the ROU asset associated with the head lease is impaired (as per Ind AS 36)</li> </ul> </td> </tr> <tr> <td>Statement of Profit and Loss</td> <td> <ul style="list-style-type: none"> <li>• Recognise finance income from sub-lease</li> <li>• Charge interest expense on head lease</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• Recognise finance income from sub-lease</li> <li>• Charge depreciation and interest expense on lease liability</li> </ul> </td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• However, when the head lease is a short-term lease, the sublease is classified as an operating lease.</li> <li>• Lessor may use the discount rate for the head lease (<b>adjusted for initial direct costs, if any, associated with the sublease</b>) to measure the net investment in the sublease, if the interest rate implicit in the lease cannot be readily determined.</li> <li>• When contracts are entered into at or near the same time, an intermediate lessor is required to consider the criteria for <b>combining contracts</b>. If the contracts are required to be combined, the intermediate lessor accounts for the head lease and sublease as a <b>single combined transaction</b>.</li> <li>• An intermediate lessor who subleases, or expects to sublease an asset, <b>CANNOT</b> account for the head lease as a lease of a low-value asset <b>even when</b> the required criteria w.r.t. 'leases of low-value assets' are satisfied.</li> </ul> <p><b>Sub-lessee Accounting</b> A sub-lessee accounts for its lease as a new lease following Ind AS 116's recognition and measurement provisions for accounting in the books of lessee.</p>			<i>Sublease is a 'Finance Lease'</i>	<i>Sublease is an 'Operating Lease'</i>	Balance sheet	<ul style="list-style-type: none"> <li>• <b>Derecognise the ROU Asset on the head lease</b> at the sub-lease commencement date</li> <li>• <b>Continue to account for the original lease liability</b> in accordance with the lessee accounting model</li> <li>• <b>Recognise a net investment in the sublease</b> and evaluate it for impairment</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Continue</b> to account for the <b>lease liability and ROU asset on the head lease</b></li> <li>• If the total remaining carrying amount of the ROU asset on the head lease exceeds the anticipated sublease income, this may indicate that the ROU asset associated with the head lease is impaired (as per Ind AS 36)</li> </ul>	Statement of Profit and Loss	<ul style="list-style-type: none"> <li>• Recognise finance income from sub-lease</li> <li>• Charge interest expense on head lease</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise finance income from sub-lease</li> <li>• Charge depreciation and interest expense on lease liability</li> </ul>
	<i>Sublease is a 'Finance Lease'</i>	<i>Sublease is an 'Operating Lease'</i>									
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<b>Presentation</b>	<p>Intermediate lessors are <b>not permitted</b> to offset</p> <ul style="list-style-type: none"> <li>• lease liabilities and lease assets that arise from a head lease and a sublease, respectively, <b>unless</b> those liabilities and assets meet the requirements in Ind AS 1 for offsetting.</li> <li>• depreciation and interest expenses and lease income relating to a head lease and a sublease of the same underlying asset, respectively, <b>unless</b> the requirements for offsetting in Ind AS 1 are met.</li> </ul>										
<b>Disclosure</b>	Entities ( <b>including intermediate lessors</b> ) are required to disclose <b>qualitative</b> and <b>quantitative</b> information which gives a <b>basis</b> for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of the lessor (refer the disclosures for 'lessors' and 'lessees')										

# FINANCIAL REPORTING

## Sale and Leaseback Transactions

A sale and leaseback transaction involves two transactions:

- the transfer (sale) of an asset by an entity (the seller-lessee) to another entity (the buyer-lessor) and
- the leaseback of the same asset by the seller-lessee.

### How to determine whether the transfer of an asset is a sale:

When determining whether the transfer of an asset should be accounted for as a sale or purchase, both the seller-lessee and the buyer-lessor shall apply the requirements of Ind AS 115 on when an entity satisfies a performance obligation by transferring '**control**' of an asset.

If Control is passed	If Control is NOT passed
If the control of an underlying asset is <b>passed</b> to the buyer-lessor, the transaction is accounted for as a ' <b>sale or purchase</b> ' of the asset and a ' <b>lease</b> '.	If the control of an underlying asset is <b>NOT passed</b> to the buyer-lessor, both the seller-lessee and the buyer-lessor account for the transaction as a ' <b>financing transaction</b> '.

**Note:** If the seller-lessee has a '**substantive repurchase option**' for the underlying asset (i.e., a right to repurchase the asset), '**NO sale**' has occurred because the buyer-lessor has **NOT** obtained control of the asset.

## Accounting Treatment for Sale and Leaseback Transaction

Particulars	Seller-lessee	Buyer-lessor
Transfer of asset is a sale	<b>Apply accounting for sale</b> <ul style="list-style-type: none"> <li>• Recognise the cash received</li> <li>• Derecognise the underlying asset</li> </ul> <b>Apply ROU Accounting</b> <ul style="list-style-type: none"> <li>• Apply the lessee accounting model to the leaseback asset</li> <li>• Measure the ROU asset at the retained portion of the previous carrying amount</li> <li>• Recognise a gain or loss related to the portion of the assets transferred to the buyer-lessor</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise the underlying asset based on the nature of the asset</li> <li>• Apply the lessor accounting model to leaseback asset</li> </ul>
Transfer of asset is not a sale	<ul style="list-style-type: none"> <li>• Continue to recognise the underlying asset</li> <li>• Account for the transaction as financing transaction</li> <li>• Recognise a financial liability under Ind AS 109 for any amount received from the buyer-lessor</li> <li>• Decrease the financial liability by the payments made (as and when) less the portion considered as interest expense</li> </ul>	<ul style="list-style-type: none"> <li>• Do not recognise the underlying asset</li> <li>• Recognise a financial asset under Ind AS 109 for any amount paid to the seller-lessee i.e. account for the amount paid as a receivable</li> </ul>

**Note:**

- When a sale occurs, both the seller-lessee and the buyer-lessor account for the leaseback in the same manner as any other lease (**with adjustments for any off-market terms**).
- A seller-lessee recognises a lease liability and ROU asset for the leaseback (**subject to the optional exemptions** for short-term leases and leases of low-value assets).

An entity shall make the following adjustments to measure the sale proceeds at fair value if:

- the fair value of the consideration for the sale of an asset does not equal the fair value of the asset **OR**
- the payments for the lease are not at market rates

Following are the two possibilities of the sale price **OR** the present value of the lease payments being 'less' or 'greater' than the fair value of the asset **OR** present value of the market lease payments:

When Sale Price or Present Value is <b>LESS</b>	When Sale Price or Present Value is <b>GREATER</b>
Using the more readily determinable basis: <ul style="list-style-type: none"> <li>• When the sale price is <b>LESS</b> than the underlying asset's fair value <b>OR</b></li> <li>• The present value of the lease payments is <b>LESS</b> than the present value of the market lease payments,</li> </ul> A seller-lessee recognises the difference as an <b>increase</b> to the sales price and the initial measurement of the ROU asset as a ' <b>lease prepayment</b> '.	Using the more readily determinable basis: <ul style="list-style-type: none"> <li>• When the sale price is <b>GREATER</b> than the underlying asset's fair value <b>OR</b></li> <li>• The present value of the lease payments is <b>GREATER</b> than the present value of the market lease payments,</li> </ul> A seller-lessee recognises the difference as a <b>reduction</b> in the sales price and an ' <b>additional financing received</b> ' from the buyer-lessor.

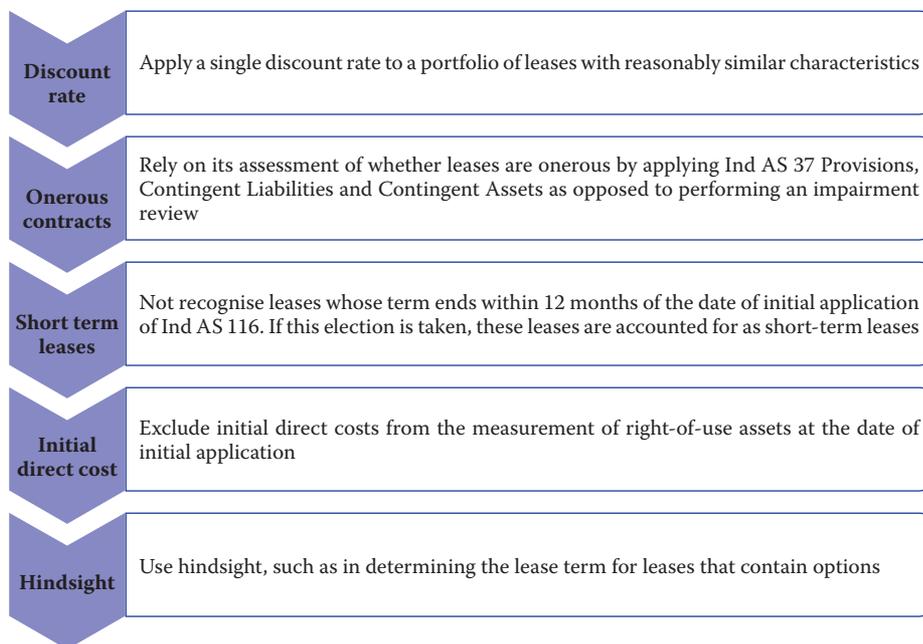
Buyer-lessors are also required to **adjust the purchase price** of the underlying asset for any off-market terms. Such adjustments are recognised as:

- '**lease prepayments**' made by the seller-lessee **OR**
- '**additional financing provided**' to the seller-lessee.



