



Registration No.: .....

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**  
**SCHOOL OF GENERAL EDUCATION**  
**3rd Semester, End-Sem, Summer Semester Examination**  
**B. Voc. Program, Session: (2018-19) 19**

**Course Name** : Entrepreneurship Development

**Time:** 3 Hour

**Course Code** : GEN1303

**Max. Marks:** 100

**Instruction** :

- Answer all objective type questions from Section-A, each question carries 01 mark.
- Attempt any 06 out of 08 long answer type questions from Section-B, each question carries 05 marks.
- Answer all essay type questions from Section-C, each question carries 10 marks.
- Write Answers in English only.

**Section – A**

**20X01 = 20 Marks**

1. According to Richard Cantillon, an entrepreneur is-
  - a) An agent who buys factors of production at certain prices to create a product
  - b) Who collect means of production and organize an enterprise
  - c) Creating, building, Operating and Managing new business enterprise
  - d) None of the above
2. According to Joseph Schumpeter, Entrepreneurship is-
  - a) A Creative process
  - b) An Innovative Process
  - c) A Managerial Process
  - d) None of the above
3. An Enterprise is a business entity established by an entrepreneur for -
  - a) Producing goods and (or) services
  - b) Providing employment opportunities
  - c) Adding value to the national income
  - d) All of the above
4. An entrepreneur is -
  - a) A Seller
  - b) A Marketer
  - c) A Commission Agent
  - d) None of the above
5. Entrepreneurs are individuals-
  - a) Who collect means of production for Socio-economic growth
  - b) Organize a social enterprise for society
  - c) Assume risk and rewards for Personal creative innovation
  - d) None of the above
6. Functions of Entrepreneurs are related to-
  - a) Planning, Organizing, Directing and Controlling new business enterprise
  - b) Creating, building, Operating and Managing new business enterprise
  - c) Creativity and Innovation
  - d) All of the above
7. One of the Critical aspects for entrepreneurial success is -
  - a) Autonomy,
  - b) Self-Beliefs and values,
  - c) Proactiveness
  - d) All the above
8. One of the quality of a successful entrepreneur is-
  - a) Self Confidence
  - b) Selfishness
  - c) Performance orientation
  - d) Anxiety



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9. The Role of Entrepreneurship in Indian Economy is related to-
  - a) Facilitating Overall Development of Entrepreneurs in the country
  - b) Promoting Country's Import Trade
  - c) Both a) and b)
  - d) None of the above
10. The process of entrepreneurial development consists of creating an entrepreneurial person by .....
  - a) Creative Entrepreneurship product development
  - b) Entrepreneurship development innovation process
  - c) Innovative Entrepreneurship Business Planning techniques
  - d) None of the above
11. One of the stages in the project identification is-
  - a) Conceptual stage
  - b) Screening and Identification stage
  - c) Pre-feasibility state
  - d) All of the above
12. To judge the adequacy of market the, the factors to be examined relates to-
  - a) Total present domestic market
  - b) Competitors and their market shares
  - c) Quality price profile of the product
  - d) All of the above
13. Which one of the following cost factors are considered to design a viable cost structure for the proposed project?
  - a) Cost of material inputs, labour costs, factory overheads.
  - b) General administration expenses, selling and distribution costs.
  - c) Service costs, economics of scale etc.
  - d) All of the above
14. Project formulation is an-
  - a) Investigating process
  - b) Investment decision process
  - c) Strategic Planning process
  - d) None of the above
15. One of the Key aspects of Entrepreneurship development is....
  - a) Entrepreneurship Orientation and Awareness Program
  - b) Entrepreneurial Motivation Training
  - c) Developing Entrepreneurial Mind-set and Values
  - d) All of the above
16. Entrepreneurship is .....
  - a) innovative process
  - b) invention
  - e) discovery
  - f) All of the above
17. A project report is meant to-
  - a) Provide the necessary information
  - b) Process and assess the new business proposal
  - c) Provide a complete information with approximate values of the project
  - d) All of the above



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18.  
18. The nature ownership of his organization helps to determine-
- The risk of the entrepreneur
  - The responsibility of the entrepreneur
  - The control of the entrepreneur
  - All of the above
19.  
19. The main forms of organization are-
- Sole Trader,
  - Partnership,
  - Joint Stock Company and Co-operative Organisation
  - All of the above
20. The entrepreneurs are calculated.....
- risk takers
  - gamblers
  - co-operatives
  - players

### Section – B

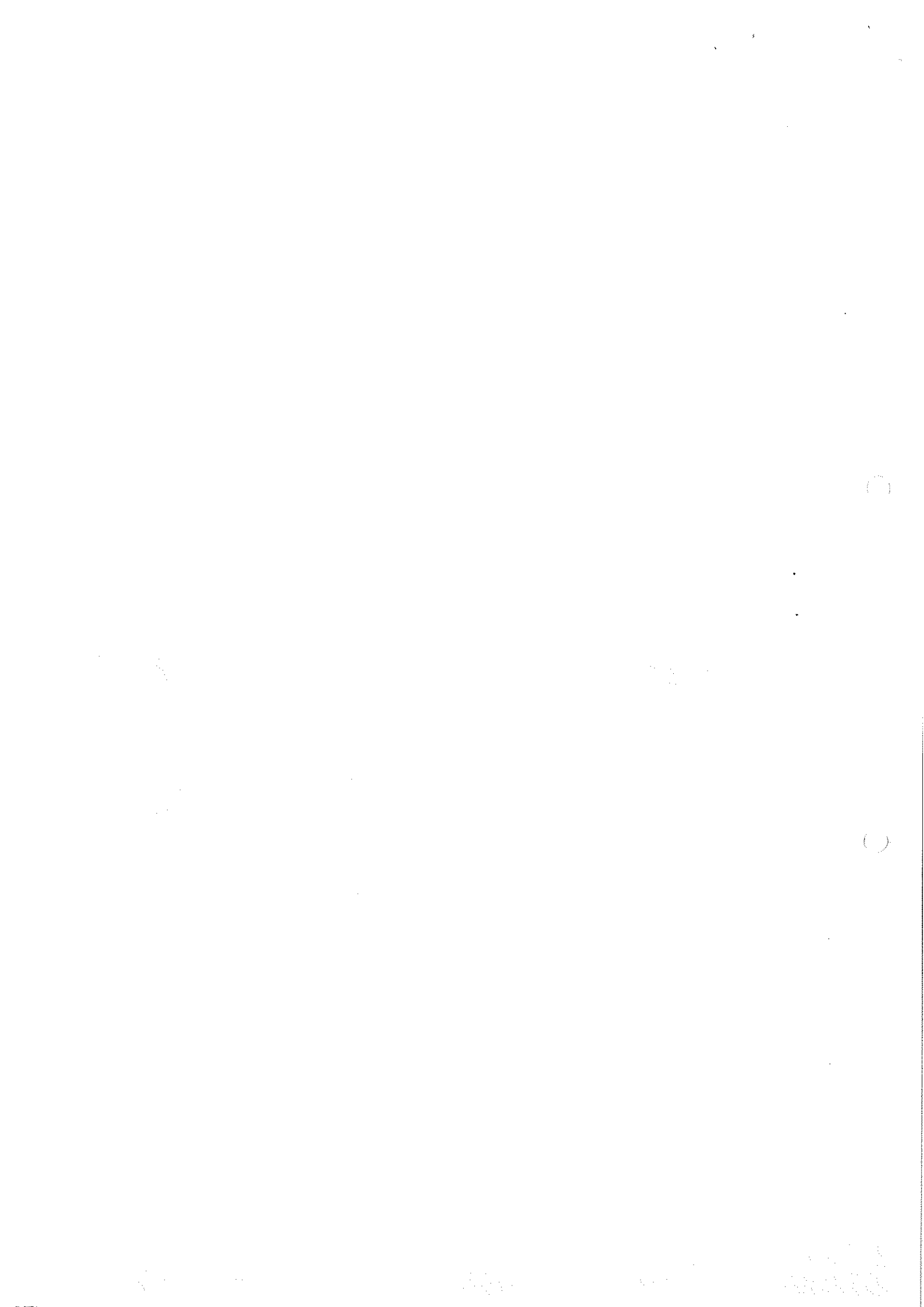
06X05 = 30 Marks

- What do you mean by Entrepreneurship, Entrepreneur? Give Examples.
- What is Project formulation?
- What do you mean by the concept of Screening of Project Ideas?
- What do mean by Business Life Cycles?
- What is significance of Motivational ability for an entrepreneur?
- Give a list of Steps in Project Identification.
- Who are the Fabian and Drone Entrepreneurs?
- What is the difference between entrepreneurship and self employment?

### Section – C

10X05 = 50 Marks

- Discuss the characteristics of Entrepreneurship.
- Describe briefly the functions of an Entrepreneur.
- Distinguish between Intrapreneurship and Entrepreneurship.
- Give a brief description of the Role of Entrepreneurship in Indian Economy.
- Discuss in detail the Causes of success and failure of entrepreneur.





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**Section – A**

**20X01 = 20 Marks**

1.	A	8.	A	15.	D
2.	A	9.	D	16.	A
3.	D	10.	D	17.	D
4.	D	11.	D	18.	D
5.	D	12.	D	19.	D
6.	D	13.	D	20.	A
7.	D	14.	A		

**Section – B**

**06X05 = 30 Marks**

1. **What do you mean by Entrepreneurship, Entrepreneur? Give Examples.**

**Answer- Concept of Entrepreneurship**

Entrepreneurship is a creative process. It essentially consists in doing things that are not generally done in the ordinary course of business routine. He opined that in a way it is also a “process of creative destruction”, implying that while this process creates something new, it simultaneously replaces, rather destroys, existing but outdated ideas, products or methodologies.

Entrepreneurship is a tendency and process. It is necessary for the state to create entrepreneurial opportunities than to create employment opportunities.

**Concept of Entrepreneur**

Entrepreneurs are individuals who collect means of production, organize an enterprise, innovate, create new things and bear the risk in the expectation of the reward in the form of profit.

According to Richard Cantillon, “An entrepreneur is an agent who buys factors of production at certain prices in order to combine them into a product with a view to selling it at uncertain prices in future.”

2. **What is Project formulation?**

**Answer-** Project formulation is an investigating process which precedes investment decision. The purpose is to present relevant facts before the decision-makers to enable them to decide as to whether to go ahead signal should be given for the project or not.

**Formulation of projects involves** scientific procedure. It explains the objectives, goals and justification for the acceptance of the project. The major task of a project is to assess the financial, technical and



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managerial involvement and its justification. The project formulation stage involves the identification of investment options by the enterprise.

**Project formulation is designed** to bring the project sponsoring authority and the agencies from whom it has to get support etc. So, the project formulation is a process involving the joint effort of a team of experts including the economists, the financial analysts and specialists in various fields.

### 3. What do you mean by the concept of Screening of Project Ideas?

**Answer-** Screening is one of the essential step in the process of Project identification at which unviable ideas are eliminated. In this, the various project ideas generated are screened as a preliminary exercise to weed out the bad or unviable ideas. All project ideas would not pass the screening test. Some project ideas may be imaginary to warrant any serious consideration.

#### Screening of Project Ideas

After gathering the project ideas from the various sources as aforesaid, it is essential to eliminate ideas which prima facie are not promising. This process of eliminating the irrelevant and unviable ideas is called screening of project ideas. It can be done with the help of testing the following conditions of the propositions.

- a. Compatibility with the promoter
- b. Consistency with governmental priorities
- c. Availability of inputs
- d. Adequacy of market
- e. Reasonableness of cost
- f. Acceptability of risk level etc.

### 4. What do mean by Business Life Cycles?

**Answer-** Generally, businesses pass through three stages before reaching the final stage of decline. The four life cycle stages for a business are start-up, growth, maturity, and decline. Each stage has unique characteristics.

**Start-up-** Start-ups are businesses that have yet to come into existence or have yet to turn a complete revenue cycle. At this stage, the owner (or owners) needs to invest a great deal of time, effort, energy, and money into the business to create a stable customer base, to buy inventory, and to engage in other business activities before revenues are generated.

**Growth-** When businesses leave the start-up stage, they typically start to grow. The business owner understands his or her business at this point, the key competitors and the customers.

**Maturity-** When businesses crack the local market and manage their affairs efficiently, they become mature. Mature firms have achieved a certain amount of name recognition. At this point, intensive marketing may be needed to increase or maintain market position, and there is little product innovation. Profit margins tend to stabilize.

**Decline-** During this final stage, the market begins to shrink. There is usually no product innovation, businesses cut costs to maintain profits, and profit margins are thin.

### 5. What is significance of Motivational ability for an entrepreneur?

**Answer-** What makes entrepreneurs successful in their venture? Different experts have identified a number of qualities of successful entrepreneurs. Motivational ability is one of the significant quality of an entrepreneur. An entrepreneur has to manage the activities of the enterprise in an effective manner. He has to plan, co-ordinate and control these activities with a view to achieve the business goals. One



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of the managerial function of an entrepreneur is directing function which involve three important elements viz. Communication, Motivation and Leadership.

The successful entrepreneurs have ability to motivate the employees. They can extract best work from them and achieve high goals. Motivational ability is also required for getting the expected response from the customers, vendors and the government. Consider again Ratan Tata, who ably motivated the vendors to supply components at a lower price for the Nano car project.

Communication skill is another important quality of successful entrepreneurs that play significant role in the process of motivation people to get the work done. The significance of Motivational ability of an entrepreneur lies in good communication skills. With good communication skill entrepreneurs are able to convince effectively their ideas, thoughts and job requirements to the employees and get the work done in a better manner.

### 6. Give a list of Steps in Project Identification.

**Answer-** Project ideas are like other ideas which don't take concrete shape immediately. There are several stages of making propositions their considerations and scrutiny for their soundness. An idea is first born, it is under incubation for some time and subsequently it begins to take some definite shape. The project ideas to develop take almost the same course. This project identification may be broadly divided into four stages, viz.,

- A. Conceptual stage - where project ideas are generated
- B. Screening stage - at which unviable ideas are eliminated
- C. Identification stage - at which viable projects are selected
- D. Pre-feasibility state - at which pre-feasibility studies are taking up

### 7. Who are the Fabian and Drone Entrepreneurs?

**Answer- Fabian Entrepreneurs:** These entrepreneurs take great precaution and are of suspicious mind in experimenting any change in their enterprises. They conduct the business in a routine manner and are ready to change only when they feel that failure to change would affect their position. They do not welcome the changes. They are lazy and indifferent towards the enterprise. They have moderate ambitions. They are happy in carrying on their family business in a traditional manner. They are not prepared to expand or change their business. Their traditional outlook is detrimental to the progress of the country.

**Drone Entrepreneurs:** These entrepreneurs stick up to the old values, customs and traditions. They are not willing to effect changes in their enterprise, rather they oppose such changes. They blindly follow the traditional methods of business even when it causes loss to them. Their attitude affects the profitability, competitiveness and productivity of their enterprises.

### 8. What is the difference between entrepreneurship and self employment?

**Answer -** Being self-employed, you have people who are working FOR YOU but being an entrepreneur, you have people who are working WITH YOU and not just under you. As a self-employed person, you hire people to work for you while the entire mission, vision and progress of the business lies on your

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shoulder but for an entrepreneur, you have people working with you - you're the boss (director, C.E.O, etc.) but you and your employees form a team and work as a team bringing in ideas and innovations.

Self-employed people have to go to work all the time regardless of the number of employees they have. If they don't, the business will simply come to an end. It may not end on that day, but if their absenteeism is constant, as the days go, the business may stop. This is not so for an entrepreneur; the business will keep on going even if the boss is absent because he/she has those who know and understand his/her vision and can run things well in his/her absence - Entrepreneurs promote capital formation by mobilizing the idle savings of our citizens. They employ resources for setting up their enterprises. Such types of entrepreneurial activities lead to value addition and creation of wealth, which is very essential for the industrial and economic development of India.

**Section – C****10X05 = 50 Marks****1. Discuss the nature of Entrepreneurship.**

**Answer-** Entrepreneurship occupies a central place in the economic development of a country. In addition to other factors of production, such as raw material, land, capital, labour, entrepreneurship factor is essential for industrial development. Any country requires both small entrepreneurs and big entrepreneurs. In fact, the rapid development of a country depends on the supply of entrepreneurship. Entrepreneurial culture therefore, needs to be inculcated and nurtured among the people. The term 'entrepreneur' and 'entrepreneurship' are different. Entrepreneur is a person and entrepreneurship is a tendency and process. It is necessary for the state to create entrepreneurial opportunities than to create employment opportunities. Definition of Entrepreneurship:

**According to Joseph Schumpeter:** Entrepreneurship IS A CREATIVE PROCESS. It essentially consists in doing things that are not generally done in the ordinary course of business routine. He opined that in a way it is also a "process of creative destruction", implying that while this process creates something new, it simultaneously replaces, rather destroys, existing but outdated ideas, products or methodologies.

**Characteristics of Entrepreneurship:** The main characteristics of entrepreneurship are stated below:

**1. Innovation:** Entrepreneurship is innovative process. Innovation does not mean 'invention'. It means introducing new products, new technology, searching new markets, and discovering new sources of raw material etc. the innovation function gives impetus to the economic development of a country. Schumpeter has regarded innovation as a main feature of entrepreneurship. Tata's 'Nano' car is an example of innovation in automobile industry.

**2. Risk bearing:** The second important characteristic of entrepreneurship is risk taking. Business is full of risks and uncertainties. The entrepreneur has to bear a number of risks in forming and running the enterprise. The market and price to be received is uncertain, there is a risk of changes in consumer likes

and dislikes, in government policies, the competition may intensify etc. The entrepreneurs are calculated risk takers and not gamblers. They bear all risks in business in return of profit. Entrepreneurship develops in a society, which has a large number of persons ready to take risk.

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****5. Discuss in detail the Causes of success and failure of entrepreneur.**

**Answer-** Entrepreneurs are individuals who collect means of production, organize an enterprise, innovate, create new things and bear the risk in the expectation of the reward in the form of profit. According to Richard Cantillon, "An entrepreneur is an agent who buys factors of production at certain prices in order to combine them into a product with a view to selling it at uncertain prices in future."

**Causes of success and failure of entrepreneur:**

An entrepreneur may sometime become successful and sometime becomes failure. There are some causes of such success and failure. They are noted below:

- 1. Selection of business:** It is an important aspect. That means an entrepreneur has to determine what type business he is going to start. Form various points of view the feasibility of the business should be tested.
- 2. Proper planning:** Proper planning me is also important. For planning, planning premises like political, economic, social premised should be considered first. The steps of planning should be followed properly.
- 3. Initial capital:** if the initial capitals are not an optimal level the organization would fall. So whether the enterprise is big or small the initial capital should be sufficient enough.
- 4. Determination oof market demand:** Through research the demand in the market should be identified. Both for long term and short term it should be considered.
- 5. Marketing of product:** If the promotion policy, channel of destitution, transportation is not good the enterprise would fall.
- 6. Education and experience:** One of the important tasks of the entrepreneurs is to select right person for the right post because the success of an enterprise depends on the right selection of employees.
- 7. Joint initiative:** One may have much money and another may have more merit. Through joint initiative it can be balanced. But sometime for joint initiative misunderstanding arise, or sometimes corruption occur which may result in fall of enterprise.
- 8. Employment:** Recruitment and appointment should be properly done. Those who have specialized skill should be appointed to that specialized job. Inefficient, corrupted employees may be responsible for fall of business.
- 9. Location of business:** Site selection is an important factor. While starting a new business, an entrepreneur should think about the location of the business. In this case, many factors should be considered such as availability of raw materials, proper communication system, availability of labor, marketing facilities and so on.
- 10. Qualities of management:** The management must have a minimum quality to success otherwise it would fall.

