Class XII

# **ANSWER KEY**

Part-A: Employability Skills

## **Artificial Intelligence**

# 1. Communication Skills-IV

_	
Eveneine	
. Exercise	
/UI UIUU	



### **Unsolved Questions**

- **A.** 1. exclamatory 2. listening, speaking, reading, writing 3. paragraph
  - 4. accurate 5. complex
- **B.** 1. False 2. True 3. False 4. True 5. False
- C. 1. Characteristics of an active listener are:
  - **Eye Contact** Eye contact is a must during a conversation. It is one of the most important parts of communication. Maintaining eye contact with the person you're speaking with communicates to the speaker," Yes, I am talking to you." Avoiding eye contact could indicate that you are not interested in what person speaking to you is saying.
  - **Gestures** These show the speaker whether you are listening or not. While speaking with someone, keep your hands and feet still.
  - Providing Feedback Feedback can be either positive or negative. However, in both
    circumstances one must be respectful so that the person receiving it would not feel hurt
    or insulted.
  - 2. Two types of part of speech are:
    - Nouns It describes a person, place, or thing.
       Ex. I love visiting <u>Tamil Nadu</u>.
    - Adjective It describes a noun.
       Ex. She has a red dress.
  - 3. Barriers to active listening are:
    - Being preoccupied.
    - Audio and visual distractions.
    - · Previous experiences or mindset.
    - Personal consideration.

- 4. i) Imperative
  - ii) Declarative
  - iii) Exclamatory
  - iv) Interrogative
  - v) Declarative

#### 5. Advantages of active listening are:

- Active listening fosters trust and solid partnerships.
- Active listening allows you to detect or anticipate difficulties.
- Active listening allows you to learn more. It helps us grasp the issues more deeply and contribute to developing solution, solving disagreement and boost our productivity.
   (Any 2)

#### D. 1. Gestures and feedback play an important role in effective communication:

**Gestures**- Your gestures indicates whether you are interested in a conversation or not. They help you emphasise your point more clearly and assist the speaker to understand better. While speaking with someone, keep your hands and feet still.

**Feedback**- Feedback is important as it gives you the viewpoint of receiver. It can be either positive or negative. You as the speaker should take it seriously and work on any flaw that is pointed out. However, in both situations (good or bad) one should deliver the feedback respectfully so that the person at other end doesn't feel hurt or insulted.

2.	Active Sentences	Passive Sentences
	The subject performs the action on the object.	The subject is being acted upon in these sentences.
	The format is-	The format is –
	Subject + verb + object	Object + verb + subject
	Examples: Anita writes a book.	Examples: A book is written by Anita.
	Swara sells pickle jars.	Pickle jars are sold by Swara.

#### 3. • R – REMOVE all distractions

- E EYE CONTACT is a must with speaker
- S SHOW that you are paying close attention to the speaker through your body language.
- P PAY ATTENTION and concentrate on what the speaker is saying.
- E EMPATHISE with the speaker's feelings. Empathy is the ability to share other person's feeling or experiences by thinking what it would be like if you were instead of that person.
- C CLEAR UP any doubts. Don't hesitate to ask questions
- T TUNE IN with speaker's timing, i.e., don't interrupt but wait for the speaker to finish before responding.



4. Body language during an interview is extremely essential in determining whether or not you will advance in your profession. For interviewers, your body language is a vital indicator of your comfort, confidence, and curiosity.

**Statement** – During an interview, one should express messages in a clear, precise, and accurate manner while being confident.

**Eye Contact** - When conversing, it is essential to maintain eye contact. It is one of the most crucial aspects of communication. It not only demonstrates that you are paying attention to your interviewer, but it also indicates your interest in the situation. Avoiding eye contact might sometimes be interpreted as a lack of confidence.

**Posture** - An erect posture frequently conveys confidence and dependability to the interviewer. Fidgeting is a sign of anxiousness and should be avoided. Always strive to smile because it exudes positivity.

The following are some of the reasons why effective listening is important:

- We listen to comprehend.
- We listen to obtain information.
- We listen to have fun, learn, establish, and nurture relationships.
- We listen to resolve conflicts.
- 5. MINTS is a simple set of rules that assist you in correctly capitalising words as shown below.
  - M MONTHS e.g. I love the month of December.
  - I the letter 'I' e.g. Nikita and I love to eat chocolate.
  - N Names (people, place, things) e.g. I am going to Maharashtra to see the famous Ajanta and Ellora caves.
  - T Titles e.g. Children love to read Harry Potter books.
  - S Start of Sentences e.g. Everyone is waiting outside.