# FINANCIAL REPORTING ||

Additionally, a lessee is also permitted to apply the following practical expedients to leases previously classified as operating leases (when applying modified retrospective approach), on a **lease-by-lease basis**:



## Disclosures

Disclosure requirements vary in accordance with the Transition Approach opted. The lessee shall disclose the following as required by Ind AS 8 (except that it is impracticable to determine the amount of the adjustment):

<b>Full Retrospective Approach</b>	<b>Modified Retrospective Approach</b>
<ul style="list-style-type: none"> <li>(a) the title of the Ind AS;</li> <li>(b) when applicable, that the change in accounting policy is made in accordance with its transitional provisions;</li> <li>(c) the nature of the change in accounting policy;</li> <li>(d) when applicable, a description of the transitional provisions;</li> <li>(e) when applicable, the transitional provisions that might have an effect on future periods;</li> <li>(f) for the current period and each prior period presented, to the extent practicable, the amount of the adjustment:                             <ul style="list-style-type: none"> <li>(i) for each financial statement line item affected; and</li> <li>(ii) if Ind AS 33 <i>Earnings per Share</i> applies to the entity, for basic and diluted earnings per share;</li> </ul> </li> <li>(g) the amount of the adjustment relating to periods before those presented, to the extent practicable; and</li> <li>(h) if retrospective application required by Ind AS 8 is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>(a) the title of the Ind AS;</li> <li>(b) when applicable, that the change in accounting policy is made in accordance with its transitional provisions;</li> <li>(c) the nature of the change in accounting policy;</li> <li>(d) when applicable, a description of the transitional provisions;</li> <li>(e) when applicable, the transitional provisions that might have an effect on future periods;</li> <li>(f) the weighted average lessee's incremental borrowing rate applied to lease liabilities recognised in the balance sheet at the date of initial application; and an explanation of any difference between:                             <ul style="list-style-type: none"> <li>(i) operating lease commitments disclosed applying Ind AS 17 at the end of the annual reporting period immediately preceding the date of initial application, discounted using the incremental borrowing rate at the date of initial application; and</li> <li>(ii) lease liabilities recognised in the balance sheet at the date of initial application.</li> </ul> </li> <li>(g) the amount of the adjustment relating to periods before those presented, to the extent practicable; and</li> <li>(h) if retrospective application required by Ind AS 8 is impracticable for a particular prior period, or for periods before those presented, the circumstances that led to the existence of that condition and a description of how and from when the change in accounting policy has been applied.</li> </ul> <p>Further, if a lessee uses one or more of the practical expedients (already discussed above), it shall disclose that fact.</p>

### Transition Options for Lessors

- A lessor is **not required** to make any adjustments on transition for leases in which it is a lessor and account for those leases applying Ind AS 116 from the date of initial application.
- However, in case of an **'Intermediate Lessor'**, the entity shall:
  - (a) **reassess subleases that were classified as operating leases applying Ind AS 17 and are ongoing at the date of initial application**, to determine whether each sublease should be classified as an operating lease or a finance lease applying Ind AS 116. The intermediate lessor shall perform this assessment at the date of initial application on the basis of the remaining contractual terms and conditions of the head lease and sublease at that date with reference to the ROU Asset associated with the head lease and not the underlying asset.
  - (b) **for subleases that were classified as operating leases applying Ind AS 17 but, finance leases applying Ind AS 116**, account for the **sublease as a new finance lease** entered into at the date of initial application. Any gain or loss arising on the sublease arrangement is included in the cumulative catch-up adjustment to retained earnings at the date of initial application.

### Sale and Leaseback Transactions before the date of Initial Application

- An entity shall not reassess sale and leaseback transactions entered into before the date of initial application to determine whether the transfer of the underlying asset satisfies the requirements under Ind AS 115 to be accounted for as a sale.
- Leaseback is accounted for on transition in the following manner, depending on the classification:

<i>Finance Lease</i>	<i>Operating Lease</i>
If a sale and leaseback transaction was accounted for as a sale and a <b>finance lease</b> applying Ind AS 17, the seller-lessee shall: <ol style="list-style-type: none"> <li>(a) account for the leaseback in the same way as it accounts for any other finance lease that exists at the date of initial application <i>AND</i></li> <li>(b) continue to amortise any gain on sale over the lease term.</li> </ol>	If a sale and leaseback transaction was accounted for as a sale and <b>operating lease</b> applying Ind AS 17, the seller-lessee shall: <ol style="list-style-type: none"> <li>(a) account for the leaseback in the same way as it accounts for any other operating lease that exists at the date of initial application; <i>AND</i></li> <li>(b) adjust the leaseback ROU asset for any deferred gains or losses that relate to off-market terms recognised in the balance sheet immediately before the date of initial application.</li> </ol>

### Amounts Previously Recognised in respect of Business Combinations

The lessee shall

- Derecognise the acquired asset or liability and
- Adjust the carrying amount of the ROU asset by a corresponding amount at the date of initial application.

### Amendment in Accounting of Rent Concessions arising due to COVID-19 Pandemic

Following amendments have been made with respect to accounting of COVID-19 related rent concessions such as rent holidays and temporary rent reductions:

As a practical expedient, a lessee **may elect not to assess** a rent concession as a lease modification **only** if **ALL** of the following conditions are met:

- a) the change in lease payments results in revised consideration for the lease that is **substantially the same as, or less** than, the consideration for the **lease immediately preceding the change**;
- b) any reduction in **lease payments affects only payments originally due on or before the 30<sup>th</sup> June, 2022\*** (for example, a rent concession would meet this condition if it results in **reduced lease payments on or before the 30<sup>th</sup> June, 2022\* and increased** lease payments that **extend beyond the 30<sup>th</sup> June, 2022\***); and
- c) there is **no substantive change** to other terms and conditions of the lease.

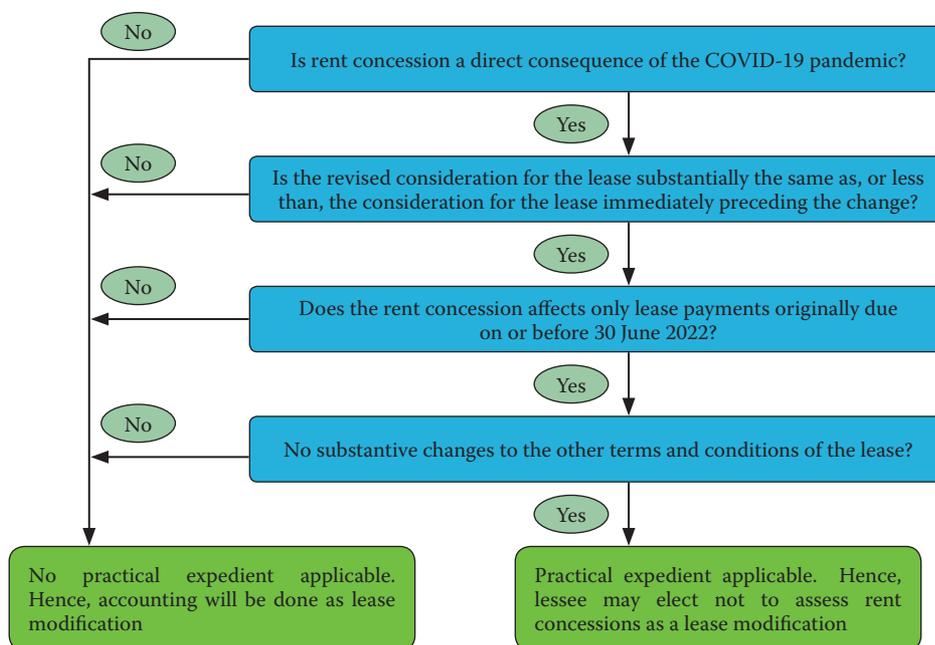
A lessee that makes this election shall account for any change in lease payments resulting from the rent concession as if the change were not a lease modification.

**Note:** The above practical expedient **applies only to rent concessions occurring as a direct consequence of the covid-19 pandemic.**

\*As per the amendment made by the MCA on 18<sup>th</sup> June, 2021.

# FINANCIAL REPORTING ||

The key conditions for applying the practical expedient are as follows:



## Disclosures

Lessees applying practical expedient are required to disclose:

- The fact that if they have applied the practical expedient to all eligible rent concessions and, if not, the nature of contracts to which they have applied the practical expedient and
- The amount recognized in profit or loss for the reporting period to reflect changes in lease payments that arise from rent concessions to which the lessee has applied the practical expedient.

**Note:** The disclosure requirements of paragraph 28(f) of Ind AS 8 do not apply on initial application of these amendments.

## CROSSWORD SOLUTION – JULY 2021

<sup>1</sup> E	<sup>2</sup> X	E	<sup>3</sup> M	<sup>4</sup> P	<sup>5</sup> T		<sup>6</sup> L	<sup>7</sup> E	<sup>8</sup> S	<sup>9</sup> S	O	<sup>10</sup> R
<sup>11</sup> X	L		<sup>12</sup> O	V	E			<sup>13</sup> E	A	T		E
<sup>14</sup> P	R		<sup>15</sup> N	U	M	<sup>16</sup> B	<sup>17</sup> E	R		<sup>18</sup> A	<sup>19</sup> P	P
<sup>20</sup> A	I	<sup>21</sup> M	E		<sup>22</sup> P	U	L	L		<sup>23</sup> T	W	O
N		<sup>24</sup> A	Y			L			<sup>25</sup> B	E	A	R
<sup>26</sup> S	<sup>27</sup> O	P		<sup>28</sup> D	<sup>29</sup> O	L	<sup>30</sup> B	<sup>31</sup> Y				T
<sup>32</sup> I	M			<sup>33</sup> C	R		<sup>34</sup> R	M	<sup>35</sup> C		<sup>36</sup> C	I
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<sup>45</sup> A	I	B	B		<sup>46</sup> L	N	E		<sup>47</sup> C	M	T	R
<sup>48</sup> R	M	B	A		<sup>49</sup> E	G		<sup>50</sup> M	A	R	I	E
<sup>51</sup> Y	A	A	R	<sup>52</sup> A			<sup>53</sup> A		N		<sup>54</sup> N	S
			<sup>55</sup> G	R	<sup>56</sup> A	<sup>57</sup> D	E			<sup>58</sup> A	G	U
<sup>59</sup> A	<sup>60</sup> E	R	O	S	P	A	C	<sup>61</sup> E		C		L
<sup>62</sup> C	F	O					<sup>63</sup> A	C	C	E	P	T
<sup>64</sup> T	C		<sup>65</sup> W	O	R	K	P	A	P	E	R	S

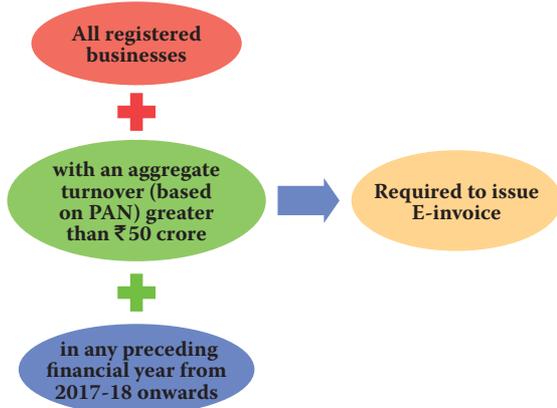
CA INTERMEDIATE - PAPER 4B - INDIRECT TAXES

The subject-wise capsules published in the Students' Journal every month are one among the many initiatives of Board of Studies which aim at providing quality academic inputs to students of Chartered Accountancy Course. The Capsule is an educational aid that assists students in quick revision of select topics of a subject. This Capsule covers the topics "E-invoicing" and "QRMP Scheme" of Paper 4B Indirect Taxes of Intermediate Course (Old as well as New).

The Capsule is based on the GST law as amended by the significant notifications/circulars issued till 30th April, 2021 and is thus, relevant for students appearing in November, 2021 examination. This Capsule should not be taken as a substitute for the detailed study of these topics. Students are advised to refer to the October 2020 Edition of Study Material along with Statutory Update for November 2021 examination for comprehensive study and revision.