**These are the common causes for which one enterprise may become successful and another may fall.**



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**Answer-** Entrepreneurship is a creative process. It essentially consists in doing things that are not generally done in the ordinary course of business routine. The Role of Entrepreneurship in Indian Economy is discussed asunder-

### 1. **Facilitates Overall Development**

Entrepreneurs act as catalytic agent for change which results in chain reaction. Once an enterprise is established, the process of industrialization is set in motion. The interplay of the forces of demand and supply leads to overall development of an area due to increase in demand and setting up of more and more units.

### 2. **Promotes Country's Export Trade**

Entrepreneurs earn valuable foreign exchange through increased exports. They produce goods and services in large scale for the purpose earning huge amount of foreign exchange from export. This ensures economic independence and development.

### 3. **Wealth Creation and Distribution**

It stimulates impartial redistribution of wealth and income in the interest of the country to more people and geographic areas, thus giving benefit to larger sections of the society.

### 4. **Improvement in the Standard of Living**

Entrepreneurs adopt latest innovations in the production of wide variety of goods and services in large scale that too at a lower cost. This enables the people to avail better quality goods at lower prices which results in the improvement of their standard of living.

### 5. **Increasing GDP and Per Capita Income**

Entrepreneurs are always looking out for opportunities. They encourage effective resource mobilization of capital and skill, bring in new products and services and develops markets for growth of the economy. In this way, they help increasing gross national product as well as per capita income of the people in our nation.

### 6. **Balanced Regional Development**

Entrepreneurs promote development of industries. They help to remove regional disparities by industrializing rural and backward areas. The growth of industries and business in these areas lead to a large number of public benefits like road transport, health, education, entertainment, etc. They help to reduce the problems of congestion, slums and population in cities by providing employment and incomes to them. They help to improve the standard of living in sub-urban and rural areas.

### 7. **Reduces Concentration of Economic Power**

Industrial development normally leads to concentration of economic power in the hands of a few individuals which results in the growth of monopolies. Entrepreneurs contribute towards the development of society by reducing concentration of economic power.

### 8. **Promotes Capital Formation**

Entrepreneurs promote capital formation by mobilizing the idle savings of our citizens. They employ resources for setting up their enterprises. Such types of entrepreneurial activities lead to value addition and creation of wealth, which is very essential for the industrial and economic development of India.

### 9. **Employment Generation**

Entrepreneurs provide instant large-scale employment to the unemployed which is an unending problem of India. Small entrepreneurs provide self-employment to artisans, technically qualified persons and professionals.



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**4. Organizing:** An entrepreneur has to collect the various factors of production viz. land, labour, capital etc. and create an organization to undertake the production / trading activity. He is required to possess a good organizing skills. Organizing has become a difficult task in modern times.

**5. Management:** An entrepreneur has to manage the activities of the enterprise in an effective manner. He has to plan, co-ordinate and control these activities with a view to achieve the business goals.

### 3. Distinguish between Intrapreneurship and Entrepreneurship.

**Answer-** Difference between Intrapreneurship and Entrepreneurship

An entrepreneur takes a substantial risk in being the owner and operator of a business with expectations of financial profit and other rewards that the business may generate. On the contrary, an Intrapreneur is an individual employed by an organization for remuneration, which is based on the financial success of the unit he is responsible for.

#### Intrapreneurship vs Entrepreneurship Difference

Factors	Intrapreneurship	Entrepreneurship
<b>Definition</b>	Intrapreneur is an entrepreneur who takes responsibility of building an idea into finished and profitable product with support from his employer.	Entrepreneur is a person who sets up a business to make profit and is responsible for all risks involved in the process.
<b>Dependence</b>	Dependent on employer	Works Independently
<b>Resources</b>	Is dependent on employer for resources	Needs to mobilize the resources on his own from fundraising to hiring, planning, launching and marketing.
<b>Funds</b>	Completely financed by the employer	Needs to raise funds on his in the form of loans, from investors, family or friends
<b>Work</b>	Primarily involved in top level tasks and has an access to large pool of people for execution of tasks from beginning	Has to take care of all type of tasks
<b>Decision making</b>	Collaborative decision	Free to take decisions
<b>Risks</b>	Medium to no risks	Entrepreneurship is closely linked to risk-taking. Top risks Entrepreneurs face are career, mental health, personal finances, family etc.
<b>End Notes</b>	Medium to low risks, low rewards	Winner takes all

### 4. Give a brief description of the Role of Entrepreneurship in Indian Economy.



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**3. Decision-making:** Entrepreneurship involves decision-making. Entrepreneurs have to take decisions on selection of product, site, raw material, labour, technology etc. They have to decide the quantum and sources of capital, marketing strategies and so on. Success of entrepreneurs depends on the ability to make decision promptly and accurately, and this requires a creative and analytical mind.

**4. Dynamic process:** Entrepreneurship is a dynamic process. In the course of time, enterprises grow, unsuccessful enterprise die and new enterprises are established. The nature of enterprise, methods of business, nature of technology change over a period of time. Today's complex and uncertain environment compels the entrepreneurs to remain dynamic in order to survive in the market.

**5. Organizing process:** Entrepreneurship is an organizing process in the sense that the entrepreneur has to organize various factors of product, create an organization structure and define the roles and responsibilities of personnel and manage the enterprise. Alfred Marshall has emphasized the organizing and management functions of entrepreneur.

**6. Accepting challenges:** Entrepreneurship gives importance to accepting challenges by the entrepreneurs. In any business, there are tremendous challenges, and the entrepreneurs cannot avoid them. The task of seeking opportunities and exploiting them itself is challenging. In today's era of globalization and hyper change entrepreneurs have to face more challenges.

**7. Management:** The entrepreneurs should manage the resources in an effective and viable manner. The management function has become more impact in modern times. It is the effective management, which helps entrepreneur to achieve the goals, maintain and improve the market share, fulfill the needs of customers and earn sufficient profit.

## 2. Describe briefly the functions of an Entrepreneur.

**Answer-** Entrepreneurs are individuals who collect means of production, organize an enterprise, innovate, create new things and bear the risk in the expectation of the reward in the form of profit.

According to Richard Cantillon, "An entrepreneur is an agent who buys factors of production at certain prices in order to combine them into a product with a view to selling it at uncertain prices in future."

**The entrepreneurs have to perform a number of functions while starting and running an enterprise:**

**1. Innovation:** Schumpeter has regarded 'innovation' as a main function of the entrepreneur. Innovative entrepreneurs are required for achieving the rapid economic progress of a country. Innovation is concerned with introduction of new products, adopting new technology, opening a new market or discovering a new source of raw materials, creating a monopoly in the industry or breaking the existing monopoly etc. Ratan Tata's Nano car is best example of innovation.

**2. Risk Assumption:** Risk bearing is second important function of an entrepreneur. There is a risk in every enterprise. The risk may arise due to natural calamities, changing government policy, changing tastes of customers, increasing competition etc. The entrepreneur has to bear all these risks and uncertainties in business. The success is not guaranteed in business. The entrepreneur should take a calculated risk.

**3. Decision making:** Decision making is another important function of an entrepreneur. The entrepreneur has to take decision as to selection of site, nature of product, technology to be used,

raising of capital, expansion of business etc. A successful entrepreneur is one who can take the decision promptly and accurately. A wrong, delayed decision may result into heavy loss. A business opportunity may be lost due to delay in making decision.



Registration No.....

**Bhartiya Skill Development University**  
**School of General Education**  
**B.Voc. Program, Summer Semester (2018-19)**  
**III Semester, End-Semester Examination- December 2018**

Course Code: GEN1301

Time: 3 Hours

Course Name: Spoken English

Max. Marks: 100

**Instructions: The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.**

**Section A: Attempt *all* questions.**

**Section B: Attempt any *six* questions**

**Section C: Attempt all questions.**

**Section-A**

**(2\*10=20)**

Q1.

- (i) English language has \_\_\_\_\_ sounds.
- (a) 40
  - (b) 44
  - (c) 26
  - (d) 50
- (ii) Transcribe the given word – *Hat*

Q2.

- (i) Which among the following words has the given speech sound- /i /?
- (a) sit
  - (b) seat
  - (c) fear
  - (d) fleet
- (ii) Transcribe the word- *Poor*

Q3.

- (i) Combination of two vowel sounds is:
- (a) Monophthong
  - (b) Diphthong
  - (c) Consonant
  - (d) Short vowel sound
- (ii) Which of these terms refers to the study of speech sounds?

( )

( )

- (a) Phonology
- (b) Substances
- (c) Phonetics
- (d) Semantics

Q4. (i) Fill in the blank with the appropriate modal verb:

When he was young, he \_\_\_\_\_ swim very well.

- (a) had to
- (b) can
- (c) could
- (d) might

(ii) Choose the correct option and fill in the blank:

I left my purse at home. Lily \_\_\_\_\_ you lend me Rs. 100/-?

- (a) may
- (b) can
- (c) used to
- (d) should

Q5. (i) The word *Humourous* means:

- (a) Funny
- (b) Serious
- (c) Happy
- (d) Emotional

(ii) \_\_\_\_\_ is the writer of the poem *Leisure*:

- (a) George Herbert
- (b) Watt Davis
- (c) R.K. Narayan
- (e) Robert Frost

Q6 (i) Fill in the blank with the correct modal verb from the given options:

*You have not eaten the whole day. You \_\_\_\_\_ be hungry.*

(a) Can (b) should (c) may (d) must

(ii) Complete the lines with the right word as given in the poem.

*What is this life if full of \_\_\_\_\_*

- (a) grass
- (b) stars
- (c) care
- (d) cows



Q 7.

(i) Write the opposite of the given word- *Modern*:

- (a) Traditional
- (b) Contemporary
- (c) Latest
- (d) Matchless

(ii) The term *Woods* in the poem *Leisure* means:

- (a) Forest
- (b) Stream
- (c) Sky
- (d) Sunlight

Q8. (i) Complete the sentence with the right word as given in the poem:

*My ..... shows ye have your closes,  
And all must die*

- (a) Chief
- (b) Virtuous
- (c) Music
- (d) Live

(ii) The term *Virtue* means:

- (a) behavior showing high moral standard
- (b) behavior showing low moral standard
- (c) behavior showing disgust
- (d) behavior showing hatred for others

Q9. (i) The term *Siesta* in the *A Snake in the Grass* means:

- (a) a short nap
- (b) a long holiday
- (c) a working day
- (d) a hot day

(ii) In the story *A Snake in the Grass*, the family consisted \_\_\_\_\_ members:

- (a) 4
- (b) 5
- (c) 3
- (d) 6

Q10. (i) The *Snake* in the short story *A Snake in the Grass* belonged to the \_\_\_\_\_ family:

- (a) Cobra
- (b) Python
- (c) Viper
- (d) Rat snake

( )

( )

- (ii) Write the homophone for the word –*Meet*

**Section B**

(5\*6=30)

- Q11. Explain the lines with reference to the context –

*No time to see, when woods we pass,  
Where Squirrels hide their nuts in grass  
No time to see, in broad daylight  
Streams full of stars, like skies at night*

- Q12. Write the central idea of the poem ‘*Virtue*’.

- Q13. Explain the lines with reference to the context.

*The thing is somewhere here. If it is not found before evening, we will dismiss you.*

- Q14. Change the following sentences from active to passive voice.

(a) I can solve this problem.

(b) Help this boy.

(c) She will help me.

(d) Mr. Sharma teaches us Maths.

(e) They play hockey.

- Q15. Convert the given sentences into reported speech.

(a) The child said, “I am happy.”

(b) He said, “Shyam plays hockey”.

(c) The teachers said, “India became independent in 1947”.

(d) I said to her, “You can play”.

(e) She said to her, “Do you know Sita?”.

- Q16. Construct five sentences using each of the following modal verbs.

(a) should (b) must (c) would (d) used to (e) need

- Q17. Write about your favourite person in about 8-10 lines using **describing words** and also underline the describing words.

- Q18. Explain the following lines with reference to their context:

*Only a sweet and virtuous soul  
Like seasoned timber, never gives,  
But though the whole world turn to coal,  
Then chiefly lives.*

**Section C**

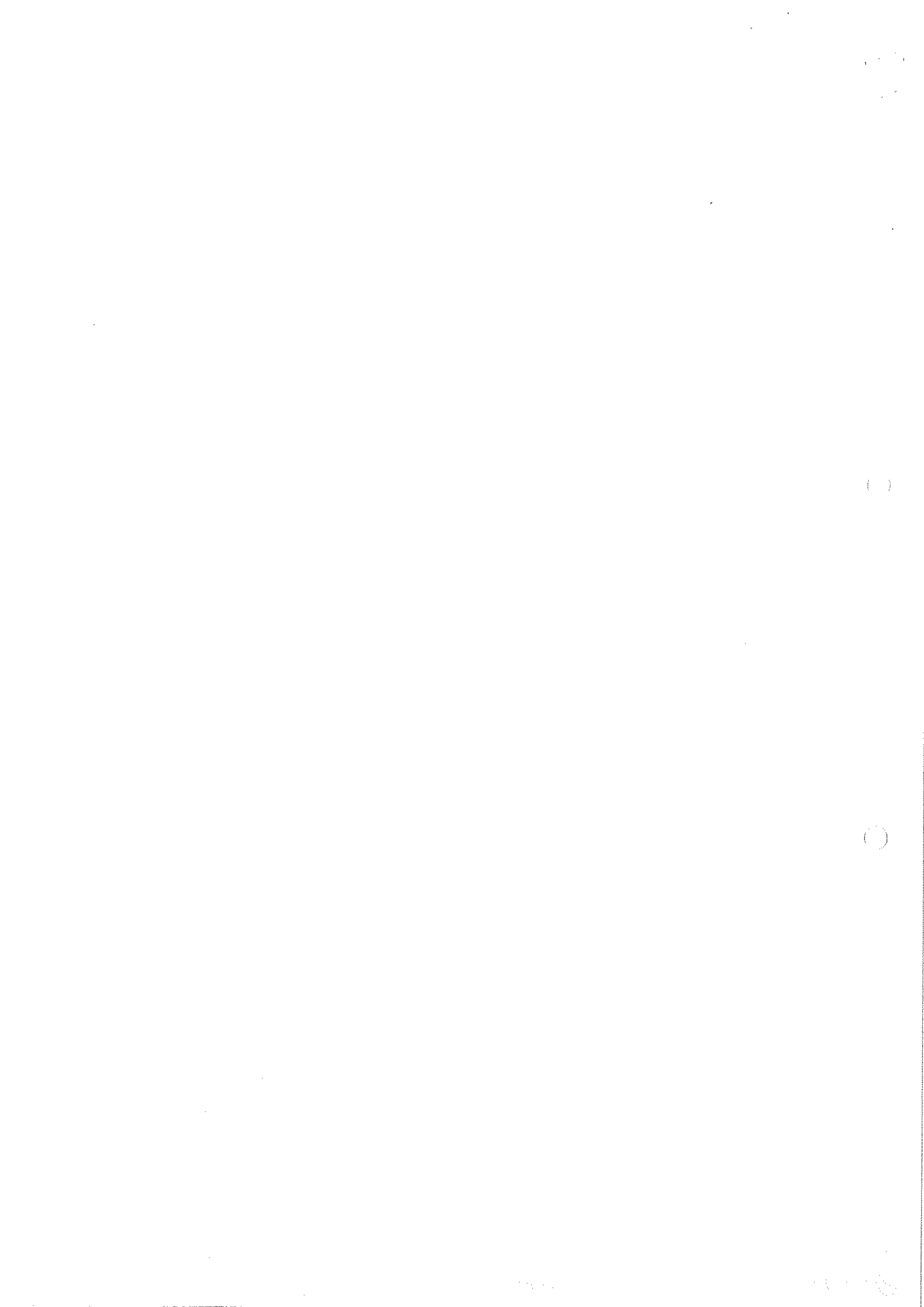
(10\*5=50)

- Q19. Transcribe the given words:

(a) Kite

(b) Dinner

(2\*5)



- (c) So
- (d) Jump
- (e) Cat

Q20. Explain the short story *A Snake in the Grass* in your own words (about 200 words.)

Q21. Draft a conversation in about 15-20 sentences between yourself and the Principal of your school in a situation where you are making an apology to him for your misbehaviour in the class.

Q22. Write a paragraph on any one of the given topics: -

- (a) Skill Education – The Need of the Hour.
- (b) My School Days.

Q23. Read the passage carefully and answer the questions given below.

Along with the natural causes, industrialization has also contributed to the increase in global warming. Scientists are of the opinion that industrialization releases gases like carbon-dioxide and methane which are known to cause global warming. Man has been responsible for global warming since some eight thousand years with the start of agriculture. Due to the clearing of the forests for agriculture, the amount of carbon-dioxide in the atmosphere increased drastically. Deforestation is, therefore, said to increase global warming. Trees contain a high level of carbon, and therefore, their cutting creates an increase in carbon in the atmosphere. Burning of fossil fuel too increases carbon dioxide in the atmosphere. The contribution of man to global warming due to the burning of fossil fuels has increased by about 80 percent in the past 20 years.

In conclusion, it can only be said that man has to become aware of the dangers that are hidden in the future if he does not do all he can to control this dangerous phenomenon called global warming. (169 words).

(1\*5)

- i. What has contributed to the increase in global warming?
- ii. What is the opinion of scientists?
- iii. Who is responsible for global warming?
- iv. What do trees contain?
- v. What can man do to control global warming?
- vi. Make a precis of the passage given above. (5)

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Registration No.....

**Bhartiya Skill Development University**  
**School of General Education**  
**B.Voc. Program, Summer Semester (2018-19)**  
**III Semester, End-Semester Examination- December 2018**

Course Code: GEN1301  
Course Name: Spoken English

Time: 3 Hours  
Max. Marks: 100

**Instructions:** The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

**Section A:** Attempt *all* questions.

**Section B:** Attempt any **six** questions

**Section C:** Attempt all questions.

*Answer- Key*

**Section-A**

**(2\*10=20)**

**Q1.**

(i) English language has \_\_\_\_\_ sounds.

- (a) 40
- (b) 44
- (c) 26
- (d) 50

(ii) Transcribe the given word – *Hat* /'hæt/

**Q2.**

(i) Which among the given words has the given speech sound- /i /

- (a) sit
- (b) seat
- (c) fear
- (d) fleet

(ii) Transcribe the word- *Poor* 'pʊə

**Q3.**

(i) Combination of two vowel sounds is:

- (a) Monophthong
- (b) **Diphthong**

- (c) Consonants
- (d) Short vowel sounds

(ii) Which of these terms refer to study of speech sounds?

- (a) Phonology
- (b) Substances
- (c) **Phonetics**
- (d) Semantics

**Q4.** (i) Fill in the blank with appropriate modal verb:

When he was young, he \_\_\_\_\_ swim very well.