Do it your self.

# 2. Self-Management Skills-I



### **Unsolved Questions**

- **A.** 1. Motivation 2. extrinsic 3. Realistic
  - 4. Self-awareness 5. Five Factor
- **B.** 1. True 2. False 3. True 4. False 5. False

- C. 1. SMART goals are the ones which are specific, measurable, attainable, realistic, and attainable
  - S SPECIFIC: Goals which are clear and deadlines which are set keeping real numbers in mind
  - M MEASURABLE: Measurable goals can be tracked, allowing you to see progress.
  - A ATTAINABLE: Know that you goal is attainable and work hard towards achieving it.
  - R REALISTIC: Your goals should be realistic so that unnecessary stress can be avoided.
  - T TIME BOUND: Give yourself a deadline.

2.	7	
۷.	<b>Avoidant Personality Disorder</b>	<b>Dependent Personality Disorder</b>
	People with this disorder are socially incompetent, unappealing, or lacking.	People with this order have a lack of self-confidence and a strong need to be looked after.
	People with this disorder are constantly afraid of being embarrassed, criticised, or rejected.	They are dependent on others for making both daily decisions and essential life decisions.
	They avoid social situations and frequently suffer emotions of failure, inferiority, or unattractiveness.	They are highly dependent on others for their emotional and physical needs due to which they dislike being alone.

- 3. Stress management techniques are:
  - Maintain a good attitude and examine what is going wrong in a given circumstance. Once the problem is understood, it is simple to resolve.
  - Keep an accomplishment sheet and record even minor accomplishments.
  - Keep your mind in the current moment. We feel unhappy and powerless when we think about past problems.
  - Seek consolation from friends and family.
- 4. An individual's personality may be described using five characteristics. These five dimensions are also known as the 'Big Five Factors', and the concept is known as the 'Five Factor Model', or FFM.
  - **Openness** People that are open to new experiences are often inquisitive, daring, energetic, adaptable, and creative.
  - Consciouness Individuals who listen to their conscience are more self-disciplined.
  - **Extraversion** Someone who is self-assured and extrovert is someone who easily makes friends and makes gatherings exciting.
  - **Agreeableness** People who have this trait are usually sociable, cooperative, warm, empathetic, and compassionate.
  - **Neuroticism** It is a personality feature characterised by a proclivity for worry, self-doubt, despair, shyness, and other negative feelings.



- 5. Maintain an optimistic outlook on life and remember that each failure brings you one step closer to your objective.
  - Learn to live in the present moment rather than worrying about the past or the future.
  - Do not set unreasonable goals since you will become demotivated if they are not met.
  - Maintain a social life by getting out and about and taking holidays on occasion. It will help you feel revitalised and think clearly with a fresh perspective.
- D. 1. Following are different types of personality disorders developed in people showing anxious behaviour:
  - Avoidant personality disorder: People with this disorder are socially incompetent, unappealing, or lacking, and they are always afraid of being embarrassed, criticised, or rejected. They avoid social situations and frequently suffer emotions of inadequacy, inferiority, or unattractiveness.
  - **Dependent personality disorder:** People with this illness have a lack of self-confidence and a strong need to be looked after. They require a great deal of assistance in making daily decisions and entrust crucial life decisions to the hands of others. They are highly dependent on others for their emotional and physical needs and, as a result, hate being alone.
  - **Obsessive-compulsive personality disorder:** People with this illness are obsessive about following rules and regulations. They are distinguished by an overbearing desire for orderliness, perfectionism, and attention to detail. They are highly uncomfortable when they are unable to attain perfection. They may even overlook personal connections in order to finish a project.
  - 2. Stress is defined as the condition of being agitated, irritated, and helpless. There are moments when we feel that nothing is functioning well, that we are unable to attain our objectives, and that we are lost.
    - Steps to overcome stress:
    - Exercising your deep breathing.
    - Meditation.
    - Meditation about mindfulness.
    - Muscles are gradually relaxed.
    - Relaxation through mental imagery
    - Music helps you unwind.
    - Counseling to assist you in recognising and releasing stress.
  - 3. The following are five methods for cultivating a positive attitude:
    - a. **Create Meaningful Habits** "You are what you feed your thoughts." Fill your head with positive thoughts by reading books, listening to podcasts/music, watching motivational videos, and so on.