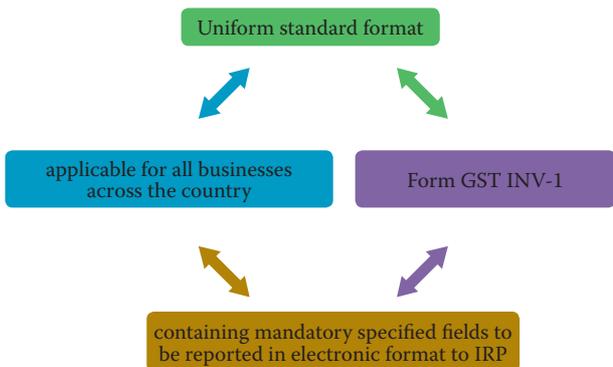
E-INVOCING

Class of persons mandatorily required to issue e-invoice [Notified Taxpayers]



Important terms

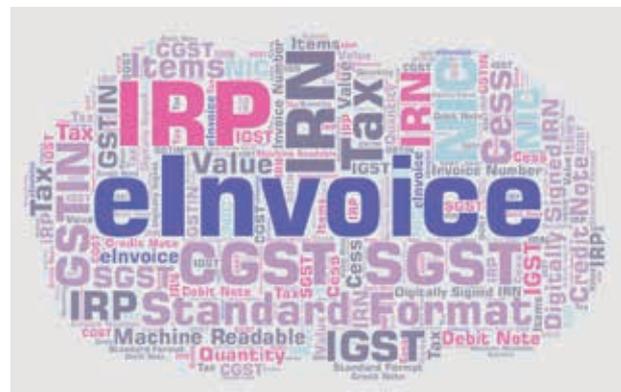
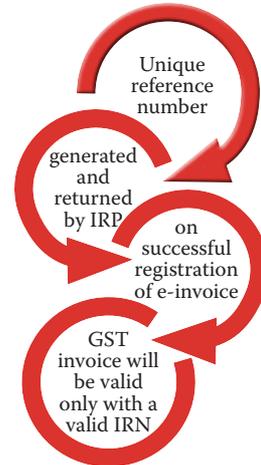
E-invoice schema



Invoice Registration Portal [IRP]

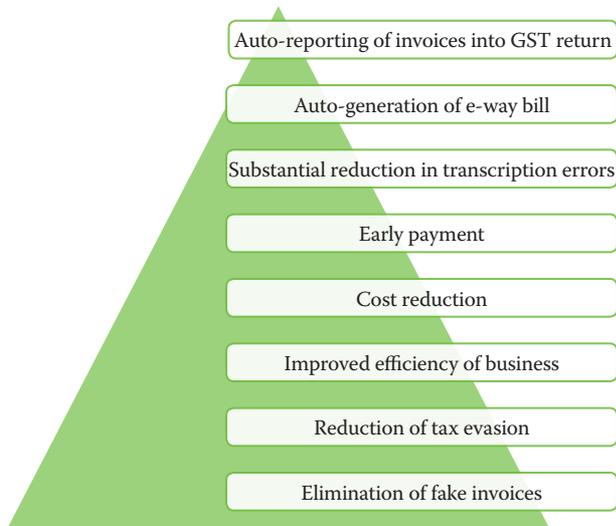


Invoice Reference Number [IRN]

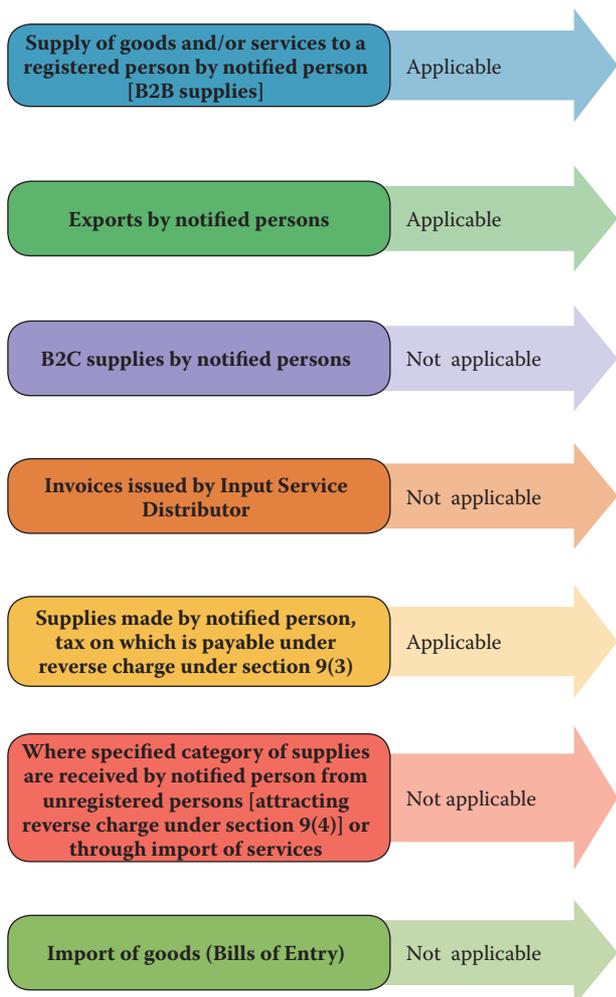


# INDIRECT TAXES ||

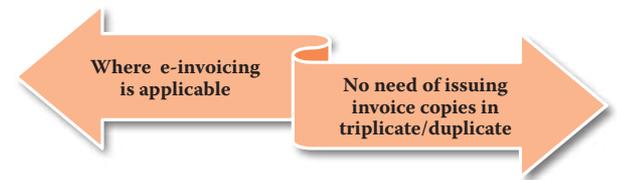
## Advantages of e-invoicing



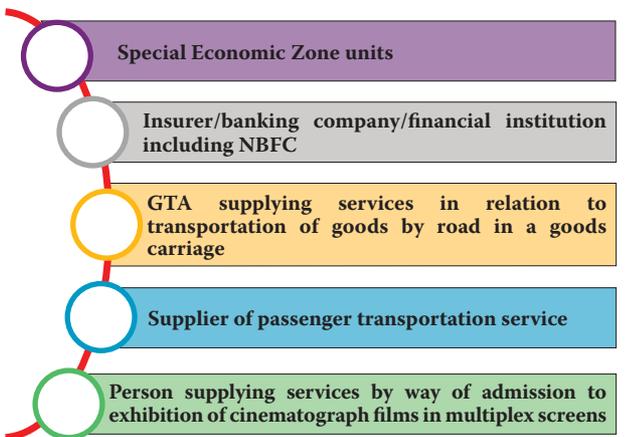
## Situations in which e-invoices are applicable



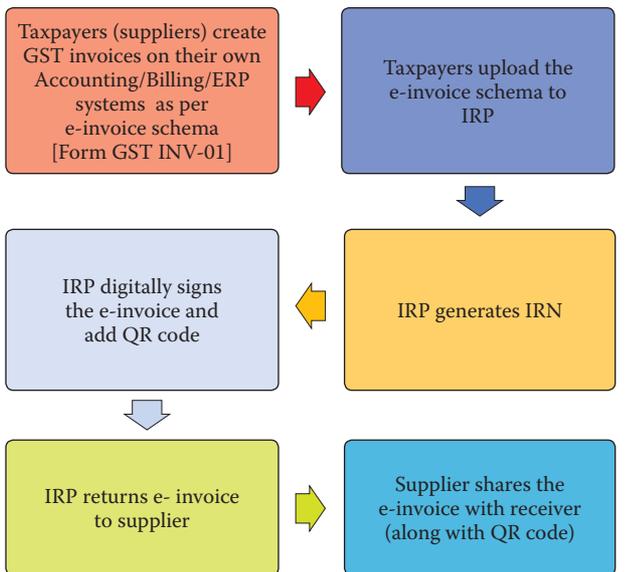
## No requirement of issuing invoice copies in triplicate/duplicate