- (a) Had to
- (b) can
- (c) **could**
- (d) might

(ii) Choose the correct option and fill in the blank:

**I left my purse at home. Lily \_\_\_\_\_ lend me Rs. 100/-.**

- (a) may
- (b) **can**
- (c) may
- (d) should

**Q5.** (i) The word *Humorous* means:

- (a) **Funny**
- (b) Serious
- (c) Happy
- (d) Emotional

(iii) \_\_\_\_\_ is the writer of the poem *Leisure*

- (a) **George Herbert**
- (b) Watt Davis
- (c) R.K. Narayan
- (e) should

**Q6** (i) Fill in the blank with the correct modal verb

***You have not eaten the whole day. You \_\_\_\_\_ be hungry.***

- (a) Can
- (b) should
- (c) may
- (d) **must**

- (ii) Complete the lines with the right word as given in the poem,

*What is this life if full of \_\_\_\_\_.*

- (a) grass
- (b) stars
- (c) care
- (d) cows

Q 7.

- (i) Write the opposite of the given word- *Modern*

- (a) **Traditional**
- (b) Contemporary
- (c) Latest
- (d) Matchless

- (ii) The term *Woods* in the poem *Leisure* means:

- (a) Forest
- (b) Stream
- (c) Sky
- (d) Sunlight

- Q8. (i) Complete the sentence with the right word as given in the poem:

*My ..... shows ye have your closes,  
And all must die*

- (a) Chief
- (b) Virtuous
- (c) **Music**
- (d) Live

- (ii) The term *Virtue* means:

- (a) **behavior showing high moral standard**
- (b) behavior showing low, moral standard
- (c) behavior showing disgust
- (d) behavior showing hatred for other

- Q9. (i) The term *Siesta* in the 'Snake in the Grass' means:

- (a) **a short nap**
- (b) a long holiday
- (c) a working day
- (d) a hot day

- (ii) In the story '*Snake in the Grass*' the family consisted \_\_\_\_\_ members:

- (a) 4
- (b) **5**

- (c) 3
- (d) 6

Q10. (i) The Snake in the short story *Snake in the Grass* belonged to the \_\_\_\_\_ family:

- (a) Cobra
- (b) Python
- (c) Viper
- (d) Rat snake

(ii) Write the homophone of the word –*Meet*  
*Meat*

### Section B

(5\*6=30)

Q11. Explain the lines with reference to their context –

*No time to see, when woods we pass,  
Where Squirrels hide their nuts in grass  
No time to see, in broad daylight  
Streams full of stars, like skies at night*

**Reference:** These lines have been taken from the poem "Leisure" written by William Davies. The poem is a criticism on the sorry state of modern man. The ideas presented in the poem have deep meanings. William Davies rightly points out that our life is full of care. The worldly worries have snatched our freedom and we are always at the mercy of time. We are enslaved by hurry, worry and mad race for success. These things have made us sick at heart.

**Explanation:**

In the given lines the poet says that we are so much absorbed in our work that we cannot enjoy the beauty spread around us. We do not have enough time to observe various activities going on in the world of nature. We ignore the beauty and activities of various animals when we pass through the woods. Similarly, we do not enjoy dancing waves on the surface of a stream which reflect sunlight and present a beautiful scene. The scene is no less beautiful than the sight of the stars twinkling in the sky. The scene is so captivating. But we cannot enjoy the beauty of things and the beauty of various sights because of our busy routine work.

Q12. Write the central idea of the poem '*Virtue*'.

This poem addresses a theme which was popular in Herbert's time – the transience of earthly pleasures – but Herbert draws a different conclusion than, for example, his contemporary poet. Instead, Herbert accepts that in this world good things will not last, and concludes that the only enduring satisfaction comes from moral righteousness. 'Vertue' Sweet day, so cool, so calm, so bright, The bridal of the earth and sky, The dew shall weep thy fall tonight; For thou must die. Sweet rose, whose hue angry and brave Bids the rash gazer wipe his eye, Thy root is ever in its grave, And thou must die. Sweet spring, full of sweet days and roses, A box where sweets compacted lie, My music shows ye have your closes, And all must die. Only a sweet and virtuous soul, Like seasoned timber, never gives; But, though the whole world turn to coal, Then chiefly lives. Commentary At first sight, the language of the poem seems simple, reinforced by the use of short

everyday words and repetition – “sweet”, “die”. But, as ever, Herbert is writing on more than one level. The first three verses appeal to the senses – the brightness and coolness of the day, the scent and colour of the rose, the music with which the poet celebrates spring. Both of the first two verses evoke tearfulness. In the final verse the images are of wood and coal and there is no sensual overtone. The poet finally says that a virtuous soul like seasoned timbre would last forever.

**Q13.** Explain the lines with reference to their context:

*The thing is somewhere here. If it is not found before evening, we will dismiss you.*

This line is taken from the short story written by R K Narayan titled *Snake in the Grass*. The mother in the family speaks this line to her servant Dasa. This is referred to a snake which enters her house. In this line she is commanding her servant Dasa to catch the snake and throw the deadly reptile out of the house or else she would dismiss him.

**Q14.** Change the following sentences from active to passive voice.

- (a) I can solve this problem. ---**This problem can be solved by me.**
- (b) Help this boy. ---**Let this boy be helped**
- (c) She will help me. --**I will be helped by her**
- (d) Mr. Sharma teaches us Maths. ---**We are taught Maths by Mr. Sharma**
- (e) They play hockey. --- **Hockey is played by them.**

**Q15.** Convert the given sentences in reported speech:

- (a) The child said, "I am happy."

**The child said that he was happy**

- (b) He said, "Ram plays hockey".

**He said that Ram played hockey**

- (c) The teachers said, "India became independent in 1947".

**The teacher said that India became independent in 1947**

- (d) I said to her, "You can play"

**I said to her that she could play.**

- (e) She said to her, "Do you know her?"

She asked her if she knew her

**Q16.** Construct one sentences using each of the following modal verbs:

- (a) should (b) must (c) would (d) used to (e) need

**You should learn English**

**You must take care of our health**

**I used to climb trees**

**You need to rest**

**Would you help me**

Q17. Write about your favorite person in about 8-10 lines using **describing words** and also underline the describing words.

Q18. Explain the following lines with reference to their context:

*Only a sweet and virtuous soul*

*Like seasoned timber, never gives,*

*But though the whole world turn to coal,*

*Then chiefly lives.*

These lines have been taken from the poem "Leisure" written by William Davies. The poem is a criticism on the sorry state of modern man. The ideas presented in the poem have deep meanings. William Davies rightly points out that our life is full of care.

The Temple is a collection of lyric poems on religious subjects. Many of the poems are obscure and difficult, but not the present one. It says that when a beautiful day comes into being, so sweet, "so cool, so calm, so bright," its death is inevitable; the dews of evening mourn for it. And the sweetly perfumed rose, with flushed and beautiful face that dazzles the eyes, must also die, as its root is ever in its grave, the earth. The spring of the year is the same as the day and the rose, destined to end; it is "full of sweet days and roses"—Herbert here effects a neat coupling of the first and second stanzas of the poem—but it must die in the heat of summer. The only thing that is not transitory is a sweet and virtuous soul; it is like well-seasoned timber that does not bend under stress. The whole world can be burned into ashes and charcoal, but the virtuous soul lives on. The day, the rose, the spring, the whole world will end, but not the virtuous soul.

### Section C

(10\*5=50)

Q19. Transcribe the given words: -

(a) Kite----- /kɑ:t/

(b) Dinner ---/'dɪnə(r)/

(c) So--- /səʊ/

(d) Jump ---/ dʒʌmp/

(e) Cat--- /kæt /

Q20. Explain the short story *Snake in the Grass* in your own words (about 200 words.)

The story A Snake in the Grass by R.K. Narayan has four family members. One day a snake enters the house. The family orders the servant Dasa to catch the snake, who hesitantly tries to catch. In a search for the snake the Garden of the bungalow is laid down. After a great commotion Dasa brings a pot covered with a stone declaring his triumph n catching the snake. The family is happy. But in a short while they see the snake crawling out of a hole in the garden looking at them with its half hood risen. The family is in dilemma if there were two snakes or was Dasa fooling them.

Q21. Draft a conversation in about 15-20 sentences between yourself and the Principal of your school in a situation where you are making an apology to him for your misbehavior in the

class.

Exchanges between the student and teacher on Greetings, utterances of making apology, Justifying the reason, assuring better behavior next time, Thanking the principal.

**Q22.** Write a paragraph on any one of the given topics: -

(a) Skill Education – the need of the hour

Elaborate points on the Importance of skill development of this large working population is not a matter of great debate. It is not a choice but an imperative both for the nation and for the individual. From the nation's perspective, economic growth is dependent on productivity of industry and its people. People can be productive provided they enjoy good health, have access to quality education, relevant skills, and are made aware of livelihood opportunities presented by the economic growth around them.

(b) My School Days

In my school days, I had many friends and some foes. We used to gossip and play and sometimes fight over silly things. I had two best friends. They were very nice and loyal to me. Every teacher in my school liked us, although we weren't brilliant students in fact were average ones but still we respected our elders and loved our youngsters. Since my childhood, I've never been complaining to anyone for anything, actually I never needed to since I had everything I needed or wanted. I miss my school days since it was all about having fun and no competitions. The most exciting part used to be 'the exchange of lunch boxes'. Usually me and my best friend liked each other's lunch and soon developed a habit of exchanging lunches. Apart from sharing lunches, we also used to share our silly secrets. My childhood was indeed really amazing and simple. We found fun in subtle but beautiful things. These were some of the stuff of my school and childhood, as I remember them, which I cherish today as sweet memories. I wish God makes everyone's childhood days as carefree and jovial as mine.

**Q23.** Read the passage carefully and answer the questions given below:

Along with the natural causes, industrialization has also contributed to the increase in global warming. Scientists are of the opinion that industrialization releases gases like carbon-dioxide and methane which are known to cause global warming. Man has been responsible for global warming since some eight thousand years with the start of agriculture. Due to the clearing of the forests for agriculture, the amount of carbon-dioxide in the atmosphere increased drastically. deforestation is, therefore, said to increase global warming. Trees contain in high level of carbon, and therefore, their cutting creates in increase in carbon in the atmosphere. Burning of fossil too increase carbon dioxide in the atmosphere. The contribution of man to global warming due to the burning of fossil has increased by about 80 percent in the past 20 years.

In conclusion, it can only be said that man has to become aware of the dangers that are hidden in the future if he does not do all he can to control this dangerous phenomenon called global warming.

(1\*5)

i. What has contributed to the increase in global warming?

**Along with the natural causes, industrialization has also contributed to the increase in global warming**

ii. What is the opinion of scientists?

**Scientists are of the opinion that industrialization releases gases like carbon-dioxide and methane which are known to cause global warming.**

iii. Who is responsible for global warming?

**Man has been responsible for global warming since some eight thousand years with the start of agriculture**

iv. What do trees contain?

**Trees contain in high level of carbon, and therefore, their cutting creates in increase in carbon in the atmosphere**

v. What can man do to control global warming?

**Man has to become aware of the dangers that are hidden in the future if he does not do all he can to control this dangerous phenomenon called global warming.**

vi. Make a precis of the passage given above. (5)

Along with the natural causes, industrialization has also contributed to the increase in global warming. Scientists are of the opinion that industrialization releases gases like carbon-dioxide and methane which are known to cause global warming. Man has to become aware of the dangers that are hidden in the future if he does not do all he can to control this dangerous phenomenon called global warming. (65 words)

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**School of Manufacturing Skills**  
**Session: 2018-19 (Summer Semester)**  
**B. Voc. Program, 3<sup>rd</sup> Semester,**  
**End-Sem. Examination**

**Course Code: GEN1302**

**Time: 3 Hour**

**Course Name: Computer Aided Drawing**

**Max. Marks: 100**

**Instruction:**

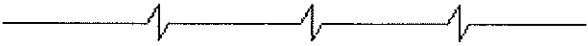
1. Attempt all questions.
2. Use of Calculators is Prohibited.
3. Section A contains 05 Questions. Each question carries 1 Marks.
4. Section B contains 03 Questions. Each question carries 2 Marks.
5. Section C contains 03 Questions. Each question carries 3 Marks.

**Section – A**

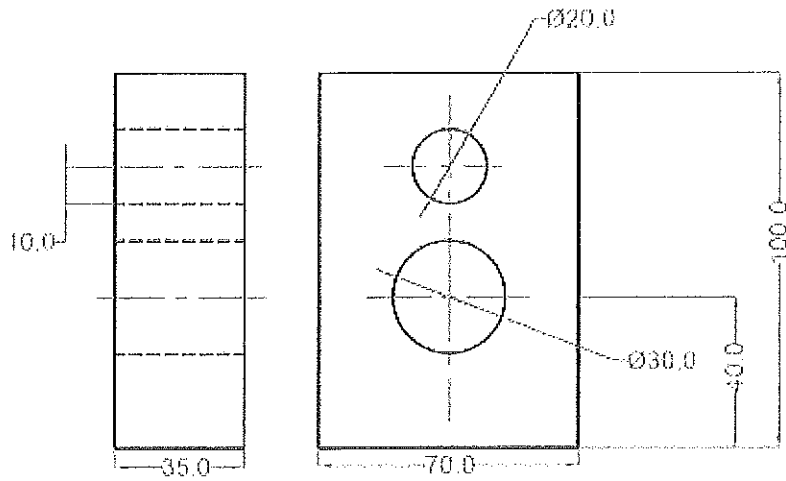
**20X1= 20 Marks**

1. What is the minimum allowable number of layers in a drawing?
  - a) 0
  - b) 5
  - c) 1
  - d) 2
  
2. If I want to draw a line in the direction 07:30 (local time) will give an angle of:
  - a) -135 degrees
  - b) 270 degrees
  - c) -225 degrees
  - d) None of the above
  
3. What is the difference between the Scale command from the command Zoom:
  - a) Scale for single object, while the Zoom whole plan
  - b) No difference
  - c) Scale can grow / shrink a shape up 10 times, while the Zoom has no limits
  - d) Scale changes the size of objects, while the Zoom changes the visibility of the project
  
4. Which of the following is NOT a property of an object?
  - a) Line weight
  - b) Measure
  - c) Hyperlink
  - d) Elevation



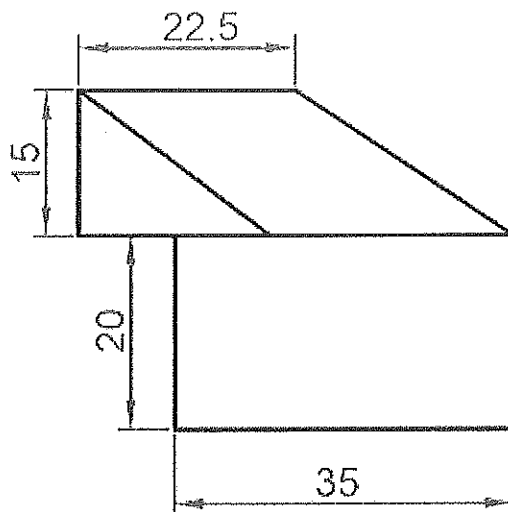
5. What is meant by roughness?
- a) Minute succession of hills of different height
  - b) Minute succession of valleys and hills of different height and varied spacing
  - c) Minute succession of valleys and hills of same height and same gap
  - d) Minute succession of valleys of different depth
6. The angle which we can't make using a single Set-square is \_\_\_\_\_
- a)  $45^\circ$
  - b)  $60^\circ$
  - c)  $30^\circ$
  - d)  $75^\circ$
7. Which is not the use of divider?
- a) To divide curved or straight lines into the desired number of equal parts
  - b) To draw circles
  - c) To transfer dimensions from one part of the drawing to another part
  - d) To set-off given distances from the scale to the drawing
8. \_\_\_\_\_ is used to draw curves which are not circular.
- a) Compass
  - b) Protractor
  - c) French curves
  - d) Pro circle
9. The untrimmed size for \_\_\_\_\_ sheet is 240 mm x 330 mm.
- a) A1
  - b) A3
  - c) A4
  - d) A5
10. Which of the following is reducing scale?
- a) 10:1
  - b) 10:2
  - c) 0.5:1
  - d) 2:1
11. The line given below is used for
- 
- a) Long-break line
  - b) Cutting planes
  - c) Centroidal lines
  - d) Out lines of adjacent parts

12. From the following figure, which is the repetitive dimension?



- a) 30
- b) 70
- c) 10
- d) 20

13. Which of the following dimension is incorrect?



- a) 22.5
- b) 15
- c) 20
- d) 35

14. How is a blind drilled hole of 15mm diameter and 15mm deep dimensioned?

- a) M15, DEEP 15
- b) Ø15, DEEP 15
- c) Ø15
- d) Ø15 x 15



15. While representing the diameter in dimensioning it is represented as \_\_\_\_\_
- a) D
  - b)  $\emptyset$
  - c) Dia
  - d) d
16. What is the representative factor of a line, whose length is 24cm on the drawing sheet, representing an actual length of 6m?
- a) 1:50
  - b) 1:25
  - c) 1:24
  - d) 1:60
17. Which of the following is not a valid representative factor?
- a) 1:2
  - b) 1:3
  - c) 2:5
  - d) 0:4
18. The hidden parts inside or back side of object while represented in orthographic projection are represented by which line?
- a) Continuous thick line
  - b) Continuous thin line
  - c) Dashed thin line
  - d) Long-break line
19. The commands Erase, Copy, Mirror, Trim, Extend, break etc belongs to which tool bar?
- a) Layer tool bar
  - b) Style tool bar
  - c) Modify tool bar
  - d) Draw tool bar
20. The command which is used to create a round corner between two lines is \_\_\_\_\_
- a) Chamfer
  - b) Fillet
  - c) Stretch
  - d) Extend



# BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Section- B

06X5= 30 Marks

(attempt any six question)

21. Define tolerances and its types on the basis of applicability and zero line?
22. Show difference between broken section view and half section view with diagram?
23. Define what is isometric projection?
24. Define fits with proper diagram?
25. Write down the name any 2-drawing instrument with their diagram and 2 uses each?
26. Differentiate between engineering drawing and artistic drawing?
28. Define layout of engineering drawing with its components?
29. Define nominal, basic and measured sizes with example each?