- b. **Change your Mindset** Do not go through life with 'problems.' Approach difficulties with a solution mindset, and remember that failure teaches you what you can do better, so don't let it discourage you.
- c. **Adequate Sleep** A good night's sleep is essential for feeling renewed and performing better the next day.
- d. **Fresh Air and Physical Activity** Students must maintain a healthy lifestyle. Yoga and meditation can help you focus and relax your body. Going for a walk in the park gives you access to a lot of fresh air, which helps you be more active.
- e. **Vacations** Visiting a different area during the holidays provides a change from one's monotonous routine, allowing the body to feel more invigorated.
- 4. To set goals one should use 'SMART'
  - S- SPECIFIC- One should be clear while setting a goal. Set deadlines that are real and achievable.
  - M- MEASURABLE- Measurable goals are one that can be tracked allowing you to monitor their progress.
  - A- ATTAINABLE- Set your goals clearly and know if it is attainable and then work hard toward achieving it.
  - R REALISTIC- Make your goal realistic as it will avoid you uncalled stress in long term.
  - T- TIME-BOUND Give yourself a deadline.
- 5. The ability to effectively control one's emotions, thoughts, and behaviour in a range of situations is referred to as self-management. This includes motivating oneself and working for personal and academic goals. It is significant because it enables a person to establish a better work-life balance and achieve success in both areas of life. It enables a person to do better in school or in work. Self-management teaches people how to manage and enhance their own abilities in areas such as punctuality, discipline, problem solving, and work habits. It has been demonstrated on numerous occasions that students and professionals with strong self-management skills perform better and are more effective in various areas.

Hence, it boosts productivity and helps one perform better, which aids in the achievement of one's goals.



Do it your self.

# 3. ICT Skills-IV



### **Unsolved Questions**

A. 1. Functions

2. name box

3. Data

- 4. selected cell
- 5. Column header, row number



Touchpad Artificial Intelligence-XII (Answer Key)

- **B.** 1. False 2. True 3. False 4. False 5. True
- C. 1. A **slide** is a single page of a presentation
  - 2. Impress .odp PowerPoint .pptx
  - 3. To apply AutoFilter in a worksheet, the steps are:
    - a. Select cell, say, A1.
    - b. Select Data ➤ Filter ➤ AutoFilter.
    - c. A drop-down menu arrows appear in each column heading.
    - d. Click the drop-down menu arrow and select an item.
    - e. Only those rows whose contents meet the filter criteria are displayed.
  - 4. Sorting means arranging data alphabetically or in numerical sequence. The steps of sorting are:

### **Sorting on One Column**

- a. Enter data in a worksheet
- b. Select any cell.
- c. Click the Sort option from the Data menu.
- d. The **Sort** dialog box appears.
- e. Select the **Descending/Ascending** option under **Sort** by and click **OK**.
- 5. a. **Save** 
  - b. Print Preview

By default, the Formatting toolbar is situated next to the Standard toolbar. It has buttons that symbolise text-editing functions including font, text size, bold, numbering, and bullets.

- **D.** 1. Presentation software is widely used to create digital presentations. It has numerous benefits as follows:
  - A presentation can be made interesting by including images, videos, animation, and music.
  - It is simple to make changes to digital presentations.
  - By projecting on a screen, a digital presentation can be shown to a much larger audience.
  - The presentation can also be printed and distributed to the audience.
  - 2. Each cell has a unique address which identifies its location. A cell address is identified with its column position followed by its row number, for example: 'A5' is the cell address that is a combination of column 'A' and row '5'.

- 3. (iv)  $\rightarrow$  (ii)  $\rightarrow$  (i)  $\rightarrow$  (iii)
  - Select the content to be copied, then click the 'Copy' command on standard toolbar.
  - Place the insertion point on the desired area where content is required to appear.
  - Press 'Ctrl+V' keys from keyboard.
  - The copied text will appear at the insertion point.
- 4. What are the various ways in which we edit or format a slide? Explain any two.

We can Edit/Format the text on the slide by

- Using formatting toolbar
- oSelecting the text and right click and use the pop-up menu
- 5. A spreadsheet allows you to enter, edit and delete data and use data functions.

#### **Deleting Data from a Cell**

You can delete the value stored in a specific cell. The following are the steps to delete data from a cell:

- **Step 1:** Select the cell.
- **Step 2:** On the keyboard, press the Delete key. Delete Contents dialog box will appear.
- **Step 3:** Click on OK button. This removes the text entry from that cell, leaving it empty.