## Exemption from e-invoicing

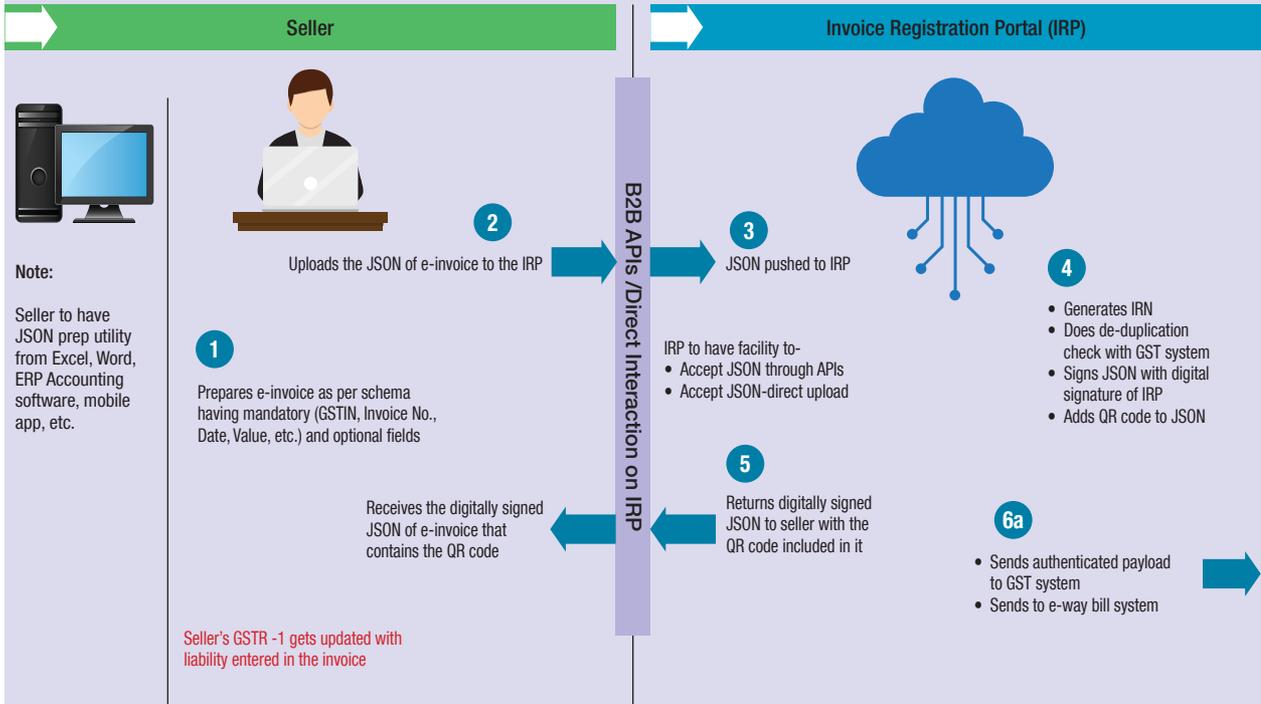


## Overall work flow of e-invoice



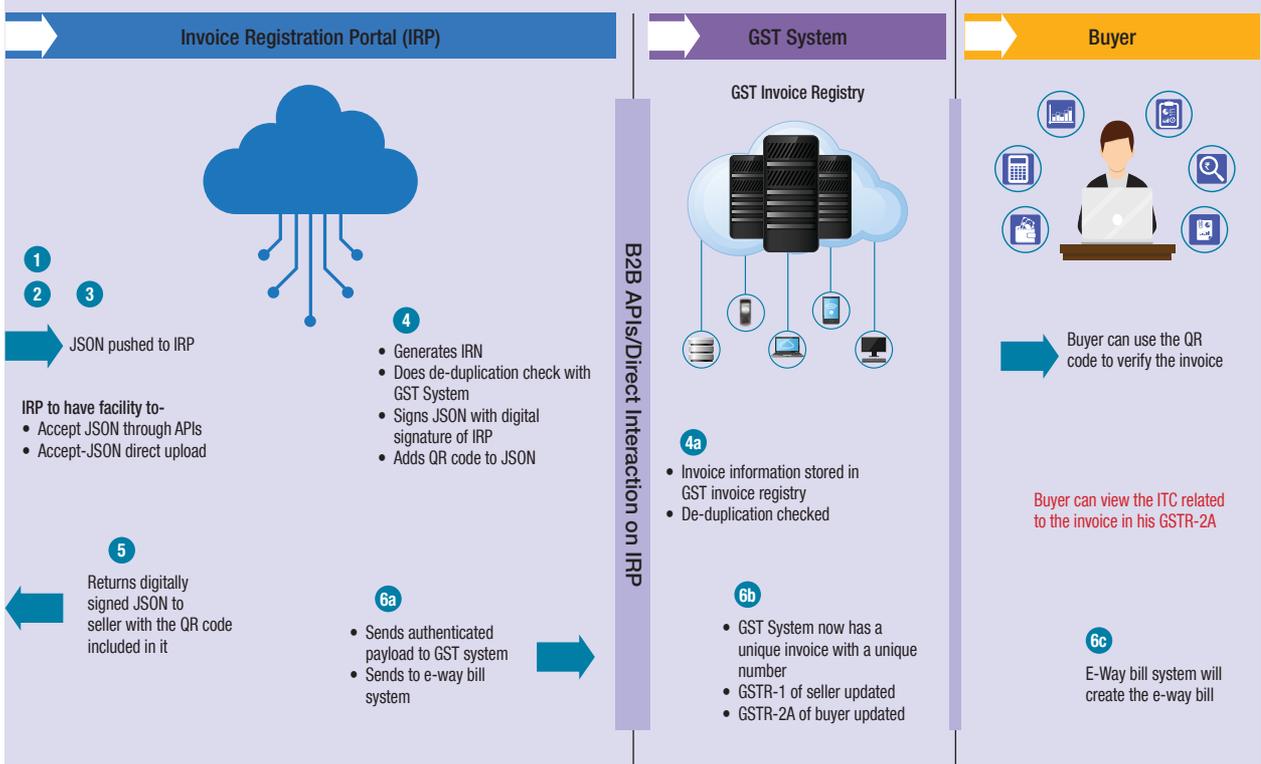
Interaction between the business (supplier) and the Invoice Registration Portal (IRP)

A. Seller-IRP Flow of Activities



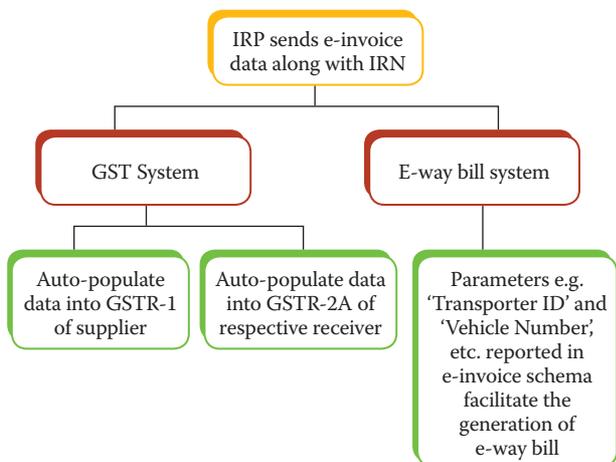
Interaction between the IRP and the GST/E-Way Bill Systems and the buyer

B. IRP-GST System Flow of Activities



# INDIRECT TAXES ||

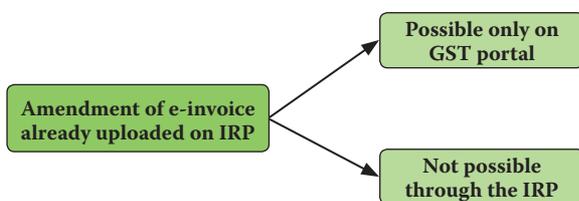
## Generation of e-way bill/populating relevant parts of GST return through e-invoicing data



## Cancellation of reported invoice

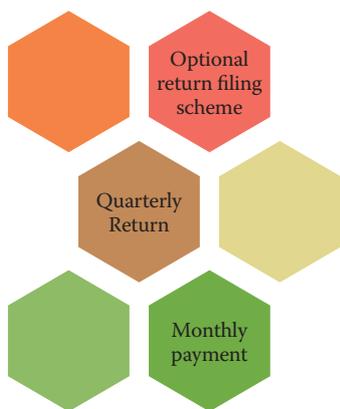


## Amendment of reported invoice



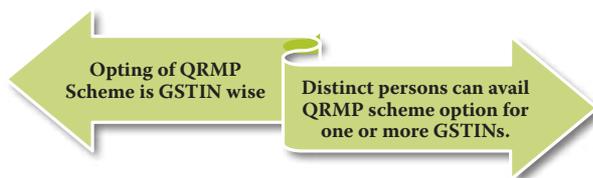
## QRMP SCHEME

### Overview of QRMP Scheme

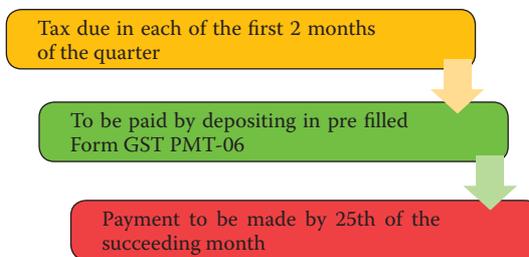


- Eligibility**
  - Taxpayers having aggregate turnover of up to Rs. 5 crore in the preceding financial year
- Criteria**
  - Taxpayer must have furnished the last return, as due on the date of exercising such option
- Exercising option**
  - Taxpayers can opt in for any quarter from 1st day of 2nd month of preceding quarter to the last day of the first month of the quarter for which the option is being exercised
- Validity of option once exercised**
  - Taxpayers are not required to exercise their option every quarter. Where such option has been exercised once, they shall continue to furnish the return as per the selected option for future tax periods, unless they revise the said option.

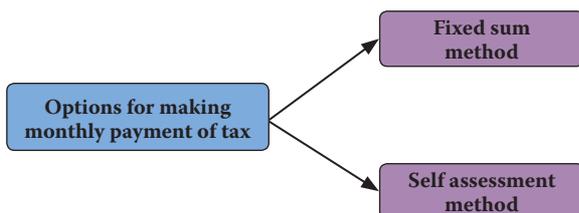
### QRMP scheme is GSTIN wise



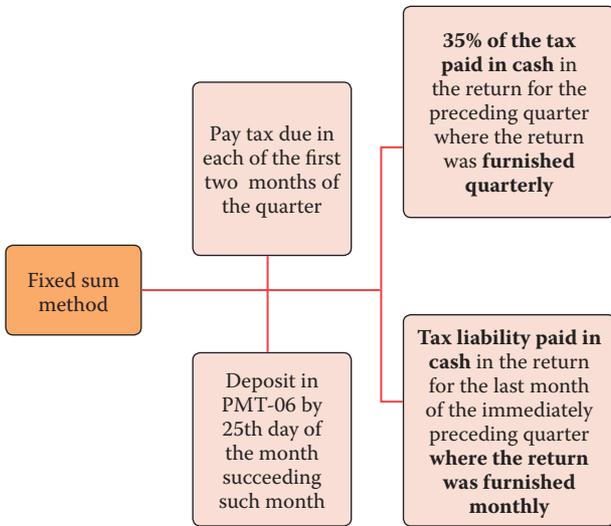
### Monthly payment of tax



### Options for making monthly payment of tax

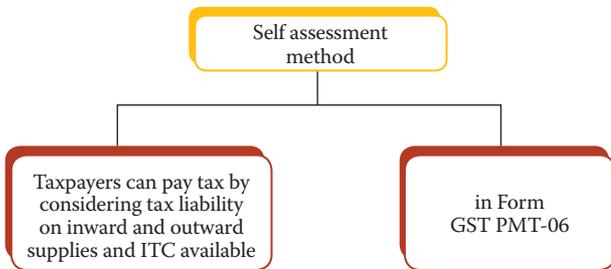


## Fixed Sum Method

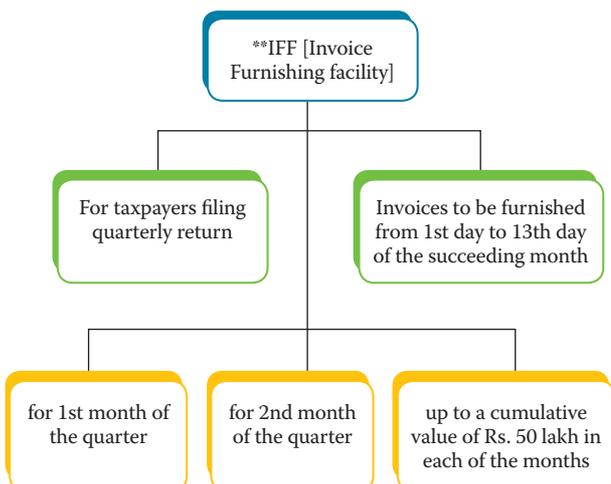


Monthly tax payment through this method would not be available to those registered persons who have not furnished the return for a complete tax period preceding such month.