## Section- C

05X10= 50 Marks

31. Explain why AutoCAD is not a parametric software with example?
32. What information should be available in an engineering drawing?
33. What is sectioning state different types of section views with diagram each?
34. Define projection and component of projection with proper diagram also differentiate parallel and perspective projection?
35. Calculate the following for 30F8:
  - a) Upper deviation b) Minimum size c) Nominal size d) Fundamental deviation
  - e) Upper limit f) Lower deviation g) basic size h) Tolerance zone i) IT grade
  - j) Tolerance class

ISO Tolerances for Holes (ISO 286-2)																				
Nominal hole sizes (mm)																				
over	3	6	10	18	30	40	50	65	80	100	120	140	160	180	200	225	250	280	315	355
inc.	6	10	18	30	40	50	65	80	100	120	140	160	180	200	225	250	280	315	355	400
micrometres																				
<b>E6</b>	+28 +20	+34 +25	+43 +32	+53 +40	+66 +50	+79 +60	+94 +72	+110 +85	+129 +100	+142 +110	+161 +125									
<b>E7</b>	+32 +20	+40 +25	+50 +32	+61 +40	+75 +50	+90 +60	+107 +72	+125 +85	+146 +100	+162 +110	+185 +125									
<b>E11</b>	+95 +20	+115 +25	+142 +32	+170 +40	+210 +50	+250 +60	+292 +72	+335 +85	+390 +100	+430 +110	+485 +125									
<b>E12</b>	+140 +20	+175 +25	+212 +32	+250 +40	+300 +50	+360 +60	+422 +72	+485 +85	+560 +100	+630 +110	+695 +125									
<b>E13</b>	+200 +20	+245 +25	+302 +32	+370 +40	+440 +50	+520 +60	+612 +72	+715 +85	+820 +100	+920 +110	+1015 +125									
<b>F6</b>	+18 +10	+22 +13	+27 +16	+33 +20	+41 +25	+49 +30	+58 +36	+69 +43	+79 +50	+89 +56	+98 +62									
<b>F7</b>	+22 +10	+28 +13	+34 +16	+41 +20	+50 +25	+60 +30	+71 +36	+83 +42	+96 +50	+108 +56	+119 +62									
<b>F8</b>	+28 +10	+35 +13	+43 +16	+53 +20	+64 +25	+76 +30	+90 +36	+106 +43	+122 +50	+137 +56	+151 +62									
<b>G6</b>	+12 +4	+14 +5	+17 +6	+20 +7	+25 +9	+29 +10	+34 +12	+39 +14	+44 +15	+49 +17	+54 +18									
<b>G7</b>	+16 +4	+20 +5	+24 +6	+28 +7	+34 +9	+40 +10	+47 +12	+54 +14	+61 +15	+69 +17	+75 +18									
<b>GB</b>	+22 +4	+27 +5	+33 +6	+40 +7	+48 +9	+56 +10	+66 +12	+77 +14	+87 +15	+98 +17	+107 +18									
<b>H6</b>	+8 0	+9 0	+11 0	+13 0	+16 0	+19 0	+22 0	+25 0	+29 0	+32 0	+35 0									
<b>H7</b>	+12 0	+15 0	+18 0	+21 0	+25 0	+30 0	+35 0	+40 0	+46 0	+52 0	+57 0									
<b>H8</b>	+18 0	+22 0	+27 0	+33 0	+39 0	+46 0	+54 0	+62 0	+72 0	+81 0	+89 0									
<b>H9</b>	+30 0	+36 0	+43 0	+52 0	+62 0	+74 0	+87 0	+100 0	+115 0	+130 0	+140 0									





# BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Answer Key

**School of Manufacturing Skills**  
**Session: 2018-19 (Summer Semester)**  
**B. Voc. Program, 3<sup>rd</sup> Semester,**  
**End-Sem. Examination**

**Course Code: GEN1302**

**Time: 3 Hour**

**Course Name: Computer Aided drawing**

**Max. Marks: 100**

## Section- A

1. What is the minimum allowable number of layers in a drawing? 1 Mark  
c) 1
2. If I want to draw a line in the direction 07:30 (local time) will give an angle of? 1 Mark  
a) -135
3. What is the difference between the Scale command from the command Zoom: 1 Mark  
d) Scale changes the size of objects, while the Zoom changes the visibility of the project
4. Which of the following is NOT a property of an object 1 Mark  
b) measure
5. What is meant by roughness? 1 Mark  
b) Minute succession of valleys and hills of different height and varied spacing
6. The angle which we can't make using a single Set-square is \_\_\_\_\_ 1 Mark  
d) 75°
7. Which is not the use of divider? 1 Mark  
b) to draw circle
8. \_\_\_\_\_ is used to draw curves which are not circular. 1 Mark  
c) French curves
9. The untrimmed size for \_\_\_\_\_ sheet is 240 mm x 330 mm. 1 Mark  
c) A4
10. Which of the following is reducing scale? 1 Mark  
c) 0.5:1
11. The line given below is used for 1 Mark  
a) long break line
12. From the following figure, which is the repetitive dimension? 1 Mark  
c) 10
13. Which of the following dimension is incorrect? 1 Mark  
c) 20

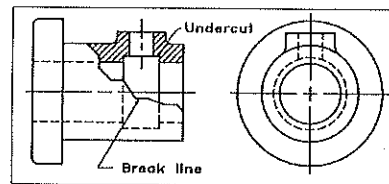
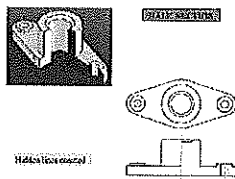


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14. How is a blind drilled hole of 15mm diameter and 15mm deep dimensioned? 1 Mark  
b)  $\varnothing 15$ , DEEP 15
15. While representing the diameter in dimensioning it is represented as \_\_\_\_\_ 1 Mark  
b)  $\varnothing$
16. What is the representative factor of a line, whose length is 24cm on the drawing sheet, representing an actual length of 6m? 1 Mark  
b) 1:25
17. Which of the following is not a valid representative factor? 1 Mark  
d) 0:4
18. The hidden parts inside or back side of object while represented in orthographic projection are represented by which line? 1 Mark  
c) dashed thin line
19. The commands Erase, Copy, Mirror, Trim, Extend, Break etc belongs to which tool bar? 1 Mark  
c) Modify tool bar
20. The command which is used to create a round corner between two lines is \_\_\_\_\_ 1 Mark  
b) fillet

### Section- B

1. Define Tolerances and its types on the basis of applicability and zero line? 5 Marks
- Tolerances are the max. permissible deviation within a specified limits
- On the basis of application
- Standard tolerance
  - User defined
- On the basis of zero line
- Unilateral tolerance
  - Bilateral tolerance
2. Show difference between broken section view and half section view with diagram? 5 marks

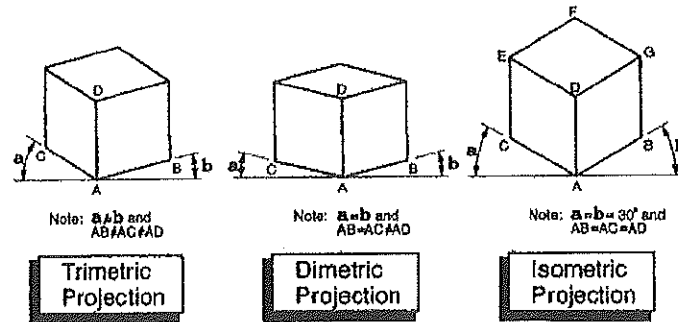


3. Define what is isometric projection? 5 Marks



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Isometric projection is a method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings. It is an axonometric projection in which the three coordinate axes appear equally foreshortened and the angle between any two of them is 120 degrees.

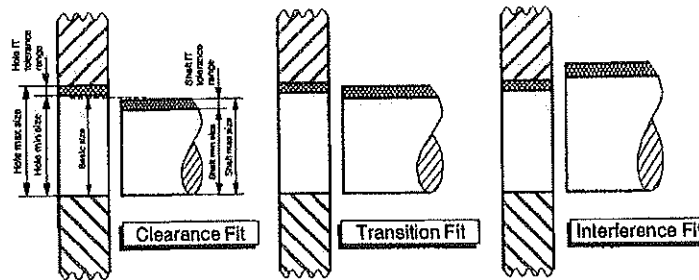


**Figure 2.4** The three types of axonometric projections

4. Define fits with proper diagram? 5 Marks

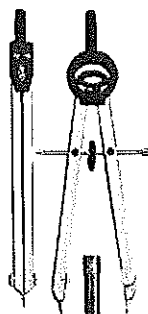
**Fits** is defined as the degree of tightness and looseness between two mating parts it is divided into three categories:

- a) Transition fit
- b) Clearance fit
- c) Interference fit



5. Write down the name any 2-drawing instrument with their diagram and 2 uses each? 5 Marks

1. Divider
  - a) It is used in indirect dimensioning
  - b) It is used for scribing purpose
2. Compass
  - a) Used to create arcs and circles
  - b) Used to divide arc and circles into equal parts





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6. Differentiate between engineering drawing and artistic drawing? 5 Marks

Engineering drawing

- 1) The sole purpose of engineering drawing is to manufacture parts
- 2) Details and dimensioning is the integral part of engineering drawing

Artistic drawing

- 1) We can't manufacture an artistic drawing it is used for aesthetic purpose
- 2) Details are not given

7. Define layout of engineering drawing with its components? 5 Marks

### LAYOUT OF DRAWING SHEETS

- Any engineering drawing has to follow a standard format. The drawing sheet consist of drawing space, title block and sufficient margins.

A typical drawing sheet consist of the following:

- Borders
- Filling margin
- Grid reference system
- Title box

8. Define nominal, basic and measured sizes with example each? 5 Marks

Nominal size: the size by name which is called is known as Nominal size

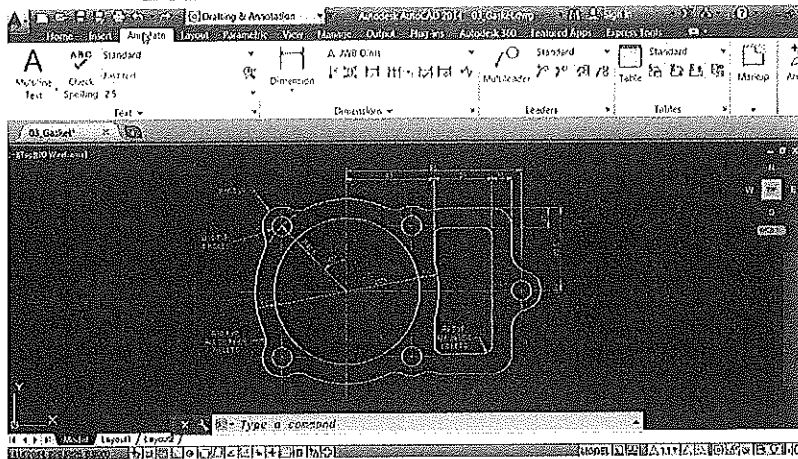
Basic size: the size on which Tolerances are applied is known as basic size

Measured size: the size which we get upon measuring by an instrument is known as measured size.

### Section- C

1. Explain why AutoCAD is not a parametric software? 10 Marks

- AutoCAD is not a parametric software because one an object is drawn in AutCAD, then we can't change the parameters of that object, in other words we cant modify object parameters once after its drawn.
- A CAD **software** allowing you to create a drawing of a triangle with Parameter information and then allow that drawing to be automatically changed by changing the parameters is a **parametric software**



For example this diagram created in AutoCAD can't be modified to a full extent its parameter can't be changed without remaking the whole diagram

2. What information should be available in an engineering drawing?

1x10=10 Marks

Ans.

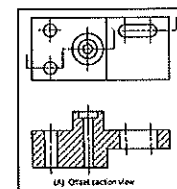
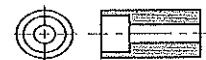
- Shape of an object
- Exact Sizes and tolerances of various parts of the object
- The finish of the product
- Machine cost
- Machining sequence
- The details of materials
- Catalogue no. of the product
- Date on which the drawing was made
- The person who made the drawing
- The company's name

3. What is sectioning state different types of section views with a diagram each

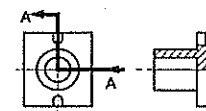
10 Marks

Ans. Sectioning is a technique by which the object is sliced and the cutaway view of the part is then drawn

- I. Full section view
- II. Offset section view



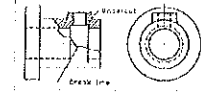
- III. Half section view



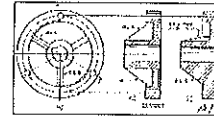


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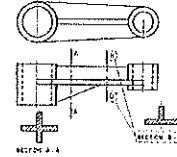
IV. Broken section view



V. Aligned or revolved section views



VI. Removed view



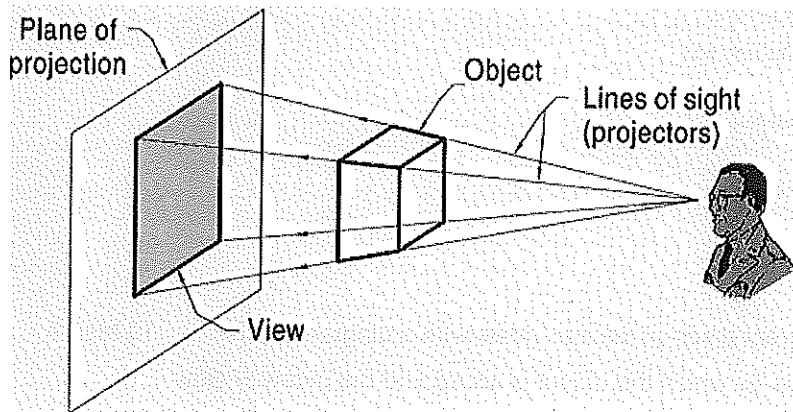
4. Define projection and component of projection with proper diagram?

10 Marks

- Projection is defined as the act of obtaining image of an object.

Components of projection are:

- a) Observer
- b) Object
- c) Image





## Parallel projection

- Distance from the observer to the object is infinite projection lines are parallel – object is positioned at infinity.
- Less realistic but easier to draw.

## Perspective projection

- Distance from the observer to the object is finite and the object is viewed from a single point – projectors are not parallel.
- Perspective projections mimic what the human eyes see, however, they are difficult to draw.

5. Calculate the following for 30F8:

10 Marks

- a) Upper deviation b) Minimum size c) Nominal size d) fundamental deviation  
e) Upper limit (f) Lower deviation g) basic size h) tolerance zone i) IT grade j)  
tolerance class

- a) +0.053 mm or +53 $\mu$ m  
b) 30.020 mm  
c) 30 mm  
d) +20  $\mu$ m  
e) 30.053 mm  
f) +20  $\mu$ m  
g) 30F8 or 30<sup>+53</sup><sub>+20</sub>  
h) 33  $\mu$ m  
i) 8  
j) F8





Registration No.....

**Bhartiya Skill Development University**  
**School of General Education**  
**End-Semester Examination- Dec., 2018**  
**Summer Semester, Sem III, B.Voc. Program**

**Course Code: GEN1304**

**Time: 3 Hours**

**Course Name: Personality Development**

**Max. Marks: 100**

**Instructions: The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.**

**Section A: Attempt *all* questions.**

**Section B: Attempt any *six* questions**

**Section C: Attempt all questions.**

**Section-A**

**(2\*10=20)**

**Q1.**

(i) Match 'O' in the term SWOT with the correct option.

- a) Option
- b) Over
- c) Opportunity
- d) Odd

(ii) Identify the full form of 'cc' in an E-mail format from the given options.

- a) carbon copy
- b) colourful copy
- c) column copy
- d) casual copy

**Q2.**

(i) Participating in sports because you want to win awards is an example of \_\_\_\_\_.

- a) Extrinsic motivation
- b) Time management
- c) Intrinsic motivation
- d) Out of box thinking

(ii) Making a painting because you find the activity enjoyable is an example of \_\_\_\_\_.

- a) Time management
- b) Intrinsic motivation
- c) Extrinsic motivation
- d) SWOT analysis

**Q 3.**

(i) Match 'S' in the term SMART with the correct option:

- a) Simple
- b) Specific
- c) Silent
- d) Stubborn

(ii) Goals that have an outcome but have time limit are known as \_\_\_\_\_

- a) Fixed goals
- b) Realistic goals
- c) Flexible goals
- d) Smart goals

**Q 4.**

(i) Cite the technique which is about using concepts as a base for new ideas:

- a) Algebra
- b) Alternatives
- c) Algorithms
- d) Altitude

(ii) Select the suitable match for 'W' in the term SWOT Analysis:

- a) Winner
- b) Workstyle
- c) Weakness
- d) Worry

**Q 5.** (i) Select the term nearest in meaning to "Good Manners" from the words given below:

- a) Motivation
- b) Etiquette
- c) Short term Goal
- d) Prioritizing work

(ii) Match 'M' in the term SMART with the correct option:

- a) Measurable
- b) Magical
- c) Manageable
- d) Meaningful

**Q 6.**

(i) \_\_\_\_\_ attitude creates pleasant environment.

- a) Positive
- b) Negative
- c) Neutral
- d) Crucial

(ii) You waste your time when you:

- a) eat
- b) sleep
- c) study
- d) spend time on social media

**Q.7**

(i) Solving problems through an indirect and creative approach is called....

- a) Motivation Theory
- b) Stress Management
- c) Lateral Thinking
- d) Negative Attitude

(ii) Cite which of the following is not a part of an E-mail.

- a) Date
- b) Signature
- c) Subject
- d) Salutation

**Q.8**

(i) What should be avoided in good email writing?

- a) Thoughtfulness
- b) Jokes and sarcasm
- c) Correct Grammar
- d) Polite Language

(ii) Which of the following is an example of a short term realistic goal for a student?

- a) Studying to pass in the exam
- b) Becoming the Prime Minister of India
- c) Learning French in a day
- d) None of the above

**Q.9**

(i) A good personality is the result of a \_\_\_\_\_

- a) Bad lifestyle
- b) Health problem
- c) Negative attitude
- d) Positive attitude

(ii) Excessive rewards may be problematic, but when used appropriately, extrinsic motivators can be a useful tool.

- a) True
- b) False

**Q10.**

(i) Goals that take a short time to achieve are known as

- (a) Complex goals
- b) Passive goals
- c) Short term goals
- d) Long term goals

(ii) Match 'A' in the term SMART with the correct option.

- a) Amazing
- b) Achievable
- c) Attitude
- d) Average

**Section B**

**(5\*6=30)**

- Q11.** When is Extrinsic motivation required in one's life?
- Q12.** What are the important factors for writing a good email?
- Q13.** Differentiate with the help of examples between positive and negative attitude.
- Q14.** How can stress be avoided in our lives?
- Q15.** Explain any three ways of managing time.
- Q16.** What is lateral thinking? Give suitable examples.
- Q17.** Explain the position and application of 'W' and 'T' and their affiliation in SWOT analysis.
- Q18.** Write the advantages of setting goals.

**Section C**

**(10\*5=50)**

- Q19.** Make a detailed blue-print of your long term goals.
- Q20.** Discuss the techniques of lateral thinking for problem solving in detail.
- Q21.** Write a detailed note on motivation and its types.
- Q22.** Write a detailed note on the importance of SWOT analysis and how it helps students to achieve their goals.
- Q23.** State the reasons which stop people from setting goals.

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Registration No.....

**Bhartiya Skill Development University**  
**School of General Education**  
**End-Semester Examination- Dec., 2018**  
**Summer Semester, Sem III, B.Voc. Program**

**Course Code: GEN1304**  
**Course Name: Personality Development**

**Time: 3 Hours**  
**Max. Marks: 100**

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  - c) Short term goals
  - d) Long term goals
- (ii) Match 'A' in the term SMART with the correct option.
- a) Amazing
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  - c) Attitude
  - d) Average

**Section B**

**(5\*6=30)**

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- Q12.** What are the important factors for writing a good email?
- Q13.** Differentiate with the help of examples between positive and negative attitude.
- Q14.** How can stress be avoided in our lives?
- Q15.** Explain any three ways of managing time.
- Q16.** What is lateral thinking? Give suitable examples.
- Q17.** Explain the position and application of 'W' and 'T' and their affiliation in SWOT analysis.
- Q18.** Write the advantages of setting goals.

**Section C**

**(10\*5=50)**

- Q19.** Make a detailed blue-print of your long term goals.
- Q20.** Discuss the techniques of lateral thinking for problem solving in detail.
- Q 21.** Write a detailed note on motivation and its types.
- Q22.** Write a detailed note on the importance of SWOT analysis and how it helps students to achieve their goals.
- Q23.** State the reasons which stop people from setting goals.