#### **Entering Formula in a cell**

- **Step 1:** Click the cell in which you want your answer.
- **Step 2:** Type '=' (equal to) sign to start the formula. Click on the cell (using the left mouse button) which contains the value to be used in your formula. Calc will automatically pick up the cell address. (You can also type in the cell address)
- **Step 3:** Type in the operator you want
- Addition
- Subtraction
- Multiplication
- Division
- **Step 4:** Click on the remaining cell to finish the formula.
- **Step 5:** Press the Enter key. Calc will do the calculations for you.



Do it your self.

# 4. Entrepreneurial Skills-IV

# Q

### **Unsolved Questions**

A. 1. resources 2. Startups 3. action 4. high 5. Critical thinking

**B.** 1. False 2. True 3. False 4. True 5. True

**C.** 1. Staying positive as an entrepreneur, even when failures occur, is critical to moving forward and pushing through. A positive attitude can help you change a poor situation into a good one in much less time and with greater results.

A positive attitude is the source of all wonderful things. Your world is created by you, and energy follows attention. So, focus on the good parts of your business and your life. People will notice if you keep your mind on track and establish a good, nontoxic attitude in the office. You want your customers and prospects to sense it. Be a positive and energetic beacon, and you and your team will have a better time in life.

- 2. Entrepreneurial problem solving is the process of bridging the gap by resolving societal, business, or technology issues through innovation and innovative solutions. Developing problem-solving abilities is a key task for businesspeople. If you don't know how to address difficulties, your firm will fail. Furthermore, in entrepreneurship, innovative problem-solving is one of the most important elements to business success.
- 3. perseverance, creative thinking, risk-taking (any two)
- 4. Goal planning entails creating an action plan to encourage and guide a person or group toward a certain goal. Goals are more intentional than desires and spur-of-the-moment intents. Setting objectives implies that a person has dedicated thought, emotion, and conduct to achieving the goal. As a result, the goal setter has constructed a desired future state that differs from their existing state, resulting in a mismatch that prompts future actions. Goal-setting criteria (or guidelines) such as the SMART criteria can help guide goal-setting. Setting goals is a key component of personal development and entrepreneurship.

5.	Entrepreneurs in Technology	Entrepreneurs in IT
	Entrepreneurs operate in the fields of	
	electronics, mechanical devices, and even	entrepreneurship in the realm of information
	civil engineering,	technology (IT) only.

D.	1			
υ.	1.	Wage Employee	Entrepreneur	
		Work for others.	Own boss.	
		Seek direction or help when a problem arises.	Create their own path.	
		Take fewer or no risks.	Need to take many risks for greater success.	

- 2. A startup is a business that is in its early stages of development. Startups can be launched with a small amount of capital. Most startups thrive on technological ideas or offer technologically driven solutions.
  - The Government of India's flagship initiative, 'Startup India,' aims to create an ecosystem for the growth of startup businesses. The government has developed various startup policies. If they meet the criteria, new businesses in India can benefit from regulatory and tax perks, capital gain exemption, and access to government funding under this scheme.
- 3. There are two reasons why entrepreneurship is vital. For starters, it encourages creativity in order to develop innovative answers to existing and emerging demands. Two, it offers more chances for self- and societal wealth generation than anything else. Individuals are drawn to entrepreneurial activity in search of freedom, self-actualization, prosperity, and other desirable consequences.

#### Challenges:

- Entrepreneurs are exposed to a variety of hazards, including insolvency, financial risk, competitive risk, environmental risk, reputational risk, and political and economic risk.
- Entrepreneurs must spend sensibly and demonstrate to investors that they are assessing risks by developing a credible business plan.
- Market demand is uncertain since consumer trends can shift quickly, posing challenges for entrepreneurs.
- 4. Entrepreneurs are vital in market economies because they can act as the country's economic development wheels. They create new employment opportunities by developing new products and services, resulting in an acceleration of economic development.
- 5. As the term implies, women entrepreneurs are those who start their own businesses. A growing number of female entrepreneurs are taking the initiative to create their own businesses, and many of them have made it to the top. Examples:
  - Falguni Nayar Nykaa.
  - Aditi Gupta Menstrupedia.
  - Radhika Agarwal Shopclues.
  - Suchi Mukherjee Limeroad.



Do it your self.