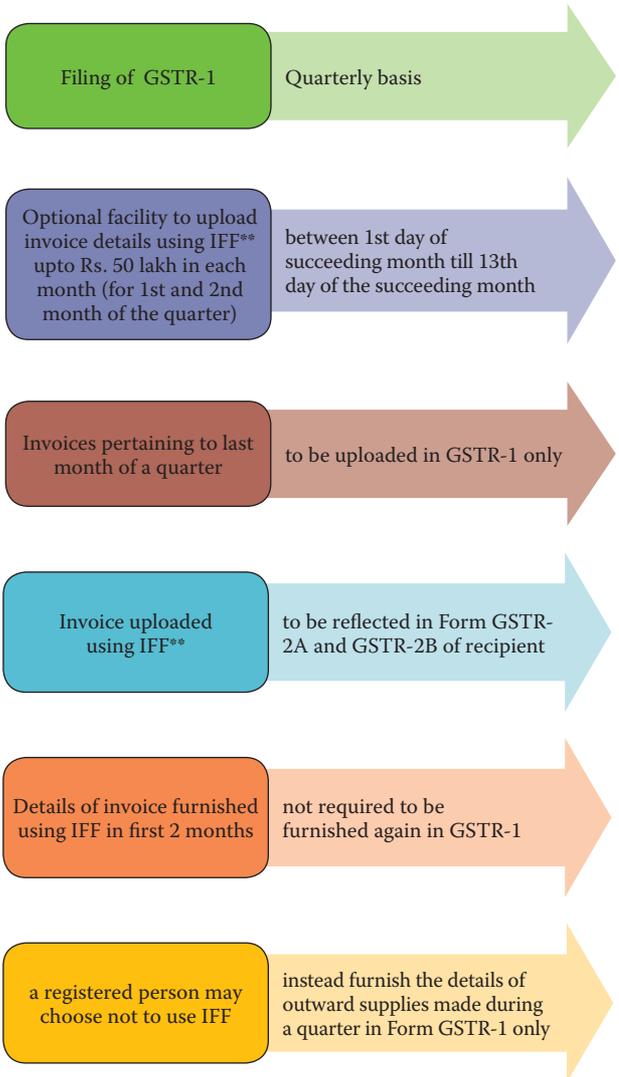
## Self Assessment Method



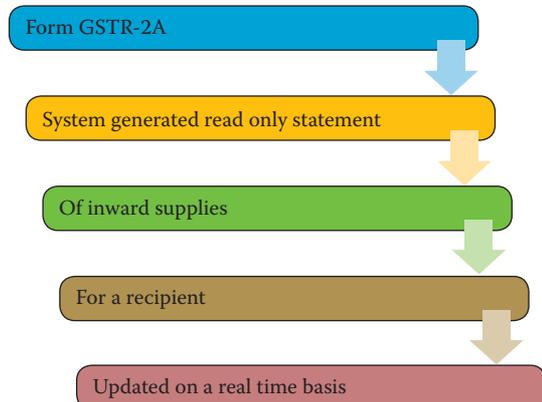
## Invoice Furnishing Facility (IFF)



## Furnishing details of outward supply under QRMP

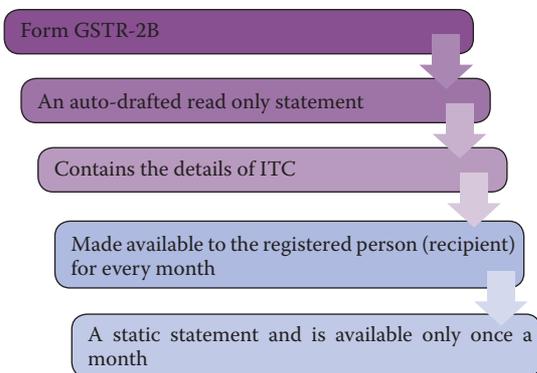


## Form GSTR-2A

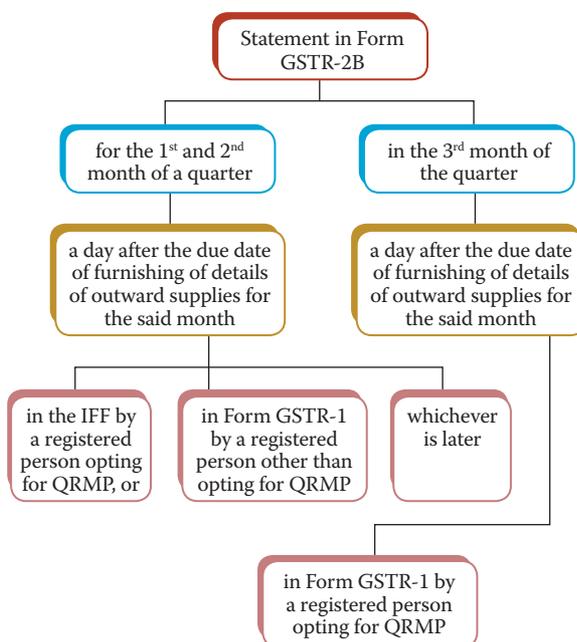


# INDIRECT TAXES ||

## Form GSTR-2B



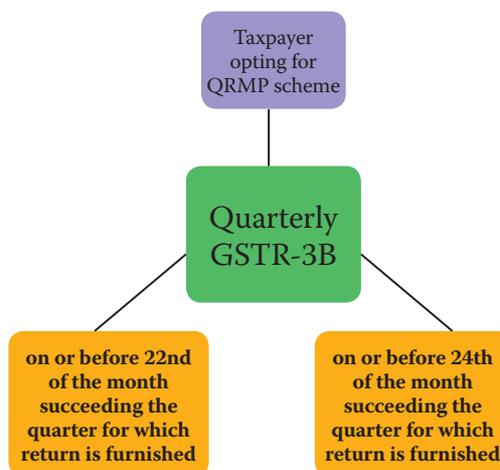
## Manner of availment of statement in Form GSTR-2B for every month to the registered person



## Quarterly filing of form GSTR-3B

<b>Filing of GSTR-3B</b>	Quarterly GSTR-3B on or before 22nd or 24th of the month succeeding the quarter.
<b>Offsetting of liability</b>	Amount deposited in the first 2 months can be debited only for offsetting the liability.
<b>Cancellation of registration</b>	GSTR-3B to be filed even if cancellation of registration was done during any of the first two months of the quarter.

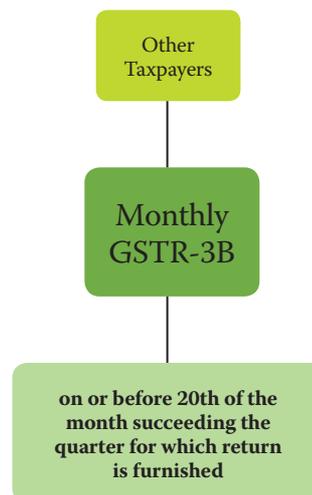
## Due date for filing GSTR-3B return



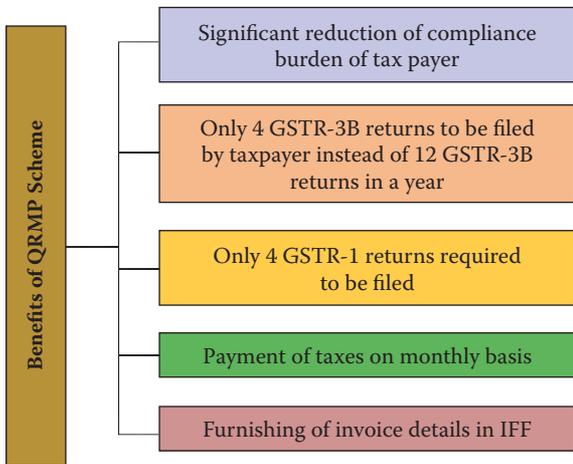
## Due dates for taxpayers opting for QRMP Scheme

Class of registered persons	Due date
Registered persons whose principal place of business is in the States of :- Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra, Karnataka, Goa, Kerala, Tamil Nadu, Telangana, Andhra Pradesh, Union territories of Daman & Diu & Dadra & Nagar Haveli, Puducherry, Andaman and Nicobar Islands or Lakshadweep.	22 <sup>nd</sup> day of the month succeeding such quarter.
Registered persons whose principal place of business is in the States of :- Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh, Bihar, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, Assam, West Bengal, Jharkhand or Odisha, the Union territories of Jammu and Kashmir, Ladakh, Chandigarh or Delhi.	24 <sup>th</sup> day of the month succeeding such quarter.

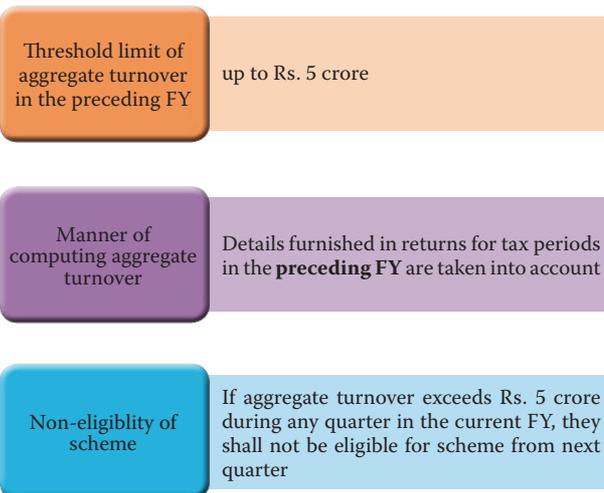
## Due date for filing GSTR-3B return



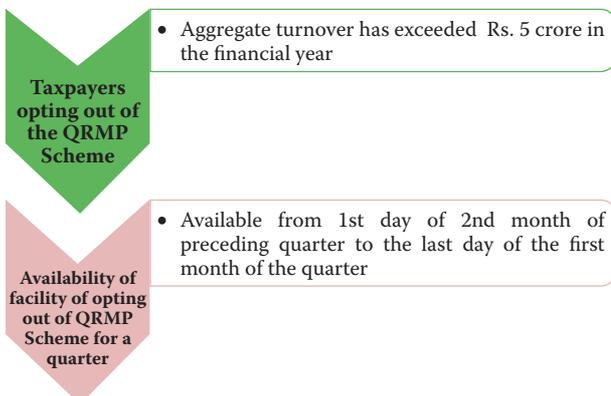
## Benefits of QRMP Scheme



## Eligibility of QRMP Scheme

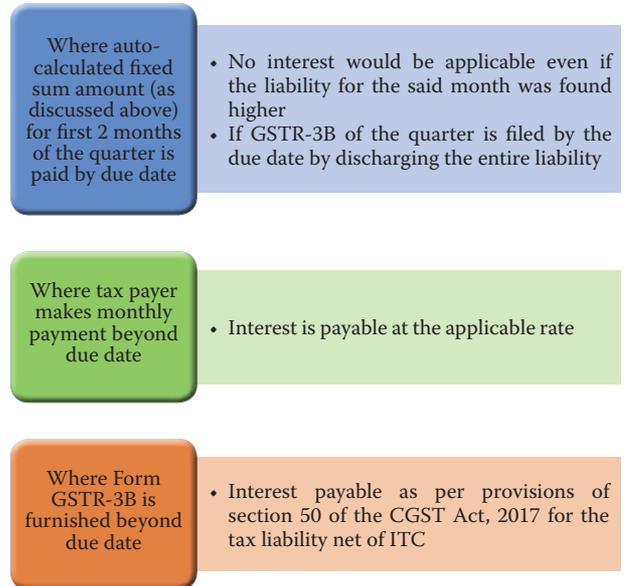


## Opting out of the QRMP Scheme

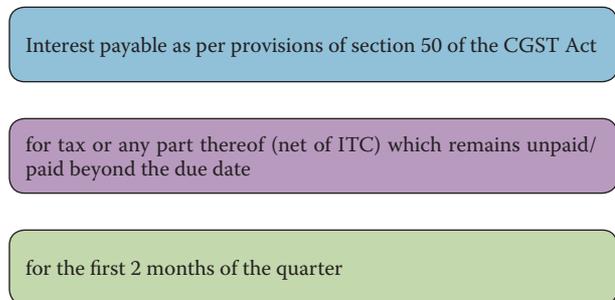


## Applicability of Interest

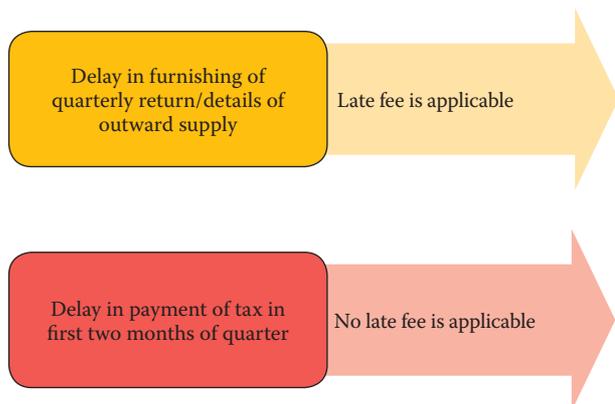
### For Fixed Sum method taxpayers



### For Self-assessment method taxpayers



## Applicability of late fees



## CA FOUNDATION - PAPER 3 - BUSINESS MATHEMATICS, LOGICAL REASONING AND STATISTICS

This capsule is in continuation to the previous edition featured in March 2021. It presents the concepts of Random Variable, Expected value, Variance and Standard Deviation of a random variable. These concepts are extensively applied and widely used in areas such as Finance, Risk Management and Costing. Here an attempt is made to enable the students to understand these concepts of probability calculation with the help of examples and help them attempt diverse questions based on these concepts.