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**Bhartiya Skill Development University**  
**School of General Education**  
**End-Semester Examination- Dec., 2018**  
**Summer Semester, Sem III, B.Voc. Program**  
**Answer Key**

Course Code: GEN1305  
Course Name :Personality Development

Time: 3 Hours  
Max. Marks: 100

**Instructions:** The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

**Section A:** Attempt *all* questions.

**Section B:** Attempt any **six** questions

**Section C:** Attempt all questions.

**Section-A**

**(2\*10=20)**

**Ans1.**

- (i) (c) Opportunity
- (ii) (a) carbon copy

**Ans2.**

- (i) (c) Intrinsic motivation
- (ii) (c) Extrinsic motivation

**Ans 3.**

- (i) (b) Specific
- (ii) (a) Fixed goals

**Ans 4.**

- (i) (b) Alternatives
- (ii) (c) Weakness

**Q 5.** (i) (b) Etiquette  
(ii) (a) Measurable

**Ans 6.**

- (i) (a) Positive
- (ii) (d) spend time on social media

**Ans .7**

- (i) (c) Lateral Thinking
- (ii)(a) Date

**Ans .8**

- (i) (b) Joke and sarcasm
- (ii) (a) Studying to pass in the exam

**Ans 9**

- (i)(d) Positive attitude
- (ii) (a) True

**Ans 10.**

- (i) (c) Short term goals
- (ii) (b) Achievable

**Section B**

**(5\*6=30)**

**Ans11.** Frustration, depression and no self-motivation.

**Ans12.** Following are the basic rules of good e-mail communication:

- Remember that direct language can sound harsher in emails than in person.
- Use proper written, not spoken, language.
- Do not assume that the reader will “get” a joke or understand sarcasm.
- Be thoughtful and respectful in what you write.
- Do not make demands.
- Choose your words carefully.

**Ans 13.**

**Positive Attitude**

Individuals who have a positive attitude will pay attention to the good, rather than bad in people, situations, events, etc.

Positive attitudes are rewarded. It means the individual is encouraged to do the same thing in future.

If we think positive thoughts we will surely experience such emotions as joy, love, gratitude, peace, and hope.

**Negative Attitude**

People with a negative attitude ignore the good and pay attention to the bad in people, situations, events, etc.

Negative attitudes are punished in order to discourage the same action in future.

If we think negative thoughts we will definitely have negative feelings such as anger, disappointment, irritation, envy, etc.

Having a “positive attitude” means a person believes everything happens for the best in the end.

A person with a “negative attitude” tends to believe their best days are in the past. There is nothing to “look forward to” and considers it a waste of time and energy.

It is an optimistic approach of a person to achieve good results.

It is a pessimistic mindset of a person who is not capable of handling critical issues.

It can achieve long-term goals easily and in time

It can achieve some initial goals but not the long-term goals

It is a process of solving problems.

It is a process of looking for problems.

A person with a positive attitude pays attention to the virtues of others.

A person with a negative attitude pays attention to other people’s shortcomings.

These persons always see opportunities.

These persons see only limitations.

**Ans14.** Meditation, sports, yoga and positive attitude

**Ans15.** After thinking about these you may come up with some of your own, but in the meanwhile, here are some of our thought provokers. Setting meaningful goals should bring:

#### 1 Clearer Focus

Properly thought out and stated, goals clearly set out your intentions and desires; the things you really want to achieve.

#### 2 Optimum Use of Resources

There are never enough resources to do everything so setting goals can help you to prioritise. Place your resources behind what you really want to do, rather than on things you are doing by default or by deflection.

#### 3 Effective Use of Time

Of course time is a resource, but it deserves special consideration because it is so important. As Peter Drucker says: “If you want to improve how you manage time – stop doing what doesn’t need to be done!”

#### 4 Peace of Mind

Too often you can have many things on your mind. Writing down your goals can help you take all of those ideas, apply perspective and priority, then galvanize you into commitment and action

#### 5 Clarity to Decision Making

Knowing what you are trying to do means that you can now ask: “does this activity get me closer to my goal?”

## 6 Easier Measurement of What You Do

Setting goals, especially SMART and SHARP goals, allows you to measure how well effectively you are moving towards achieving them

**Ans16.** Lateral thinking is solving problems through an indirect and creative approach. This type of thinking involves moving away from the traditional type of thinking in solving a problem. This term was introduced by Edward De Bono in 1967 in his book "the use of Lateral Thinking". Usually a problem is solved using a step-by-step and logical approach. He believed that moving away from the direct approach and thinking of unusual ways to solve a problem are sometimes very useful. Students are required to state examples in the support of their answers.

### **Ans17. W stands for Weaknesses in SWOT Analysis**

- I have a strong, compulsive need to do things quickly and remove them from my "to do" list, and sometimes the quality of my work suffers as a result.
- This same need to get things done also causes me stress when I have too many tasks.

I get nervous when presenting ideas to clients, and this fear of public speaking often takes the passion out of my presentations.

### **T stands for Threats in SWOT Analysis**

- Simon, one of my colleagues, is a much stronger speaker than I am, and he's competing with me for the art director position.
- Due to recent staff shortages, I'm often overworked, and this negatively impacts my creativity.
- The current economic climate has resulted in slow growth for the marketing industry. Many firms have laid off staff members, and our company is considering further cutbacks.

**Above mentioned terms are directly proportional to each other.**

**Ans 18.** Provides Direction. First and foremost, goals give you a direction and destination. ...

Clearer Focus on what is important. ...

Clarity in Decision Making. ...

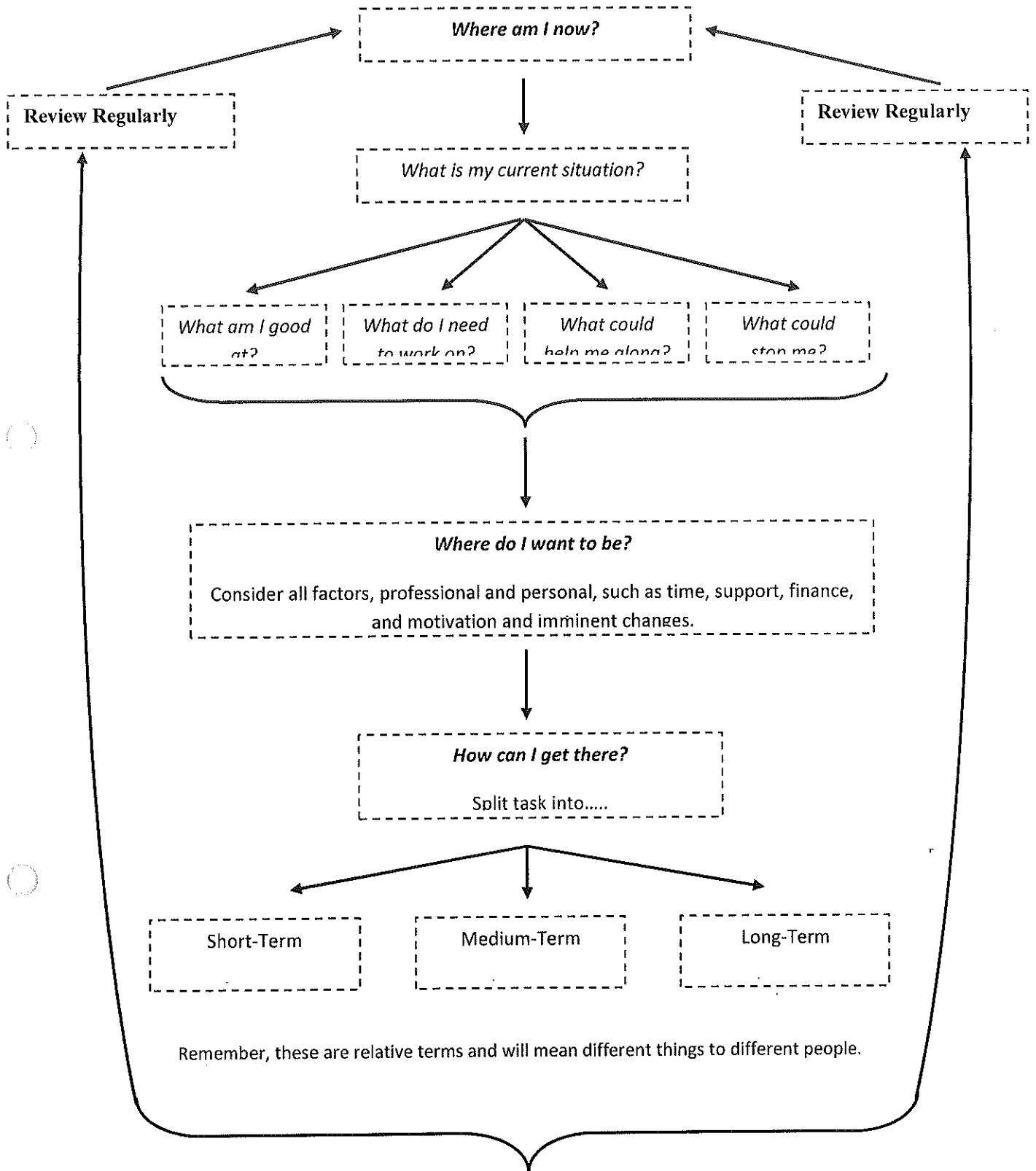
Gives you control of your future. ...

Provides Motivation. ...

Gives you a sense of personal satisfaction. ...

Gives you a sense of purpose in life.

Ans 19. Blueprint for writing your personal individual plan for long term goals



**Ans20.** There are six techniques to help you get creative ideas which are useful in problem solving:

1. **Alternatives**

This technique is about using concepts as a base for new ideas. Concepts are general theories or ways of doing things. Thinking of a number of ways to implement a concept is one way to generate ideas. Each idea can then generate new concepts. These new concepts can create a whole new way for generating more ideas.

2. **Focus**

This technique is about learning when and how to change your focus to improve creative thinking. You can train your mind to focus on areas other people have not thought of. You may be able to make a breakthrough just because other people have not thought of it.

3. **Challenge**

In this technique you break free from the boundaries of traditional thinking and the accepted way of doing things. It is based on the assumption that there may be a different and better way to do something even if there is no obvious problem with the current way.

4. **Random Entry**

This technique is about using unconnected input to open up new lines of thinking. With this, you can use a randomly chosen word, picture, sound or other stimulus to open new lines of thinking.

5. **Provocation and Movement**

This technique is about generating provoking thoughts and using them to build new ideas. It enables you to think outside the box to get a list of interesting ideas to consider.

6. **Harvesting**

This technique involves selecting specific ideas that seems practical and have the most value then reshaping them into practical solutions. It is about turning starter ideas into workable ideas. This technique is done at the end of a thinking session in order to select ideas that may prove to be valuable in the current situation or in the future. Harvesting helps you identify ideas that could be implemented right away as well as those that may need more work.

**Ans 21.** Definition, discussion on extrinsic motivation and Intrinsic motivation.

**Ans22.** SWOT Analysis is a useful technique for understanding our Strengths and Weaknesses, and for identifying both the Opportunities open to us and the Threats we face.

**Strengths**

- I'm very creative. I often impress clients with a new perspective on their brands.
- I communicate well with my clients and team.
- I have the ability to ask key questions to find just the right marketing angle.
- I'm completely committed to the success of a client's brand.

## **Weaknesses**

- I have a strong, compulsive need to do things quickly and remove them from my "to do" list, and sometimes the quality of my work suffers as a result.
- This same need to get things done also causes me stress when I have too many tasks.
- I get nervous when presenting ideas to clients, and this fear of public speaking often takes the passion out of my presentations.

## **Opportunities**

- One of our major competitors has developed a reputation for treating their smaller clients poorly.
- I'm attending a major marketing conference next month. This will allow for strategic networking, and also offer some great training seminars.
- Our art director will go on maternity leave soon. Covering her duties while she's away would be a great career development opportunity for me.

## **Threats**

- Simon, one of my colleagues, is a much stronger speaker than I am, and he's competing with me for the art director position.
- Due to recent staff shortages, I'm often overworked, and this negatively impacts my creativity.
- The current economic climate has resulted in slow growth for the marketing industry. Many firms have laid off staff members, and our company is considering further cutbacks.

**Ans23.** Detailed note including the points such as negative attitude, fear of failure, escapism, laziness and comfort zone.

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Registration No.: .....

## BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Automotive Skills  
3<sup>rd</sup> Semester, End Sem. Examination  
B. Voc. Program, summer Semester (2018-19)

Course Code: GEN1305

Time: 3 Hour

Course Name: Elementary Drawing

Max. Marks: 100

### Instruction:

1. Answer all questions from section – A, each question carries one mark.
2. Answer six question from section – B, each question carries five marks.
3. Answer all questions from section – C, each question carries Ten marks.

### Section – A

20x01 = 20 Marks

Q 1. What is the full form of IT?

- |                            |                      |
|----------------------------|----------------------|
| A. Indian tolerance.       | C. Inline tolerance. |
| B. International tolerance | D. None of the above |

Q 2. What are the dimensions of A4 sheet?

- |             |                       |
|-------------|-----------------------|
| A. 210*297. | C. 210*296.           |
| B. 210*298. | D. None of the above. |

Q 3. Hatching lines indicate which part in cut section?

- |                    |                          |
|--------------------|--------------------------|
| A. Solid part.     | C. Invisible part parts. |
| B. Spherical part. | D. Both B & C.           |

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|-------------|-----------------------|
| A. ellipse. | C. parabola.          |
| B. cycloid. | D. None of the above. |

Q.6 Which type of line is a part of dimension line?

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|-----------------|------------------------|
| A. break line   | C. extension line      |
| B. phantom line | D. cutting plane lines |

Q 7. Which tool can be used to draw 90-degree angle?

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|-------------------|---------------------|
| A. 30/60 triangle | C. drafting machine |
| B. protractor     | D. all of the above |

Q.8 Imagine a 'L' shaped face extruded into three dimension, how many faces does it contain?

- A. seven
- B. eight
- C. ten
- D. six

Q9. Which of the following is the reducing scale?

- A. 1:1
- B. 1:2
- C. 2:1
- D. 10:1

Q10. In first angle projection method, object is placed to be placed in?

- A. First quadrant
- B. Second quadrant
- C. Third quadrant
- D. Fourth quadrant

Q11. Hatching lines drawn at \_\_\_ degree to reference line?

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- B. 45
- C. 60
- D. 90

Q12. The length:width in case of an arrow head is?

- A. 1:1
- B. 2:1
- C. 3:1
- D. 4:1

Q13. A drafter helps in drawing:

- A. Parallel and perpendicular lines
- B. Concentric lines
- C. Smooth curves
- D. All above

Q14. To draw smooth curves of nature, draughting instrument used is,

- A. Mini- drafter
- B. French curves
- C. Pair of set squares
- D. All of the above

Q15. The primary unit of measurement for engineering drawing and design in the mechanical industries is the:

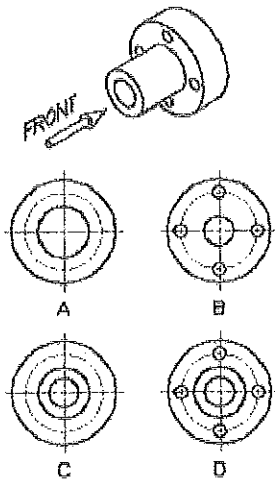
- A. Millimeter
- B. Centimeter
- C. Kilometer
- D. Meter

Q16. What type of line has precedence over all other types of lines?

- A. Hidden line
- B. Center line
- C. Visible line
- D. None of the above

Q17. What is the correct front view of the given object?

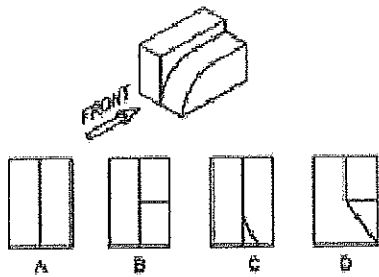
- A. A
- B. B
- C. C
- D. d



Q18. The face of the object has the most descriptive feature should be the:

- A. Back view
- B. Front view
- C. Right side view
- D. Top view

Q19. Which is the correct top view of the given object?



- A.
- B.
- C.
- D.

- A. A
- B. B
- C. C
- D. D

Q20. A line composed of closely and evenly spaced short dashes in the drawing represents?

- A. Visible line
- B. Hidden line
- C. Hatching line
- D. Pitch circle of gear

**Section – B**

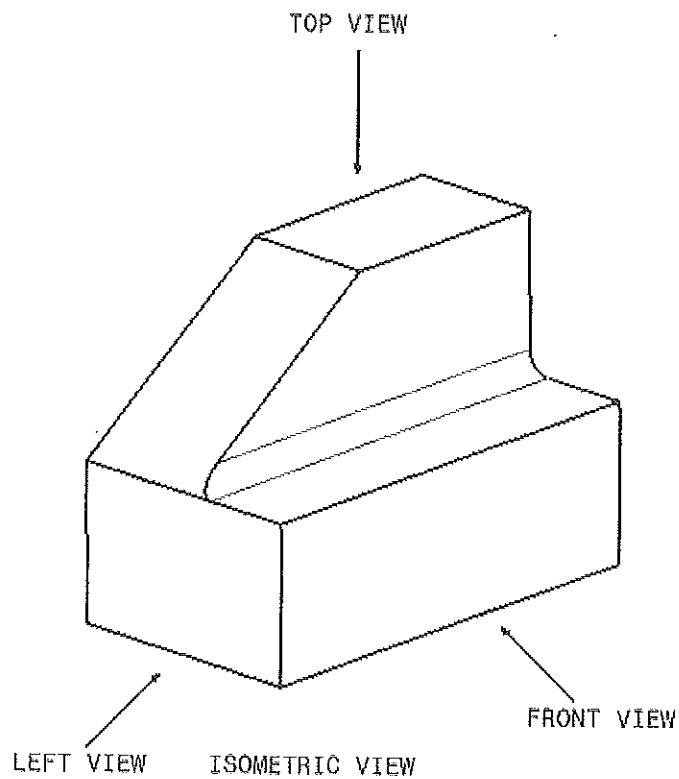
06X05 = 30 Marks

- Q 21. Explain perspective view with any day to day life example.
- Q 22. Describe differences between fits and tolerance.
- Q 23. Why the engineering drawing is called the language of engineers? Explain with some suitable examples.
- Q 24. Describe the use of French curve in engineering drawing with the help of industrial examples.
- Q 25. Describe the types of lines in engineering drawing with their applications.
- Q 26. What is meant by scale in drawing? Explain with the help of a drawing.