# 5. Green Skills-Iv



### **Unsolved Questions**

**A.** 1. Carbon dioxide, methane 2. Eco-tourism 3.'Green Jobs Skill Council'

4. holistic 5. Water harvesting, conservation

**B.** 1. True 2. False 3. False 4. True 5. False

C. 1. Hybrid and electric car production, sales, and repair are examples of green occupations in the automotive industry. Many of these jobs are in specialist fields and can be considered ecologically beneficial. As the Hybrid and Electric vehicle industries grow, so will the demand for these specialist roles described below. As the industry becomes more green and ecofriendly, hybrid production, R&D, efficiency, and so on will be required.

Many additional vocations in the transportation industry are ecologically beneficial. Bicycle repair and bus drivers reduce carbon emissions to the environment by using these modes of transportation.

- 2. Composting.
  - Using a little creativity, plastic bottles can be reused. For instance, you can cut off the bottom halves of the plastic bottles and plant seedlings in them.
- 3. Drip irrigation is the most effective method of delivering water and nutrients to crops. It provides water and nutrients straight to the plant's root zone in the proper amounts and at the right time, ensuring that each plant gets exactly what it needs, when it needs it, to grow effectively. Farmers may increase yields while saving money on water, fertiliser, electricity, and even crop protection items by using drip irrigation.

Water and fertilisers are carried over the field in pipes known as 'dripperlines,' which include smaller units known as 'drippers.' Each dripper emits water and fertilizer-containing drips, resulting in the uniform distribution of water and nutrients to each plant's root zone across an entire field.

1	

Chief sustainability officer	Wind/Solar energy engineer	
They supervise green activities in their organisation.	They design and develop wind farm systems.	

- 5. Yes. Rain water harvesting leads to water conservation so it is a green job. This also includes water quality testing as rainwater harvesting requires filters and purifiers.
- D. 1. Organic farming is an agricultural technique that employs environmentally friendly insect treatments and biological fertilisers obtained primarily from animal and plant wastes, as well as nitrogen-fixing cover crops. It prevents the use of harsh chemicals, hence aiding in the preservation of the natural environment. Indeed, scientific studies have found that organic

farming can prevent approximately 500 million pounds of pesticides and toxins from entering the environment each year.

Organic farming does not rely on synthetic fertilisers, as opposed to traditional methods that employ a lot of these external chemicals. Avoiding fertilisers helps to further the cause of energy conservation. This is because the production of synthetic fertilisers requires a substantial quantity of energy.

- 2. A greenhouse gas is any gaseous compound in the atmosphere that absorbs infrared radiation, trapping and holding heat in the atmosphere. Greenhouse gases cause the greenhouse effect by increasing the amount of heat in the atmosphere, which eventually leads to global warming. Climate change affects society and ecosystems in a variety of ways. For example:
  - A warming climate is projected to bring more severe heat waves, floods, and droughts.
     Crop yields may be reduced as a result of several factors.
  - Sea level rise has the potential to degrade and inundate coastal ecosystems, as well as remove wetlands.
  - Climate change has the potential to influence where species dwell and how they interact, thereby transforming current ecosystems.
- 3. Green occupations in relevant technology may include biogas production, water treatment filtration, farm mechanisation, rainwater harvesting, sanitation, lighting, food production, refrigeration, and so on. The emphasis of green technology is on sustainability.
- 4. E-waste has been highlighted as the world's fastest growing waste source at the moment. The key drivers of this trend are rapid socioeconomic progress and technical advancement. If not correctly managed, the toxic chemical components of e-waste have the potential to harm ecosystems and human health. This is an impending threat to accomplishing sustainable development goals. Although technologically developed countries remain the primary source of e-product creation and e-waste generation, the volume generated in developing and transition countries has increased due to transport and transfer from e-waste source countries. As a result of a lack of inventory data, waste management policies, and improved technology for environmentally sound management, developing countries are vulnerable.

Electronics are made from valuable materials such as precious metals such as gold, silver, and platinum, as well as copper, aluminium, plastic, and glass. These materials can be reclaimed through the recycling process. The vast majority of electronic gadgets are practically entirely recyclable. Landfilling these materials would be terrible stewardship.

5. Clean energy is produced by solar and wind power facilities. A Solar Photovoltaic Installer installs and maintains solar panels in homes, companies, or on private property. A solar lighting technician installs, tests, and fixes various solar photovoltaic home lighting systems including streetlights. Roofer, solar panel installation technician, and field technician are some of the more prevalent jobs in this industry.



Do it your self.