### Chapter 16 : Probability - II

(7) A **random variable or stochastic variable** is a function defined on a sample space associated with a random experiment assuming any value from R and assigning a real number to each and every sample point of the random experiment.

(8) **Expected value or Mathematical Expectation or Expectation** of a random variable may be defined as the sum of products of the different values taken by the random variable and the corresponding probabilities.

When  $x$  is a discrete random variable with probability mass function  $f(x)$ , then its expected value is given by

$$E(x) = \mu = \sum_x x f(x)$$

and its variance is

$$V(x) = \sigma^2 = E(x^2) - \mu^2$$

$$\text{Where } E(x^2) = \sum_x x^2 f(x)$$

For a continuous random variable  $x$  defined in  $[-\infty, \infty]$ , its expected value (i.e. mean) and variance are given by

$$E(x) = \int_{-\infty}^{\infty} x f(x) dx$$

$$\text{and } \sigma^2 = E(x^2) - \mu^2$$

$$\text{where } E(x^2) = \int_{-\infty}^{\infty} x^2 f(x) dx$$

#### Properties of Expected Values

- Expectation of a constant is  $k$   
i.e.  $E(k) = k$  for any constant  $k$
- Expectation of sum of two random variables is the sum of their expectations.  
i.e.  $E(x + y) = E(x) + E(y)$  for any two random variables  $x$  and  $y$ .
- Expectation of the product of a constant and a random variable is the product of the constant and the expectation of the random variable.  
i.e.  $E(kx) = k.E(x)$  for any constant  $k$
- Expectation of the product of two random variables is the product of the expectation of the two random variables, provided the two variables are independent.  
i.e.  $E(xy) = E(x).E(y)$   
Where  $x$  and  $y$  are independent.

#### IMPORTANT EXAMPLES:

- A speaks truth in 60% and B in 75% of the cases. In what percentage of cases are they likely to contradict each other in stating the same fact?

Solution:

The Probability that A speaks the truth and B a lie =

$$\frac{60}{100} \times \frac{(100-75)}{100} = \frac{60}{100} \times \frac{25}{100} = \frac{3}{20}$$

The Probability that B speaks the truth and A a lie =

$$\frac{75}{100} \times \frac{(100-60)}{100} = \frac{75}{100} \times \frac{40}{100} = \frac{3}{10}$$

$$\therefore \text{Total Probability} = \frac{3}{20} + \frac{3}{10} = \frac{9}{20}$$

Hence, the percentage of cases in which they contradict each other =  $(9/20) \times 100$  or 45%

- A Committee of 4 persons is to be appointed from 7 men and 3 women. The probability that the committee contains (i) exactly two women, and (ii) at least one woman is

Solution:

Total number of persons =  $7+3 = 10$ . Since 4 out of them can be formed in  ${}^{10}C_4$  ways, where the exhaustive number of cases is  ${}^{10}C_4$  or 210 ways.

(i) P (exactly 2 women in a committee) of four =  $7 C_2 \times 3 C_2 / 210 = 63/210 = 3/10$ .

(ii) P (at least one woman in committee) =  $1 - P(\text{no women}) = 1 - ({}^7C_4 / {}^{10}C_4) = 1 - (35/210) = 1 - 1/6 = 5/6$

- If A and B are two events, such that  $P(A) = 1/4$ ,  $P(B) = 1/3$  and  $P(A \cup B) = 1/2$ ; then  $P(B/A)$  is equal to

Solution:  $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

$$1/2 = 1/4 + 1/3 - P(A \cap B)$$

$$\text{Or } P(A \cap B) = 1/4 + 1/3 - 1/2 = 1/12$$

$$\text{Hence, } P(B/A) = \frac{P(A \cap B)}{P(A)} = \frac{1/12}{1/4} = \frac{1}{3}$$

- A person applies for a job in two firms, say X and Y. the probability of his being selected in firm X is 0.7 and being rejected in firm Y is 0.5. The probability of at least one of his applications being rejected is 0.6. What is the probability that he will be selected in one of the two firms?

**Solution:**

Event A; Person is selected in firm X, and

Event B : person is selected in Firm Y .

Then,  $P(A) = 0.7$ ,  $P(B^c) = 0.5$  and  $P(A^c \cup B^c) = 0.6$

Therefore  $P(B) = 1 - 0.5 = 0.5$

$P(A^c \cup B^c) = P[(A \cap B)^c] = 1 - P(A \cap B)$

This implies that  $P(A \cap B) = 1 - P(A^c \cup B^c) = 1 - 0.6 = 0.4$

Hence,  $P(A \cup B) = 0.7 + 0.5 - 0.4 = 0.8$

5. A person is known to hit a target in 5 out of 8 shots, whereas another person is known to hit in 3 out of 5 shots. Find the probability that the target is hit at all when they both try.

**Solution:** Event A = First person hits the target and

Event B = Another person hits the target.

$P(A) = 5/8$  and  $P(B) = 3/5$

$P(A^c) = 1 - 5/8 = 3/8$  and  $P(B^c) = 1 - 3/5 = 2/5$

Event X = target is hit when they both try i.e.,

When at least one of them hit the target.

$P(X^c) = P(\text{the target is not hit at all})$

$= P(A^c \cap B^c) = P(A^c) \times P(B^c) = 3/20$

Hence  $P(X) = 1 - P(X^c) = 1 - 3/20 = 17/20$

6. The probability that a man will be alive in 25 years is  $3/5$ , and the probability that his wife will be alive in 25 years in  $2/3$ . Find the probability that :

(i) Both will be alive (ii) at least one of the will be alive

**Solution:**

$P(M) = 3/5$  and  $P(W) = 2/3$

$P(M^c) = 1 - 3/5$  and  $P(W^c) = 1 - 2/3 = 1/3$ .

The probability that both will be alive

$= P(M) \times P(W) = 3/5 \times 2/3 = 2/5$ .

Probability that at least one of them will be alive is given by

$P(M \cup W) = P(M) + P(W) - P(M \cap W)$

$= 3/5 + 2/3 - 2/5 = 13/15$ .

7. Given the data in Previous Problem find the probability that (i) only wife will be alive, (ii) only man will be alive.

**Solution.**

(i) Probability that only wife will be alive.

= Probability that wife will be alive but not man

$= P(W) \times P(M^c) = 2/3 \times 2/5 = 4/15$

(ii) Probability that only man will be alive

= Probability that man will be alive but not wife

$= P(M) \times P(W^c) = 3/5 \times 1/3 = 1/5$ .

8. A random variable X has the following probability distribution:

Value of X	0	1	2	3
$P[X = x]$	1/3	1/2	0	1/6

Find  $E\{(X - E(X))^2\}$

**Solution :**

$E(X) = 0 \times 1/3 + 1 \times 1/2 + 2 \times 0 + 3 \times 1/6 = 1$

$E(X^2) = 0 \times 1/3 + 1 \times 1/2 + 4 \times 0 + 9 \times 1/6 = 2$

$E[X - E(X)]^2 = E(X^2) - [E(X)]^2 = 2 - 1 = 1$

9. Given the data in previous Problem, Find  $\text{Var}(Y)$ , where  $Y = 2X - 1$ .

**Solution:**

$E(Y) = E(2X - 1) = 2E(X) - 1 = 1$

$E(Y^2) = E(2X - 1)^2 = 2E(X^2) - 4E(X) + 1 = 1$

$\text{Var.}(Y) = E(Y^2) - [E(Y)]^2 = 1 - 1 = 0$

- 10 Daily demand for pen drive is having the following probability distribution. Determine the expected demand and variance of the demand:

Demand	1	2	3	4	5	6
Probability	0.10	0.15	0.20	0.25	0.18	0.12

**Solution:**

$E(X) = 1 \times 0.10 + 2 \times 0.15 + 3 \times 0.20 + 4 \times 0.25 + 5 \times 0.18 + 6 \times 0.12 = 3.62$

Variance of the demand.

$E(X^2) = 1 \times 0.10 + 4 \times 0.15 + 9 \times 0.20 + 16 \times 0.25 + 25 \times 0.18 + 36 \times 0.12 = 15.32$

$\text{Var.}(X) = 15.32 - (3.62)^2 = 2.22$

11. An investment consultant predicts the odds against the price of a certain stock going up are 2:1 and odds in favor of the price remaining the same are 1:3. What is the price of stock will go down?

**Solution:**

$$P(\text{the prices will go up}) = \frac{1}{2+1} = \frac{1}{3}$$

$$P(\text{the prices will remain the same}) = \frac{1}{1+3} = \frac{1}{4}$$

Therefore  $P(\text{the prices will go down})$

$= P(\text{the price will neither go up nor remain same})$

$= 1 - P(\text{the price will go up or will remain the same})$

$$= 1 - \left(\frac{1}{3} + \frac{1}{4}\right) = 1 - \frac{7}{12} = \frac{5}{12}$$

12. A pair of dice is rolled. If the sum of the two dice is 9, find the probability that one of the dice shows 3

**Solution:**

Let A: Sum of on the two dice is 9. B: one of the dice showed 3.

Total outcomes when two dice are thrown =  $6 \times 6 = 36$

$$P(A) = P\{(6,3), (5,4), (4,5), (3,6)\} = \frac{4}{36}$$

$$P(A \cap B) = P\{(6,3), (3,6)\} = \frac{2}{36}$$

Therefore, required probability =  $P(B/A) =$

$$= \frac{P(A \cap B)}{P(A)} = \frac{2/36}{4/36} = \frac{2}{4} = \frac{1}{2}$$

13. The overall percentage of failures in a certain examination was 30. What is the probability that out of a group of 6 candidates at least four passed the examination?