**Section – C**

10X05 = 50 Marks

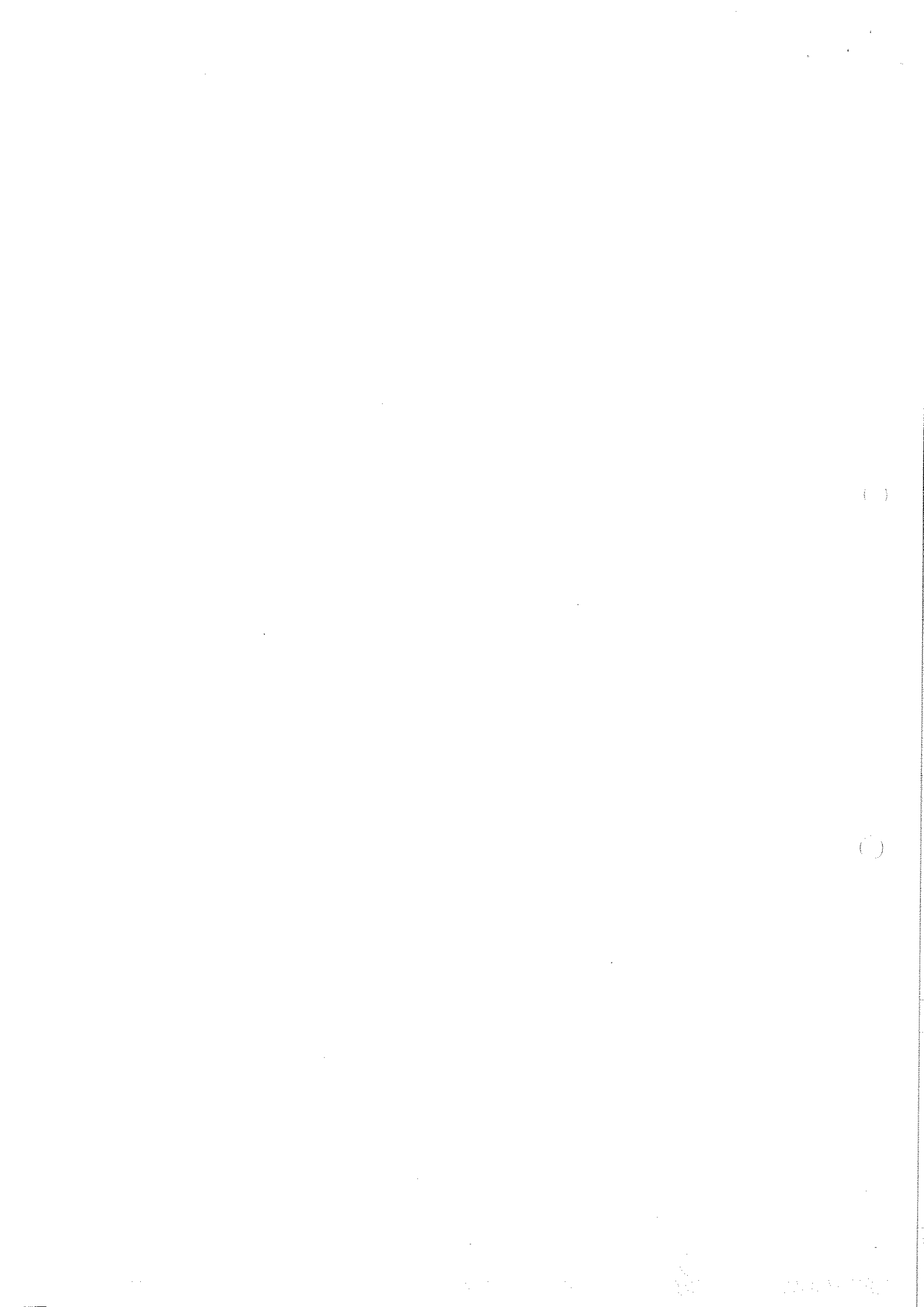
- Q 27. Draw the alphabets A to J in drawing.
- Q 28. Draw the views of this object in third angle.



Q 29. Explain clearance fit, transition fit and interference fit with suitable diagram

Q 30. Explain tolerance and classification of tolerance.

Q 31. list out the tools and equipment which are used during manual drafting, and explain them with their applications



**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of Carpenter Skills  
B. Voc. Program, Summer (2017-18)  
I Semester, End-Sem. Examination

Course Code: GEN1305

Time: 3 Hours

Course Name: Elementary Drawing Skills

Max. Marks: 100

**Instruction:**

1. Answer all question from section A, each question carries one marks.
2. Answer any six question from section B, each question carries five marks.
3. Answer all question from section C, each question carries ten marks.

**Section – A**

20X01 = 20 Marks.

Q1. Which of the following statements is true for AutoCAD?

- (a) Zoom All will reach beyond the drawing limits if an object is there
- (b) Zoom All shows objects only in drawing limits
- (c) There is not real difference between Zoom All and Zoom Window
- (d) Zoom All makes all objects visible of drawing (d)

Q2. In the coordinate system of AutoCAD?

- (a) Positive x figures are to the left
- (b) Positive x figures are to the right
- (c) Positive x figures are in the direction vertically upwards
- (d) Positive x figures are in the direction vertically downwards (b)

Q.3 Which one of the followings function is toggled on/off by F9 key

- (a) Grid on/off (b) Snap on/off
- (c) Ortho on/off (d) Osnap on/off (b)

Q.4 Which one of the following could be an AutoCad drawing file?

- (a) DWG.plan (b) PLAN.dwg
- (c) DRAW.fle (d) FILE.txt (b)

Q.5 The command line abbreviation for the Line tool is-

- (a) lin (b) li
- (c) l (d) ln (c)

Q.6 The command line abbreviation for the Circle tool is-

- (a) cir (b) c
- (c) ci (d) cl (b)

Q.7 The command line abbreviation for the Mirror tool is-

- (a) M (b) MI
- (c) Mo (d) Mi (d)

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Q.8 The command line abbreviation for the Array tool is-

- (a) A (b) Ara  
(c) Ar (d) Aray (c)

Q.9 The command line abbreviation for the Layer tool is-

- (a) La (b) Ly  
(c) L (d) Lay (a)

Q.10 The command line abbreviation for the Chamfer tool is-

- (a) C (b) Ch  
(c) Chm (d) Cha (d)

Q.11 The command line abbreviation for the Break tool is-

- (a) B (b) Br  
(c) Bk (d) Brk (b)

Q.12 To continue drawing a line from the last known point, enter-

- (a) 0,0 (b) @  
(c) Next (d) a or b (b)

Q.13 Which one of the following is an AutoCAD relative polar co-ordinate?

- (a) 81,30 (b) @81,30  
(c) 30<81 (d) @81<30 (d)

Q.14 When entering absolute coordinate numbers at the command line, the coordinates are preceded by?

- (a) The letter a  
(b) The symbol @  
(c) The letters ab  
(d) There is no need to enter anything in front of the coordinate numbers (c)

Q.15 To reverse the Undo command the correct entry is-

- (a) Redo (b) Redraw  
(c) Esc (d) U (a)

Q.16 The command line abbreviation for the Undo tool is-

- (a) N (b) Un  
(c) Unit (d) U (d)

Q.17 The special character string that is used to print the diameter sign is-

- (a) %%c (b) %%d  
(c) %dia (d) c%% (b)

Q.18 The command line abbreviation for the Layer tool is -

- (a) La (b) L  
(c) Ly (d) Lyr (a)

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Q.19 When is a space not interpreted as the enter key?

- (a) When entering text
- (b) When using the PEDIT command
- (c) When selecting objects
- (d) The space is always an alternative to the enter key (a)

Q.20 When using the Rotate tool then angle of rotation is in the following direction?

- (a) Clockwise
- (b) Anticlockwise
- (c) The direction in which the cursor is moved
- (d) There is no fixed rotation direction (b)

### Section – B

06X05 = 30 Marks

Q.21 What do you understand by Computer Aided Drawing, discuss importance of AutoCAD in wood working.

**Ans.** Auto CAD is a computer aided design and drafting software used in architecture, construction and manufacturing to prepare the engineering drawings in terms of 2D and 3D by electronic method.

This CAD drawing offers time saving process to drawing. As per high technology we can draft a drawing with help of different predefined library. From this library we can use a lots of shapes, material, accessories of joinery etc. We can also set a template file in which we can fix our all drawing settings as well as some materialistic objects. Saved file we can transfer easily where we want by electronic method. It is also easy in PDF file which they can open to view and print.

Q.22 Write down the advantages of AutoCAD software.

- Ans.**
1. More quicker for time Saves & more productive by electronic design system.
  2. It helps to snap object by various points in design.
  3. 3D models can be created & directly imported into AutoCAD by using application like SolidWorks etc.
  4. Work of drafting can be done easily and you can design and re-design the product in short span of time & also we can attach image, doc file, links, videos etc.

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Q.23 Write down the name of any five dimension parameters with their short key.

Ans.

S. No.	Dimension Parameter	Short keys
1	Dimension Linear	DLI + Enter
2	Dimension Angular	DAN + Enter
3	Dimension Arc Length	DAR + Enter
4	Dimension Radial	DRA + Enter
5	Dimension Diameter	DDI + Enter

Q.24 Discuss the dimension of various drawing sheets used in Engineering Drawing.

Ans.

S. No.	Size Designation	Trimmed Sheet Sizes (in mm)	
		Width	Length
1.	<b>A0</b>	841	1189
2.	<b>A1</b>	594	841
3.	<b>A2</b>	420	594
4.	<b>A3</b>	297	420
5.	<b>A4</b>	210	297
6.	<b>A5</b>	148	210

Q.25 What do you understand by DWG and DXF file format, write down any three difference between them.

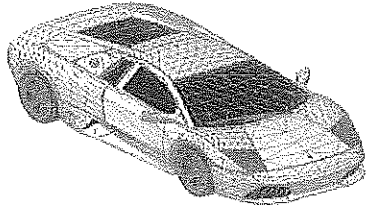
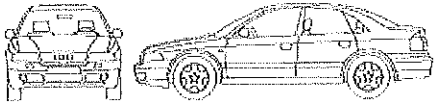
Ans. These both are file extension of AutoCAD file.

**DWG** - It should be used if your drawing will only be accessed via AutoCAD.

**DXF** - It should be used if you're sharing drawings between different CAD or vector based programs.

S. No.	DWG File	DXF File
1.	The acronym DWG stands for Drawing.	The acronym DXF stands for Drawing Exchange Format.
2.	It is the native file format for AutoCAD for storing 2D and 3D design data.	DXF format became the standard for data exchange between CAD programs.

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	DWG handles 3D geometry	DXF stores 2D vector images
3.		

Q.26 Discuss any two types of object selection method used in AutoCAD.

**Ans. 1. Implied window selection method** – Just click on the left upper corner and drag it down in opposite side, then a default blue window appears at the time of object selection. In this if object is not covered fully, but object will not select by this method.

**2. Cross window selection method** – Just click on the right upper corner and drag it down in opposite side, then a default green window appears at the time of object selection. In this if object is not covered fully, but object will select by this method.

Q.27 Explain the geometry rectangle, discuss any two methods to construct it.

**Ans.** A 4-sided flat shape with straight sides where all interior angles are right angles (90°). Also diagonals sides are parallel and of equal length.

1. **Corner Method** – In that we make rectangular by only click on two opposite corners.

REC + Enter

specify first corner point

specify second corner point

2. **Dimension Method** – In that we make rectangular by the values of length and width of rectangular.

REC + Enter

specify first corner point

D + Enter

Specify length of rectangles

Specify width of rectangles

Click on right quadrant

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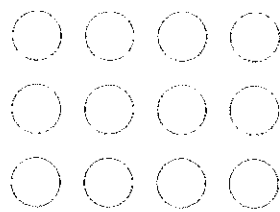
Q.28 Define Array with its short key and explain its types with neat sketch.

**Ans.** Array is the collection of similar object. Array creates copies of objects in a arranged pattern.

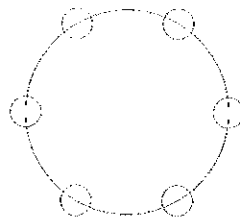
Short key - (AR + Enter)

Types of Array as follow-

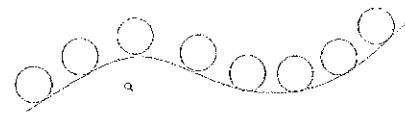
1. Rectangular Array – Evenly distributes object copies into any combination of rows, columns.
2. Polar Array – Evenly distributes object copies in a circular pattern around a center point.
3. Path Array - Evenly distributes object copies along a path



Rectangular Array



Polar Array



Path Array

### Section – C

05X10 = 50 Marks

Q.29 Explain the difference between basic hand drawing and AutoCAD drawing and discuss how drawing is useful in improving product quality.

**Ans.**

S. No.	Basic Hand Drawing	Auto Cad Drawing
1	It is truly made by hand on paper	We can draw in software computer
2	It has to be store manually cause of hard copy	It has to be store in computer memory
3	More time consuming to draw on paper	Less time consuming cause of electronic medium
4	Correction in drawing is too tough	Correction in drawing is too easy
5	All things have to draw, no any predefined library as AutoCAD	We can access predefined library of AutoCAD

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It is true that quality of product is related to drawing because of the assembly and connections of joints are totally based on the drawing and this is so important to get qualitative product drawing has to be realistic and qualitative.

Importance of drawing in product quality -

1. To know visualization of product in 2D & 3D
2. In assembly of joints
3. Product reality
4. Product quality
5. To check error in product.

Q.30 Define Cartesian coordinate system in AutoCAD and explain its various types with suitable example.

**Ans.** A Cartesian coordinate system is a coordinate system that specifies each point in a plane by a set of numerical coordinates, which are the distances to the point from two fixed coordinate axis of the system, and the point where they meet is its origin as (0,0).

Types of Co-ordinate system

### 1 Absolute Coordinate system –

- In the system all points are measured from the origin (0,0).
- To enter the absolute coordinate use format (x,y), where (x,y) is distance from horizontal axis and vertical axis from origin (0,0).

### 2 Relative Rectangular Coordinate system –

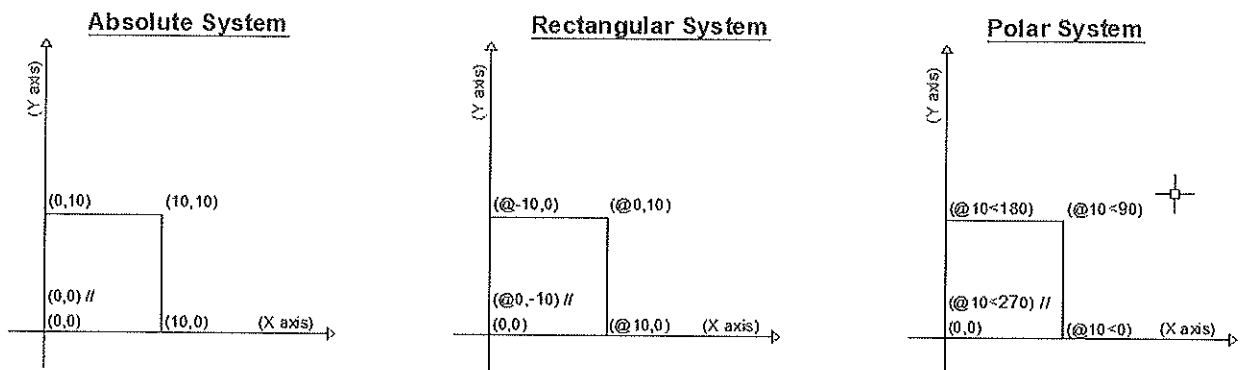
- In this system next point is based on last point entered.
- To enter the rectangular coordinate use format (@ x,y), where (@ x,y) is relative distance from horizontal axis and vertical axis from last point.

### 3 Relative Polar Coordinate system -

- In this system we used as combination of distance & angle from one point to another.
- To enter the rectangular coordinate use format (@ x<y), where (@ x<y) is relative distance & angle from horizontal axis and vertical axis from last point.
- Angles are +ve when measured counter-clockwise & -ve when measured clockwise.

e.g. –

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Q.31 Define various scales in engineering drawing and discuss Representative Fraction used for scale with suitable example.

**Ans.** The proportion by which we either reduce or increase the actual size of the object on a drawing is known as drawing to scale or simply scale.

**Representative Fraction** - The ratio of the distance on the drawing sheet of an object to the corresponding actual distance of the object is known as scale factor. A scale factor represents the ratio of two corresponding lengths in similar geometric shapes.

$$\text{Scale Factor} = \frac{\text{Distance of the object on drawing sheet (Drawing Size)}}{\text{Corresponding actual distance of the object (Actual size)}}$$

**Types of scale -**

1. **Full size scale** - In this, actual measurement of the object drawn to same size on the drawing.

It is written as -

**Full Size Scale :**

$$\text{Scale factor} = \frac{\text{Scale Drawing}}{\text{Actual Drawing}} = \frac{4}{4} = \frac{5}{5} = \frac{1}{1}$$

**Scale factor = 1:1**

**Actual Drawing**

4 mm  
5 mm

**Scale Drawing**

4 mm  
5 mm

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1 :1 - Drawing made to actual size

2. **Reducing scale** – In this, actual measurement of the object reduced to some proportion on drawing.

It is written as –

1:2 - Drawing made to one half of actual size

1:5 - Drawing made to one fifth of actual size

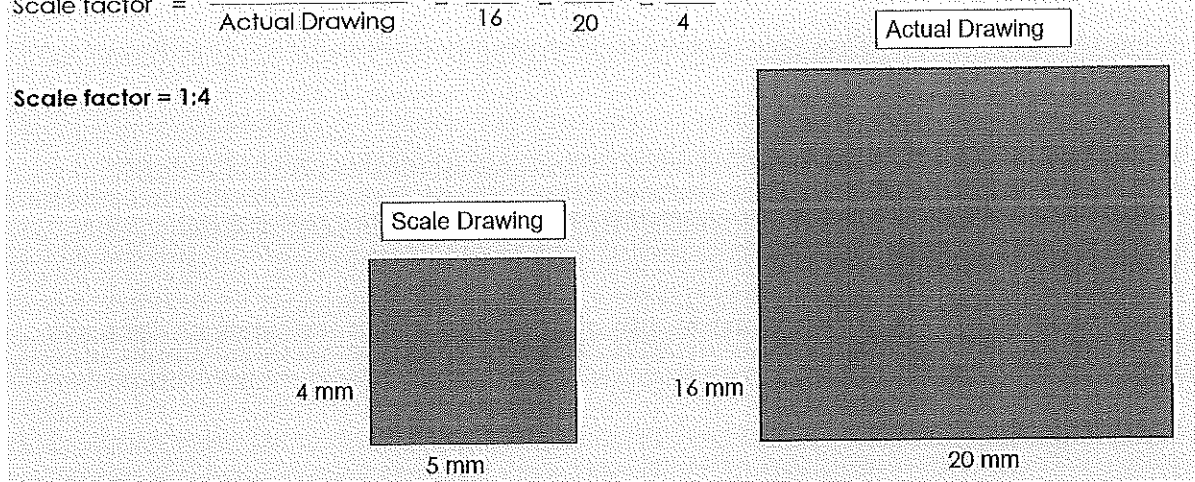
1:10 - Drawing made to one tenth of actual size

1:50 - Drawing made to one fiftieth of actual size

### Reducing Scale :

$$\text{Scale factor} = \frac{\text{Scale Drawing}}{\text{Actual Drawing}} = \frac{4}{16} = \frac{5}{20} = \frac{1}{4}$$

Scale factor = 1:4



3. **Enlarging scale** – In this, actual measurement of the object increased to some proportion on drawing.

It is written as –

2:1 - Drawing made to twice of actual size

5:1 - Drawing made to five times of actual size

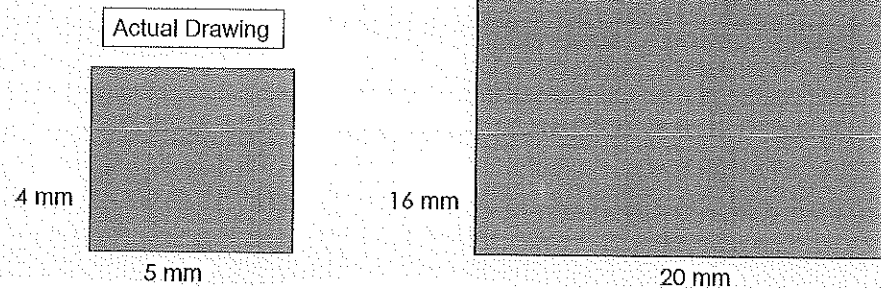
10:1 - Drawing made to ten times of actual size

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### Enlarging Scale :

$$\text{Scale factor} = \frac{\text{Scale Drawing}}{\text{Actual Drawing}} = \frac{16}{4} = \frac{20}{5} = \frac{4}{1}$$

Scale factor = 4:1



Q.32 Explain the following tool and also mention their short key used in AutoCAD.