Solution:

Let passing the examination be a success.

$$\text{Take } n = 6, P = P(\text{a student passes}) = 1 - \frac{30}{100} = \frac{70}{100} = \frac{7}{10}$$

$$q = P(\text{a student fails}) = \frac{30}{100} = \frac{3}{10}$$

Therefore  $P(\text{at least 4 students pass}) = P(4 \text{ or } 5 \text{ or } 6)$

$$= {}_6C_4 \left(\frac{7}{10}\right)^4 \left(\frac{3}{10}\right)^2 + {}_6C_5 \left(\frac{7}{10}\right)^5 \left(\frac{3}{10}\right) + {}_6C_6 \left(\frac{7}{10}\right)^6 \left(\frac{3}{10}\right)^0$$

$$= 15 \left(\frac{7}{10}\right)^4 \left(\frac{3}{10}\right)^2 + 6 \left(\frac{7}{10}\right)^5 \left(\frac{3}{10}\right) + \left(\frac{7}{10}\right)^6$$

$$= \left(\frac{7}{10}\right)^4 \left[ \frac{135}{100} + \frac{126}{100} + \frac{49}{100} \right]$$

$$= \frac{31}{10} \left(\frac{7}{10}\right)^4 = 0.74431.$$

14. What is the probability that a leap year selected at random would contain 53 Saturdays?

Solution:

A normal year has 52 Mondays, 52 Tuesdays, 52 Wednesdays, 52 Thursdays, 52 Fridays, 52 Saturdays and 52 Sundays  
52 Saturdays, 52 + 1 day that could be anything depending upon the year under consideration.

- In addition to this, a leap year has an extra day which might be a Monday or Tuesday or Wednesday or Sunday.

Our sample space is  $S$ : {Monday-Tuesday, Tuesday-Wednesday, Wednesday-Thursday, Thursday-Friday, Friday-Saturday, Saturday-Sunday, Sunday-Monday} = Number of elements in  $S = n(S) = 7$

set  $A$  (say) that comprises of the elements Friday-Saturday and Saturday-Sunday i.e.  $A$ : {Friday-Saturday, Saturday-Sunday}

Number of elements in set  $A = n(A) = 2$ ,

By definition, probability of occurrence of  $A = n(A)/n(S) = 2/7$

Therefore, probability that a leap year has 53 Saturdays is  $= 2/7$

15. If two unbiased coin is tossed three times, what is the probability of getting more than one head.

Solution:

One toss can give two (2) possible outcomes - head and tail.

So, three tosses can give  $(2 \times 2 \times 2) = 8$  possible outcomes.

2 heads and 1 tail out of 3 tosses can occur in  $({}^3C_2) \times ({}^1C_1) = 3$  ways.

So, the probability =  $(3/8)$ .

16. If two unbiased are rolled, what is the probability of getting points neither 6 nor 9?

Solution:

Two dice can make 6 in 5 ways: {1,5}, {2,4}, {3,3}, {4,2} and {5,1}.

Two dice can make 9 in 4 ways: {3,6}, {4,5}, {5,4} and {6,3}.

There are 36 possible ways the two dice can fall. Therefore, the probability of 6 or 9 is  $(5+4)/36 = 1/4$ .

The probability of not (6 or 9) is therefore  $1 - 1/4 = 3/4$ .

17. What is probability that 4 children selected at random would have different birthdays

Solution:

There are 365 out of 365 ways to select the birthday of first person. Therefore, the number of ways that we can choose a birthday for second person is 364 out of 365.

The probability that the second child has a different birthdate than the first is  $364/365$ .

The probability that the third child has a different birthday than the first two is  $363/365$ .

The probability that the fourth child has a different birthday than the first three is  $362/365$ .

Since all three of these situations must occur, multiply the three probabilities.

$$364/365 \times 363/365 \times 362/365 = 98.364\%$$

18. A box contains 5 white and 7 black balls. Two successive drawn of 3 balls are made (i) with replacement (ii) without replacement. The probability that the first draw would produce white balls and the second draw would produce black balls are respectively.

Solution:

Two successive drawn of 3 balls are made: TOTAL = 12 Balls: (5 White balls + 7 Black balls)

1st draw white ball and second draw black ball with

$$\text{replacement} = \frac{{}^5C_3 \times {}^7C_3}{{}^{12}C_3} = \frac{10}{220} \times \frac{35}{220} = \frac{7}{968}$$

1st draw white ball and second draw black ball without

$$\text{replacement} = \frac{{}^5C_3 \times {}^7C_3}{{}^{12}C_3} = \frac{10}{220} \times \frac{35}{84} = \frac{5}{264}$$

$$P(\text{both happening}) = \frac{7}{968} \text{ and } \frac{5}{264}$$

19. There are three boxes with the following composition:

Box I: 5 Red + 7 White + 6 Blue balls

Box II: 4 Red + 8 White + 6 Blue balls

Box III: 3 Red + 4 White + 2 Blue balls

If one ball is drawn at random, then what is the probability that they would be of same colour?

Solution:

Either balls would be Red or white or blue

$$= P(R_1 \cap R_2 \cap R_3) + P(W_1 \cap W_2 \cap W_3) + P(B_1 \cap B_2 \cap B_3)$$

$$= P(R_1) \times P(R_2) \times P(R_3) + P(W_1) \times P(W_2) \times P(W_3) + P(B_1) \times P(B_2) \times P(B_3)$$

$$= \frac{5}{18} \times \frac{4}{18} \times \frac{3}{9} (\text{Red Balls}) + \frac{7}{18} \times \frac{8}{18} \times \frac{4}{9} (\text{White Balls}) + \frac{6}{18} \times \frac{6}{18} \times \frac{2}{9} (\text{Black Balls})$$

$$= \frac{89}{729}$$

20. A number is selected at random from the first 1000 natural numbers. What is the probability that the number so selected would be a multiple of 7 or 11?

Solution:

First 1000 natural numbers belong to the following set {1, 2, 3, ..., 1000} with cardinality = 1000

Multiples of 7 less than 1000 = Quotient of  $(1000/7) = 142$

Multiples of 11 less than 1000 = Quotient of  $(1000/11) = 90$

As 7 & 11 are both primes so multiples of  $7 \times 11 = 77$  will be included in both multiples of 7 and multiples of 11

Multiples of 77 less than 1000 = Quotient of  $(1000/77) = 12$   
 Hence, all-natural numbers below 1000 which are either multiples of 7 or of 11 =  $142 + 90 - 12 = 220$   
 So, Prob (this event) =  $220/1000 = 0.22$

21. A bag contains 8 red and 5 white balls. Two successive draws of 3 balls are made without replacement. The probability that the first draw will produce 3 white balls and the second 3 red balls is

Solution:

There are total 13 balls out of which 8 are red and 5 are white. Favourable case of first draw is to get 3 white balls out of 5 white balls.

$$\text{Probability } P_1 = \frac{5C_3}{13C_3} = \frac{5}{143}$$

If this happens then remaining are - 2 white balls and 8 red balls.

Favourable case is to get 3 red balls out of 8 balls.

$$\text{Probability } P_2 = \frac{8C_3}{10C_3} = \frac{7}{15}$$

Both the events are independent of each other, hence total probability is  $P_1 * P_2 = \frac{(5C_3 * 8C_3)}{(13C_3 * 10C_3)} = \frac{5}{143} * \frac{7}{15} = \frac{7}{429}$

22. There are two boxes containing 5 white and 6 blue balls and 3 white and 7 blue balls respectively. If one of the boxes is selected at random and a ball is drawn from it, then the probability that the ball is blue is

Solution:

First box: No. of white balls = 5, No. of blue balls = 6

Second box: No. of white balls = 3, No. of blue balls = 7

So, total no. of white balls = 8, Total no. of blue balls = 13

So, total no. of balls =  $8+13=21$

Now probability of getting blue ball:  $=13/21$

Hence the probability of getting blue ball is  $=13/21$

23. A problem in probability was given to three CA students A, B and C whose chances of solving it are  $1/3$ ,  $1/5$  and  $1/2$  respectively. What is the probability that the problem would be solved?

Solution:

Probability of A solving the problem =  $1/3$ , Probability of A not solving the problem =  $1-1/3 = 2/3$

Probability of B solving the problem =  $1/5$ , Probability of B not solving the problem =  $1-1/5 = 4/5$

Probability of C solving the problem =  $1/2$ , Probability of C not solving the problem =  $1-1/2 = 1/2$

Probability of A, B and C not solving the problem =  $2/3 * 4/5 * 1/2 = 4/15$

Probability of A, B and C solving the problem =  $1-4/15 = 11/15$

24. There are three persons aged 60, 65 and 70 years old. The survival probabilities for these three persons for another 5 years are 0.7, 0.4 and 0.2 respectively. What is the probability that at least two of them would survive another five years?

Solution:

$$\text{Probability (At least two alive)} = P(\text{two alive}) + P(\text{two alive}) \\ = (0.7)(0.4)(1-0.2) + (0.7)(0.2)(1-0.4) + (0.4)(0.2)(1-0.7) + (0.7)(0.4)(0.2)$$

$$= 0.28 * 0.8 + 0.14 * 0.6 + 0.08 * 0.3 + 0.056 = 0.224 + 0.084 + 0.056 = 0.388$$

25. Tom speaks truth in 30 percent cases and Dick speaks truth in 25 percent cases. What is the probability that they would contradict each other?

Solution:

$$P(\text{Tom speaks truth}) = P(T_T) = 30/100 = 3/10;$$

$$P(\text{Dick speaks truth}) = P(D_T) = 25/100 = 1/4$$

$$P(T_F) = 1-3/10 = 7/10; P(D_F) = 1-1/4 = 3/4$$

probability that they would contradict each other

$$= P(T_T) * P(D_F) + P(T_F) * P(D_T)$$

$$= (3/10 * 3/4) + (7/10 * 1/4) = 0.40$$

26. There are two urns. The first urn contains 3 red and 5 white balls whereas the second urn contains 4 red and 6 white balls. A ball is taken at random from the first urn and is transferred to the second urn. Now another ball is selected at random from the second urn. The probability that the second ball would be red is

Solution:

the first urn contains 3 red and 5 white balls => total = 8 Balls

second urn contains 4 red and 6 white balls. => Total = 10 Balls

There can be two cases : Ball taken from Urn is Red or White

Case 1 : Red is Taken from Urn:A

Probability of Red =  $(3/8)$

then second urn contains 5 Red & 6 White => total = 11

Probability of Red from Urn:B =  $(3/8) * (5/11) = 15/88$

Probability of White from Urn:B =  $(3/8) * (6/11) = 18/88$

Case 1 : White is Taken from Urn:A

Probability of White =  $(5/8)$

then second urn contains 4 Red & 7 White => total = 11

Probability of Red from Urn:B =  $(5/8) * (4/11) = 20/88$

Probability of White from Urn:B =  $(5/8) * (7/11) = 35/88$

probability of that the second ball would be Red =  $15/88 + 20/88 = 35/88$

probability of that the second ball would be White =  $18/88 + 35/88 = 53/88$

27. For a group of students, 30%, 40% and 50% failed in Physics, Chemistry and at least one of the two subjects, respectively. If an examinee is selected at random, what is the probability that he passed in Physics if it is known that he failed in Chemistry?

Solution:

Let the total number of students = 100

Number of students failed in physics = 30% of 100 = 30

Number of students failed in chemistry = 40% of 100 = 40

Number of students failed at least one of the two subjects = 50% of 100 = 50

We need to calculate.