**Ans.**

**(a) Explode** - Used for explode/brake a unit object to modify its component separately. Objects that can be exploded includes, polylines, blocks etc.

Short key - X + Enter

**(b) Extend** - Used to increase the length of an object within the limits of defined object.

Short key - EX + Enter

**(c) Ellipse** - Used to draw any oval shape by the parameter of major and minor axis.

Short key - EL + Enter

**(d) Polygon** - – Used to draw any regular polygon (Closed chain of defined edges/sides) from 3 sides to 1024 sides.

Short key - POL + Enter

**(e) Hatch** - Used to show of object cutting view by a plane in 2D by different patterns.

Short key - H + Enter

Q.33 Explain the following tool and also mention their short key used in AutoCAD.

**Ans.**

**(a) Scale** - Used for either reducing or increasing the actual size of the selected object by a specified scale.



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Short key - SC + Enter

**(b) Stretch** - Used to lengthen object, shorten them and to alter their shapes by a selection window.

Short key - S + Enter

**(c) Offset** - Used to create concentric circle, parallel lines, and parallel curves at a specified distance.

Short key - O + Enter

**(d) Join** - Used to join the end points of linear objects and curved objects

Short key - J + Enter

**(e) Break** - Used to erase the part of an object.

Short key - BR + Enter

10

11

12

Double copy



Registration No.: .....

## BHARTIYA SKILL DEVELOPMENT UNIVERSITY

### Question Paper

#### School of Automotive Skills

#### 3<sup>rd</sup> Semester, End Sem. Examination

#### B. Voc. Program, Semester (2018-19)

Course Code: GEN1305

Time: 3 Hour

Course Name: Elementary Drawing

Max. Marks: 100

#### Instruction:

1. Answer all questions from section – A, each question carries one mark.
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#### Section – A

20x01 = 20 Marks

05x01 = 05 Marks

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- |                            |                      |
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- |                    |                          |
|--------------------|--------------------------|
| A. Solid part.     | C. Invisible part parts. |
| B. Spherical part. | D. Both B & C.           |

Q4. In first angle projection, we draw left side view on \_\_\_\_\_ of the front view.

- |               |              |
|---------------|--------------|
| A. Left side  | C. Back side |
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Q 5. A circle will appear on an isometric drawing is?

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- A. Mini- drafter
- B. French curves
- C. Pair of set squares
- D. All of the above

Q15. The primary unit of measurement for engineering drawing and design in the mechanical industries is the,

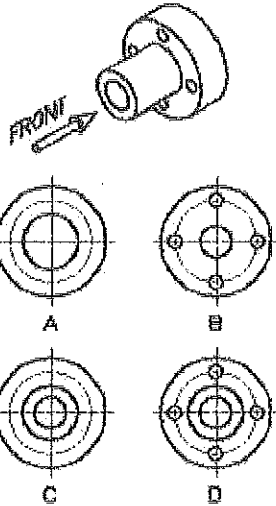
- A. Millimeter
- B. Centimeter
- C. Kilometer
- D. Meter

Q16. What type of lie has precedence over all other types of lines?

- A. Hidden line
- B. Center line
- C. Visible line
- D. None of the above

Q17. What is the correct front view of the given object?

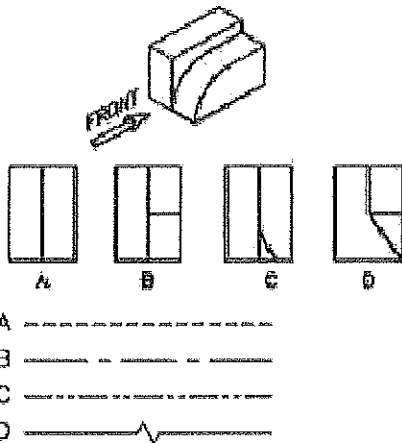
- A. A
- B. B
- C. C
- D. d



Q18. The face of the object has the most descriptive feature should be the,

- A. Back view
- B. Front view
- C. Right side view
- D. Top view

Q19. Which is the correct top view of the given object is?



- A. A
- B. B
- C. C
- D. D

Q20. Line composed of closely and evenly spaced short dashes in the drawing represents?

- A. Visible line
- B. Hidden line
- C. Hatching line
- D. Pitch circle of gear

**Section – B**

06X05 = 30 Marks

Q 21. Explain perspective view with any day to day life example.

Q 22. Describe difference between fits and tolerance.

Q 23. Why the engineering drawing is called the language of engineers? Explain with some suitable examples.

Q 24. Describe the use of French curve in engineering drawing with the help of industrial examples.

Q 25. Describe the types of lines in engineering drawing with their application.

Q 26. What is meant by scale in drawing? Explain with the help of drawing.

Q 27. Explain the difference between first angle projection and third angle projection with the help of symbol.

Q28. A shaft has the dimension of  $80_{-0.6}^{+0.4}$ , what is the value of upper deviation, lower deviation and nominal dimension

### Section – C

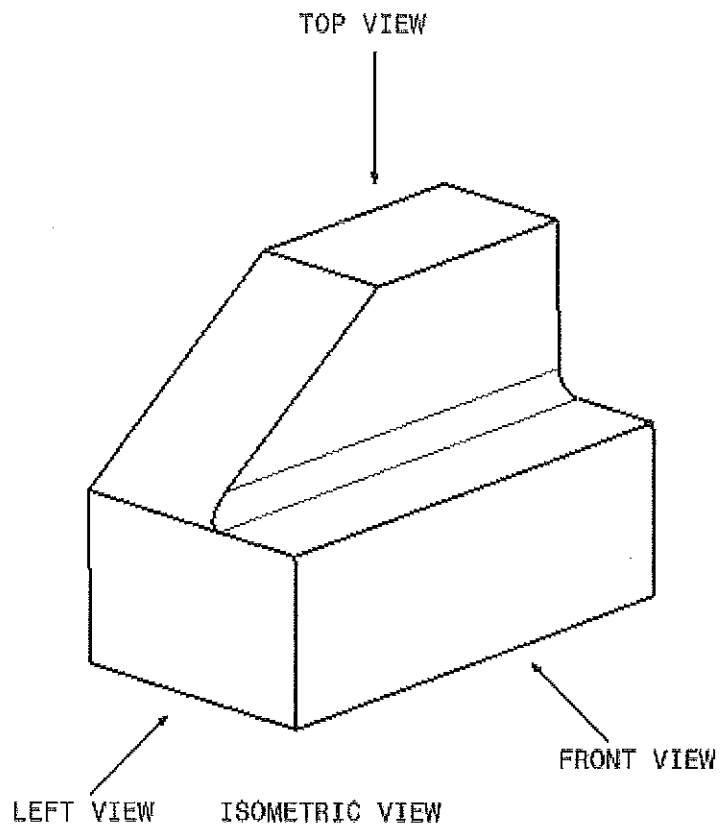
10X05 = 50 Marks

Q 29. Draw the alphabets A to J in drawing.

Q 30. Draw the views of this object in third angle projection.

(left side view, right side view)

(Top view), (front view)



Q 31. Explain clearance fit, transition fit and interference fit with suitable diagram

Q 32. Explain tolerance and classification of tolerance.

Q 33. List out the tools and equipment which are used during the manual drafting.







Registration No.: .....

## BHARTIYA SKILL DEVELOPMENT UNIVERSITY

### Answer Paper

#### School of Automotive Skills

#### 3<sup>rd</sup> Semester, End Sem. Examination

#### B. Voc. Program, Summer Semester (2018-19)

Course Code: GEN1305

Time: 3 Hour

Course Name: Elementary Drawing

Max. Marks: 100

#### Instruction:

1. Answer all questions from section – A, each question carries one mark.
2. Answer all questions from section – B, each question carries two marks.
3. Answer all questions from section – C, each question carries three marks.

#### Section – A

20x01 = 20 Marks

05x01 = 05 Marks

Q 1. What is the full form of IT?

Ans International tolerance

Q 2. What are the dimension of A4 sheet?

Ans 210\*297.

Q 3. Hatching lines indicates which part in cut section?

Ans. Solid part.

Q 4. In first angle projection, we draw left side view on \_\_\_\_\_ of the front view.

Ans. Right side

Q 5. A circle will appear on an isometric drawing is?

Ans. ellipse.

Q.6 which type of line is a part of dimension line?

Ans. extension line

Q 7. which tool can be used to draw 90-degree angle?

Ans. all of the above

Q.8 imagine a 'L' shaped face extruded into three dimension, how many faces does it contain?

Ans. eight

Q9. Which of the following is the reducing scale?

Ans. 1:2

Q10. In first angle projection method, object is placed to be placed in?

Ans. First quadrant

Q11. Hatching lines drawn at \_\_\_ degree to reference line?

Ans. 45

Q12. The length:width in case of an arrow head is?

Ans. 3:1

Q13. A drafter helps in drawing,

Ans. Parallel and perpendicular lines

Q14. To draw smooth curves of nay nature, draughting instrument used is,

Ans. French curves

Q15. The primary unit of measurement for engineering drawing and design in the mechanical industries is the,

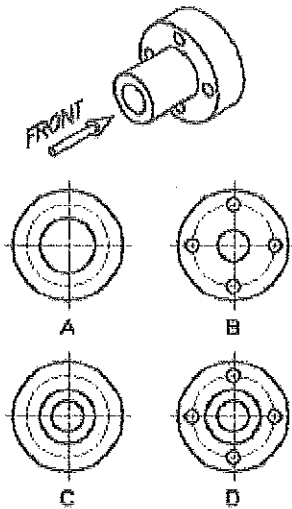
Ans. Millimeter

Q16. What type of line has precedence over all other types of lines?

Ans. Center line

Q17. What is the correct front view of the given object?

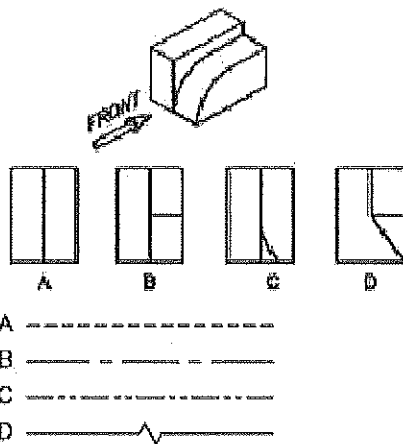
Ans. D



Q18. The face of the object has the most descriptive feature should be the,

Ans. Front view

Q19. Which is the correct top view of the given object is?



Ans. A

Q20. Line composed of closely and evenly spaced short dashes in the drawing represents?

Ans. Hidden line

### Section – B

06X05 = 30 Marks

Q 21. Explain perspective view with any day to day life example.

Ans. On a flat surface (such as paper), of an image as it is seen by the eye. The two most characteristic features of perspective are that objects appear smaller as their distance from the observer increases; and that they are subject to *foreshortening*, meaning that an object's dimensions along the line of sight appear shorter than its dimensions across the line of sight.

Q 22. Describe difference between fits and tolerance.

Ans. **LIMITS, FITS AND TOLERANCE**. ... The relationship existing **between** two parts which are to be assembled with respect to the **difference** on their sizes before assembly is called a **fit**. **Tolerance** is defined as the total permissible variation of a size. It is the **difference between** maximum limit and minimum limit of size.

**Fits may be classified into the following three types:**

(i) Clearance fit.

(ii) Interference fit.

(iii) Transition fit.

### **21. Clearance:**

The term clearance refers to the difference between the sizes of the hole and the shaft before assembly. Clearance must be positive.

### **22. Interference:**

The term interference refers to the arithmetical difference between the sizes of the hole and the shaft, before assembly. Interference is negative clearance.

### **23. Clearance Fit:**

A fit that always provides a clearance (gap) between the hole and shaft when assembled is known as clearance fit.

In clearance fit, the minimum size of the hole is either greater than or, equal to (in extreme case) the maximum size of the shaft, so that the shaft can rotate or slide as per the purpose of the assembled members.

In clearance fit, the difference between the maximum size of the hole and minimum size of the shaft is called maximum clearance, whereas the minimum size of the hole and maximum size of the shaft is known as minimum clearance.

**Clearance fit is shown in Fig. 1.56 (a):**

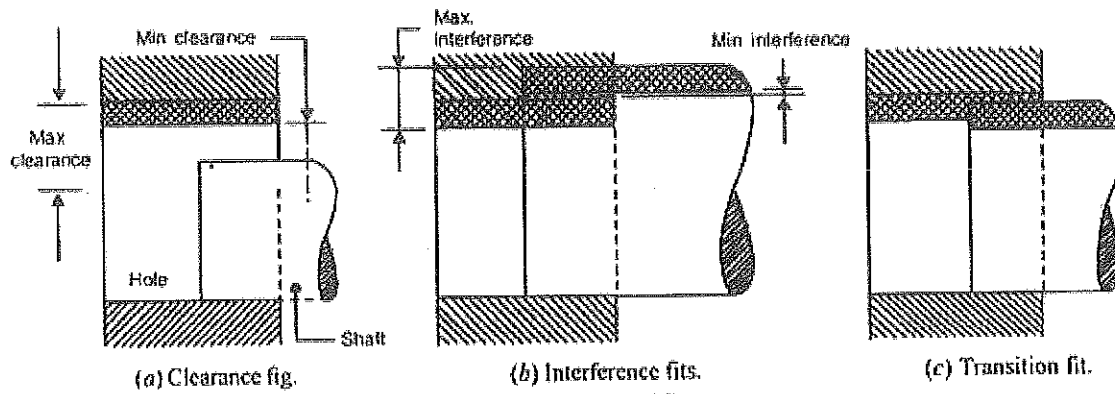


Fig. 1.56. Types of fits.

The clearance fit may be of different types, e.g., slide fit, easy sliding fit, running fit, slack running fit and loose running fit, etc.

#### 24. Interference Fit:

A fit that everywhere provides interference between the hole and shaft when assembled, is known as interference fit. In interference fit, the maximum size of the hole is either smaller or equal to (in extreme case) the minimum size of the shaft.

In this fit, the shaft and the hole members are intended to be attached permanently, so that they can be used as a solid component, but according to the purpose and function of this combination, this type of fit can be varied.

It may be noted from the figure that in interference fit, the tolerance zone of the hole is entirely below the tolerance zone of the shaft.

In interference fit, the difference between the minimum size of the hole and the maximum size of the shaft is called maximum interference. Whereas difference between the maximum size of the hole and the minimum size of the shaft is known as minimum interference, Interference fit is shown in Fig. 1.56 (b).

The interference fit may be of different types, e.g., shrink fit, light drive fit, heavy drive fit. Example of this type of fit are bearing bushes which are in an interference fit in their housing of a small end of the connecting rod of an engine.

### 25. Transition Fit:

A fit which may provide either a clearance or interference between the shaft and hole when assembled, depending on the actual sizes of the shaft and hole, is known as Transition fit. It may be noted that in a transition fit, the tolerance zone of shaft and hole overlap completely or partially. Transition fit is shown in Fig. 1.56 (c).

The transition fit may be of different types, e.g. Push fit, force fit, tight fit etc.

### 26. Hole Basis System:

In hole basis system, the size of the hole is constant and different fits are obtained by varying the size of shaft as shown in Fig. 1.57 (a).

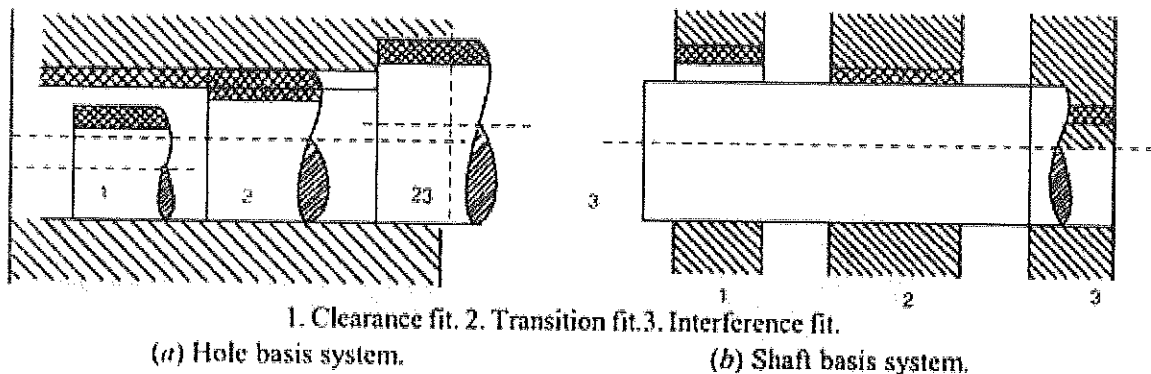


Fig. 1.57. Basis of limit system.

Q 23. Why the engineering drawing is called the language of engineers? Explain with some suitable examples.

- Ans. Engineering drawing is a graphical language of an engineer to convey one's ideas most effectively, easily, conveniently and with high speed.
- So Engineering drawing is a starting point of all engineering branches such as Mechanical, Production, Civil, Electrical, Electronics, Computer science, Chemical etc.
  - It is spoken, read, and written in its own way. Engineering drawing has its own grammar in terms of projections, conventional representations, types of lines, abbreviations, symbols and various geometric constructions.
  - A drawing drawn by an engineer having engineering knowledge for the drawing purposes is an engineering drawing. It is meant for communicating his ideas, thoughts and designs to others. Engineering drawing is a starting point of all engineering branches such as Mechanical, Production, Civil, Electrical, Electronics, Computer science, Chemical etc. It is spoken, read, and written in its own way. Engineering drawing has its own grammar in the theory of projections, its idioms in conventional practices, its punctuations in

the types of lines, its abbreviations, symbols and its descriptions in the constructions.

Q 24. Describe the use of French curve in engineering drawing with the help of industrial examples.

Ans. **French curve.** ... It is used in manual drafting to draw smooth **curves** of varying radii. The shapes are segments of the **curve**. The **curve** is placed on the drawing material, and a pencil, knife or other implement is traced around its **curves** to produce the desired result.


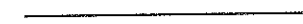
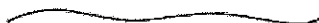

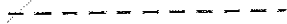


### Use of the French Curve

The French curve is used to draw a smooth line through predetermined points. After the points are plotted, a line should be sketched to connect the points in a smooth flowing line. To draw the finished line over the line, match the various parts of the french curve to various segments of the freehand curve. Avoid abrupt curvature by placing the short radius of the french curve toward the short radius portion of the line to be drawn. When using the irregular curve, you can draw a perfectly smooth curved line by plotting enough points around the drawing board when

necessary so that you can work on the side of the french curve that is away from you. You should avoid working on the "under" side of the french curve. Place the french curve so that it intersects at least two points of the line to be drawn. Then move the french curve so that it intersects two or three more points and make sure that the edge of the curve connects smoothly with the line already drawn. When using the irregular curve, you can draw a perfectly smooth curved line by plotting enough points

Q 25. Describe the types of lines in engineering drawing with their application.

Ans.

Illustration	Application
<b>Thick</b> 	<b>Outlines, visible edges, surface boundaries of objects, margin lines</b>
<b>Continuous thin</b> 	<b>Dimension lines, extension lines, section lines leader or pointer lines, construction lines, boarder lines</b>
<b>Continuous thin wavy</b> 	<b>Short break lines or irregular boundary lines – drawn freehand</b>
<b>Continuous thin with zig-zag</b> 	<b>Long break lines</b>
<b>Short dashes, gap 1, length 3 mm</b> 	<b>Invisible or interior surfaces</b>
<b>Short dashes</b> 	<b>Center lines, locus lines</b> <b>Alternate long and short dashes in a proportion of 6:1,</b>
<b>Long chain thick at end and thin elsewhere</b> 	<b>Cutting plane lines</b>

Q 26. What is meant by scale in drawing? Explain with the help of drawing.