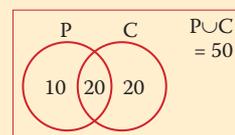
$P(\text{He passed in Physics but Failed in Chemistry}) / P(\text{Failed Chemistry})$

$$n(P \cup C) = n(p) + n(c) - n(P \cap C) \Rightarrow 50 = 30 + 40 - n(P \cap C)$$

$$n(P \cap C) = 20$$

$P(\text{He passed in Physics but Failed in Chemistry}) / P(\text{failed Chemistry})$

$$= \frac{P(C-P)}{P(P)} = \frac{100}{40} = \frac{20}{40} = \frac{1}{2}$$



28. A packet of 10 electronic components is known to include 2 defectives. If a sample of 4 components is selected at random from the packet, what is the probability that the sample does not contain more than 1 defective?

Solution:

P (No more than one defective) = P (No defective) + P (One defective)

$$\begin{aligned} &= \frac{{}^8C_4}{{}^{10}C_4} + \frac{{}^2C_1 \times {}^8C_3}{{}^{10}C_4} \\ &= \frac{70}{210} + \frac{112}{210} \\ &= \frac{91}{210} = \frac{13}{30} \end{aligned}$$

29. 8 identical balls are placed at random in three bags. What is the probability that the first bag will contain 3 balls?

Solution:

The probability that a ball will be placed in the first bag is  $\frac{1}{3}$ . The probability that exactly 3 of the 8 balls will end up in the first bag can be found by using the binomial distribution:

$${}^8C_3 \left(\frac{1}{3}\right)^3 \left(\frac{2}{3}\right)^5 = \frac{{}^8C_3 \times 2^5}{3^8} = \frac{56 \times 32}{6561} = 0.2731$$

30. X and Y stand in a line with 6 other people. What is the probability that there are 3 persons between them?

Solution:

There are altogether 8 people  $p_1, p_2, \dots, p_8$  including X & Y and these 8 people can be arranged in  $8! = 40320$  ways. Now, there should be 3 people between X and Y and these 3 people can be selected out of 6 in  $C(6,3) = 20$  ways. (6 people because X & Y are excluded from 8).

Now, take  $(X, *, *, *, Y)(X, *, *, *, Y)$  as one set of people and together with the remaining 3 people we can think of a total of 4 people which can be arranged in  $4! = 24$  ways.

Again, the 3 people between X & Y can be arranged in  $3! = 6$  ways. Also, the position of X and Y can also be arranged in  $2! = 2$  ways. So, total arrangements with 3 people between X & Y is  $20 \times 24 \times 6 \times 2 = 5760$

Hence, the required probability is  $= \frac{5760}{40320} = \frac{1}{7}$ .

31. Given that  $P(A) = \frac{1}{2}$ ,  $P(B) = \frac{1}{3}$ ,  $P(AB) = \frac{1}{4}$ , what is  $P(A \cup B)$ ?

Solution:

$$\begin{aligned} P\left(\frac{A}{B}\right) &= \frac{P(A \cap B)}{P(B)} = \frac{P(A \cup B)}{1 - P(B)} = \frac{1 - P(A \cup B)}{1 - P(B)} = \frac{1 - \left(\frac{1}{2} + \frac{1}{3} - \frac{1}{4}\right)}{1 - \frac{1}{3}} = \frac{1 - \left(\frac{6+4-3}{12}\right)}{\frac{2}{3}} \\ &= \frac{1 - \frac{7}{12}}{\frac{2}{3}} = \frac{\frac{5}{12}}{\frac{2}{3}} = \frac{5}{12} \times \frac{3}{2} = \frac{5}{8} \end{aligned}$$

32. Four digits 1, 2, 4 and 6 are selected at random to form a four-digit number. What is the probability that the number so formed, would be divisible by 4?

Solution:

From four digits 1, 2, 4 and 6 last two digits (12, 16, 24, 64) can be selected in (4 ways)

Total possible numbers are divisible by 4 are 4612, 6412, 2416, 4216, 1624, 6124, 1264, 2164 = 8

Here are four ways of filling the last two digits. The remaining two places (100's, 1000's digits) can be filled in two ways. Thus there are total  $4 \times 2 = 8$  ways

Total possible 4 digit numbers =  $4! = 24$

$$\text{Probability} = \frac{8}{24} = \frac{1}{3}$$

33. A bag containing 6 white and 4 red balls. Rs 10 is received if he draws white ball and Rs. 20 for red ball. Find the expected amount when the person draws 2 balls.

Solution:

$$\text{The probability of both being white ball would be} = \frac{{}^6C_2}{{}^{10}C_2} = \frac{15}{45}$$

$$\text{The probability of both being red ball would be} = \frac{{}^4C_2}{{}^{10}C_2} = \frac{6}{45}$$

The probability of one being red ball and another being white

$$\text{ball would be} = \frac{{}^6C_1 \times {}^4C_1}{{}^{10}C_2} = \frac{24}{45}$$

Hence the expected amount when person draws two balls will be

$$= \frac{15}{45} \times (10 + 10) + \frac{6}{45} (20 + 20) + \frac{24}{45} (10 + 20)$$

$$= 6.7 + 5.33 + 16 = \text{Rs. } 28$$

34. If two random variables x and y are related as  $Y = -3x + 4$  and Standard Deviation of Y is

Solution:

$$\text{Given } Y = -3x + 4$$

$$Y = a + bx$$

$$\sigma_y = \sigma(ax + b), \sigma(b) = 0$$

$$\sigma_y = |a| \cdot \sigma_x$$

$$\text{SD of } y = \sigma_y = 3 \times 2 = 6$$

35. If  $2x + 3y + 4 = 0$  and  $v(x) = 6$  then  $V(y)$  is

Solution:

Given that  $2x + 3y + 4 = 0$  and  $v(x) = 6$  then SD of  $x = \sqrt{6}$ ;  $V(y) = ?$

$$\text{SD}_y = \left| -\frac{2}{3} \right| \cdot \text{SD}_x = \frac{2}{3} \sqrt{6}$$

$$y^2 = \frac{4}{9} \cdot 6 = \frac{8}{3}$$

$$V(y) = \frac{8}{3}$$

36. A pocket of 10 electronic components is known to include 3 defectives. If 4 components are selected from the packet at random, what is the expected value of the number of defective?

Solution:

10 electronic components If 4 components are selected from the packet at random =  $\frac{4}{10}$

$$\text{Expected value of the number of defective} = 3 \times \frac{4}{10} = \frac{12}{10} = 1.2$$

37. The Probability there is atleast one error in a account statement prepared by 3 persons A, B and C are 0.2, 0.3 and 0.1 respectively. If A, B and C prepare 60, 70 and 90 such statements then expected number of correct statements.

Solution:

$$E(x) = A \cdot (1 - P(A)) + B \cdot (1 - P(B)) + C \cdot (1 - P(C)) = (60 \times (1 - 0.2)) + (70 \times (1 - 0.3)) + (90 \times (1 - 0.1))$$

$$= (60 \times 0.8) + (70 \times 0.70) + (90 \times 0.9) = 178$$



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## CROSSWORD - AUGUST 2021

1	2			3			4		5	6
7							8	9		
		10	11		12		13			
14	15				16		17			
	18				19		20		21	
22						23			24	
							25	26		
27		28	29	30		31				
32	33							34	35	
36								37		
38								39		

16. \_\_\_\_ equals the gross domestic product (GDP) minus depreciation on a country's capital goods.
20. A strategic planning technique used to help a person or organisation identify strengths, weaknesses, opportunities, and threats related to business competition or project.
26. Something (as power, a signal, or data) that is put into a machine or system.
27. An instant payment inter-bank electronic funds transfer system in India.
28. \_\_\_\_ was established in 1945 to provide feeding, resting, and nesting habitat for migratory birds.
29. \_\_\_\_ is available to anyone who plans to attend a university in the United States and who has not been conditionally accepted to any of the ELI's conditional admissions partner universities.
30. \_\_\_\_ is a freely available and global framework for exchanging business information.
31. An organised Group 'A' class service (Cadre) in railways.
33. A scheme that was introduced to boost exports, increase foreign earnings, and created employment in India.
35. The minimum amount of default for initiating CIRP is \_\_\_\_ crore.

### ACROSS

1. A bill of exchange is drawn by \_\_\_\_.
5. A scale used to specify the acidity or basicity of an aqueous solution.
7. \_\_\_\_ refers to the amount of risk capital that a bank estimates it will need in order to remain solvent at a given confidence level and time horizon.
8. A river in France:
10. \_\_\_\_ ratio measures the absolute liquidity of the business.
13. \_\_\_\_ is a pressure limit set, usually by a government body, which applies to compressed gas pressure vessels, pipelines, and storage tanks.
14. What is used to make computer chips?
17. \_\_\_\_ is a globally recognised computer-based standardised language readiness test developed by Pearson Plc.
18. A \_\_\_\_ is a coding error in a computer program.
19. The concept of \_\_\_\_ was introduced with an aim to collect tax from the very source of income.
21. \_\_\_\_ is a command line-utility in Linux and Unix systems that translates, deletes, and squeezes characters from the standard input.
22. MPG is a file extension of \_\_\_\_ file.
23. \_\_\_\_ is the online destination for professionals and businesses.
24. \_\_\_\_ is the leave earned by an employee after working in the company for a certain amount of time, usually a month.
25. \_\_\_\_ is a smaller but beautiful upcoming tourist destination in Himachal Pradesh.
28. A \_\_\_\_ is a compulsory financial charge or some other type of levy imposed on a taxpayer by a governmental organization in order to fund government spending.
31. A UK-based television production company.
32. The \_\_\_\_ of software contains lists of commands and options.
34. The name used by India for the portion of Kashmir under Pakistani administration.
36. The ability or capacity to do something or act in a particular way.

37. Model Convention has inserted new article 12B on Income from Automated Digital Services.
38. Credit balance in the profit and loss statement after providing for proposed appropriations.
39. The threshold turnover limit above which tax audit under section 44AB would be mandatory has been increased to \_\_\_\_ crores, in respect of those businesses, whose aggregate cash receipts and payments in the relevant previous year do not exceed 5% of total receipts and total payments, respectively, in the relevant previous year.

### DOWNWARD

1. \_\_\_\_ was set up by the Department of Atomic Energy and the University of Mumbai in 2007.
2. A document that proves your vehicle is registered with the Regional Transport Office (RTO) authorities.
3. An International Accounting body which is working to achieve uniformity in the accounting principles that are used by businesses and other organisations for financial reporting around the world.
4. \_\_\_\_ is volatile memory that temporarily stores the files we are working on.
5. \_\_\_\_ device is used to reproduce drawing using pens that are attached to movable arms.
6. A word in a web page that, when clicked, opens another document is called \_\_\_\_.
9. An American worldwide clothing and accessories retailer.
10. Abbre: Compatible Land Use Development.
11. Abbre: 'ASEAN Institute for a Green Economy'.
12. Something that is very warm in temperature.
15. \_\_\_\_ portal is visualised as a federally distributed data base network on bio-resources and biodiversity of the country.

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