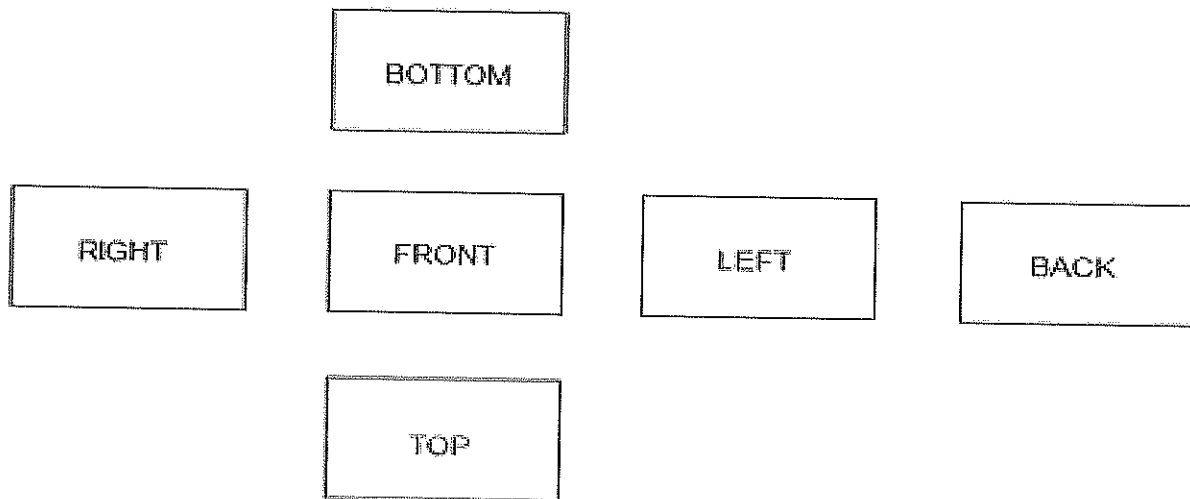
Ans. Depending on the size of the object, the size taken on drawing (sheet) can be same or different.

- Size on drawing can be = or < or > the actual size.
- If size on drawing = the actual size, it is a FULL SCALE, represented as 1:1
- If size on drawing < the actual size, it is a REDUCED SCALE, represented as 1:4
- If size on drawing > the actual size, it is a ENLARGED SCALE, represented as 3:1

Q 27. Explain the difference between first angle projection and third angle projection with the help of symbol.

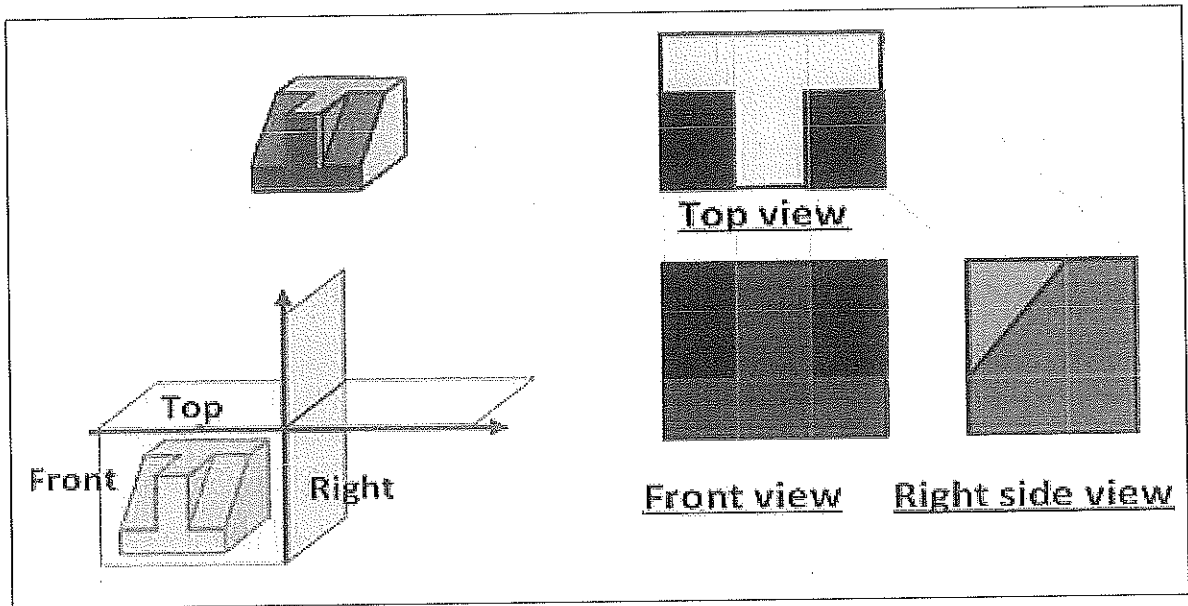
Ans. **FIRST ANGLE PROJECTION**

- In this the object is assumed to be positioned in the first quadrant
- The object is assumed to be positioned in between the projection planes and the observer. The views are obtained by projecting the images on the respective planes.
- Note that the right hand side view is projected on the plane placed at the left of the object.
- After projecting on to the respective planes, the bottom plane and left plane is unfolded on to the front view plane. i.e. the left plane is unfolded towards the left side to obtain the Right hand side view on the left side of the Front view and aligned with the Front view. The bottom plane is unfolded towards the bottom to obtain the Top view below the Front view and aligned with the Front View.



### **THIRD ANGLE PROJECTION**

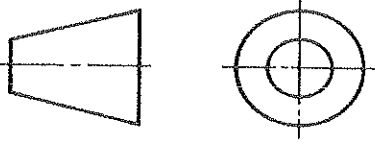
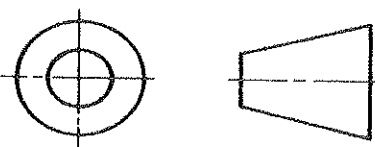
- In the third angle projection method, the object is assumed to be in the third quadrant. i.e. the object behind vertical plane and below the horizontal plane.
- In this projection technique, Placing the object in the third quadrant puts the projection planes between the viewer and the object.



**DIFFERENCE BETWEEN FIRST AND THIRD ANGLE PROJECTION**

<b>First angle projection</b>	<b>Third-angle projection</b>
Object is kept in the first quadrant.	Object is assumed to be kept in the third quadrant.
Object lies between observer and the plane of projection.	Plane of projection lies between the observer and the object.
The plane of projection is assumed to be non-transparent.	The plane of projection is assumed to be transparent.
Front (elevation) view is drawn above the XY line	Front (elevation) view is drawn below the XY line
Top (plan) view is drawn below the XY line	Top (plan) view is drawn above the XY line
Left view is projected on the right plane and vice versa	Left view is projected on the left plane itself.
Followed in India, European countries	Followed in USA

**SYMBOL OF PROJECTION**

Projection	Symbol
First angle	
Third angle	

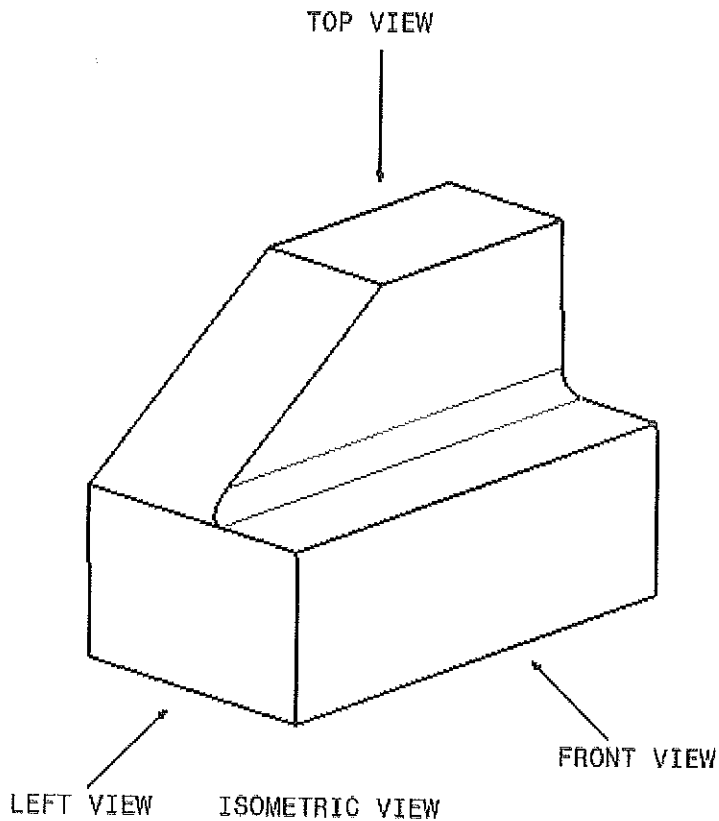
Q 28. A shaft has the dimension of  $80 (+0.6, -0.4)$ . what is the value of upper deviation, lower deviation, and nominal diameter of the shaft?

**Section – C**

10X05 = 50 Marks

Q 29. Draw the alphabets from A to J in drawing.

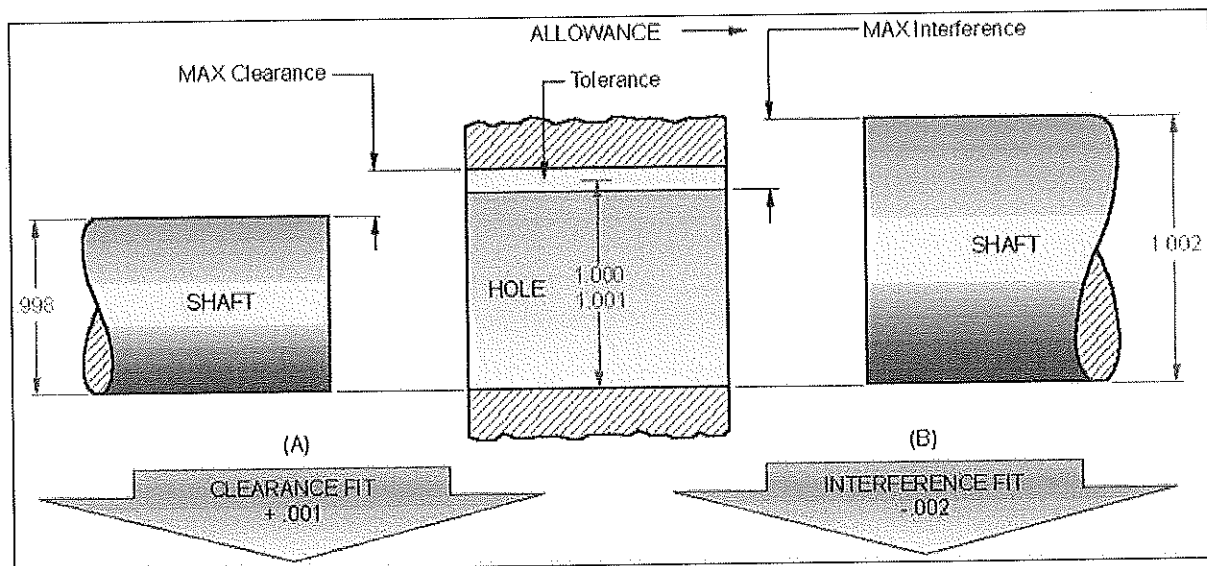
Q 30 Draw the views of this object in third angle.



Q 31. Explain clearance fit, transition fit and interference fit with suitable diagram.

Ans. Manufactured parts are required to mate with one another during assembly.

- The relationship between the two mating parts that are to be assembled, that is, the hole and the shaft, with respect to the difference in their dimensions before assembly is called a fit.
- An ideal fit is required for proper functioning of the mating parts. Three basic types of fits can be identified, depending on the actual limits of the hole or shaft:
  - a. Clearance fit
  - b. Interference fit
  - c. Transition fit
- **Clearance fit:** The largest permissible diameter of the shaft is smaller than the diameter of the smallest hole.
- In case of clearance fit, the difference between the sizes is always positive.
- **Interference fit:** The minimum permissible diameter of the shaft exceeds the maximum allowable diameter of the hole.
- This type of fit always provides interference. Interference fit is a form of a tight fit. Tools are required for the precise assembly of two parts with an interference fit.
- In an interference fit, the difference between the sizes is always negative.
- **Transition fit:** Occurs when two tolerance mating parts are sometimes and interference fit and sometimes clearance fit when assembled.



### GENERAL TERMINOLOGY IN FITS

- **Basic size:** This is the size in relation to which all limits of size are derived. Basic or nominal size is defined as the size based on which the dimensional deviations are given. This is, in general, the same for both components.
- **Limits of size:** These are the maximum and minimum permissible sizes acceptable for a specific dimension. The operator is expected to manufacture the component within these limits. The maximum limit of size is the greater of the two limits of size, whereas the minimum limit of size is the smaller of the two.

- **Tolerance:** This is the total permissible variation in the size of a dimension, that is, the difference between the maximum and minimum limits of size. It is always positive.
- **Allowance:** It is the intentional difference between the LLH and HLS. An allowance may be either positive or negative.

$$\text{Allowance} = \text{LLH} - \text{HLS}$$

Q 32. Explain tolerance and classification of tolerance?

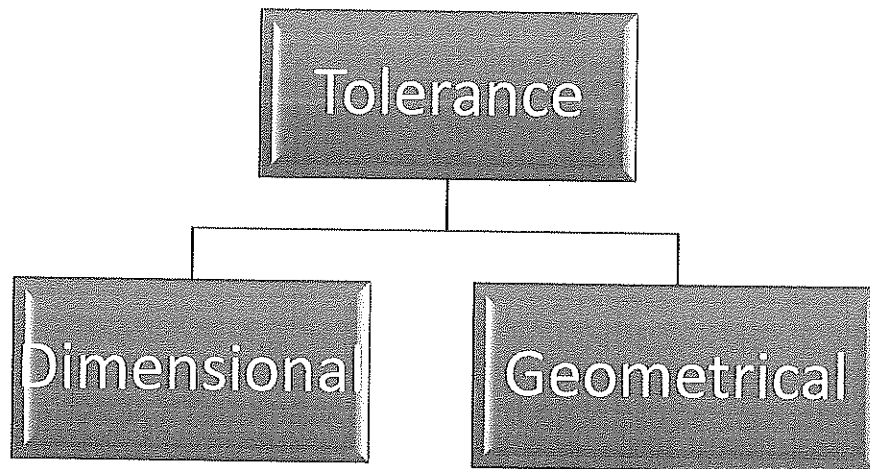
Ans.

## TOLERANCE

Tolerance can be defined as the magnitude of permissible variation of a dimension or other measured value from the specified value.

- It can also be defined as the total variation permitted in the size of a dimension, and is the algebraic difference between the upper and lower acceptable dimensions. It is an absolute value.
- The basic purpose of providing tolerances is to permit dimensional variations in the manufacture of components, adhering to the performance criterion as established by the specification and design.

### CLASSIFICATION OF TOLERANCE



Classification of Tolerance:

Tolerance can be classified under the following categories:

A. Dimensional Tolerance

1. Unilateral tolerance

2. Bilateral tolerance

3. Compound tolerance

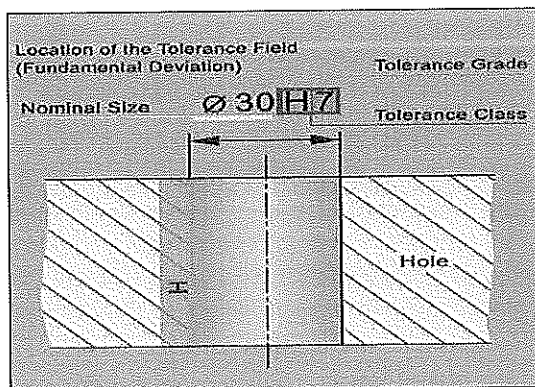
B. Geometric tolerance

### CLASSIFICATION OF TOLERANCE

- Dimensional Tolerance can be define as:

- **Unilateral Tolerance:** When the tolerance distribution is only on one side of the basic size, it is known as unilateral tolerance. In other words, tolerance limits lie wholly on one side of the basic size, either above or below.
- **Bilateral Tolerance:** When the tolerance distribution lies on either side of the basic size, it is known as bilateral tolerance. In other words, the dimension of the part is allowed to vary on both sides of the basic size but may not be necessarily equally disposed about it.

### TOLERANCE DESIGNATION



- H= Fundamental deviation
- Dia 30 = Nominal size
- 7 = IT Grade

### CLASSIFICATION OF TOLERANCE

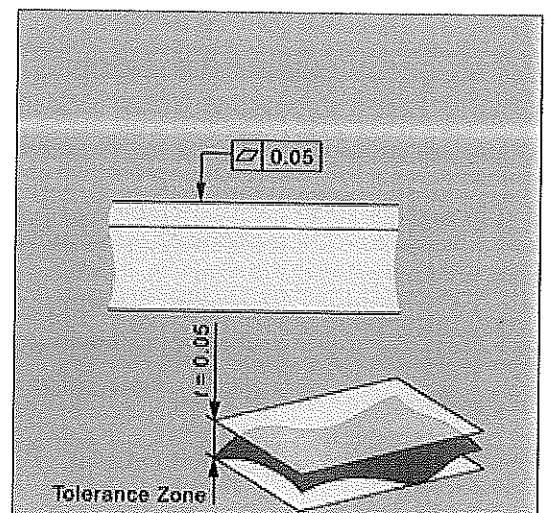
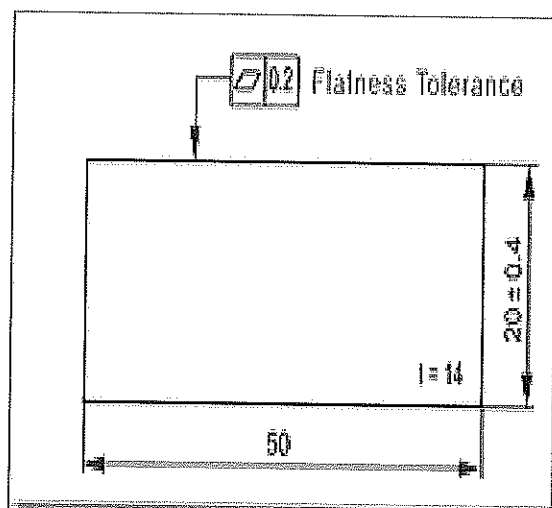
**Geometric Tolerance:** Geometric Dimensioning and Tolerance (GD & T) is a system for defining and communicating engineering tolerances. It uses a symbolic language on engineering drawings and computer generated three dimensional solid models that explicitly describes nominal geometry and its allowable variation.

Type of control <sup>▲</sup>	Geometric characteristics <sup>◆</sup>	Symbol <sup>◆</sup>
Form	Straightness	—
Form	Flatness	
Form	Cylindricity	
Form	Circularity	

Type of control <sup>▲</sup>	Geometric characteristics <sup>◆</sup>	Symbol <sup>◆</sup>
Location	Symmetry	
Location	Position	
Location	Concentricity	
Orientation	Perpendicularity	

Orientation	Parallelism	
Orientation	Angularity	
Profile	Profile of a surface	
Profile	Profile of a line	

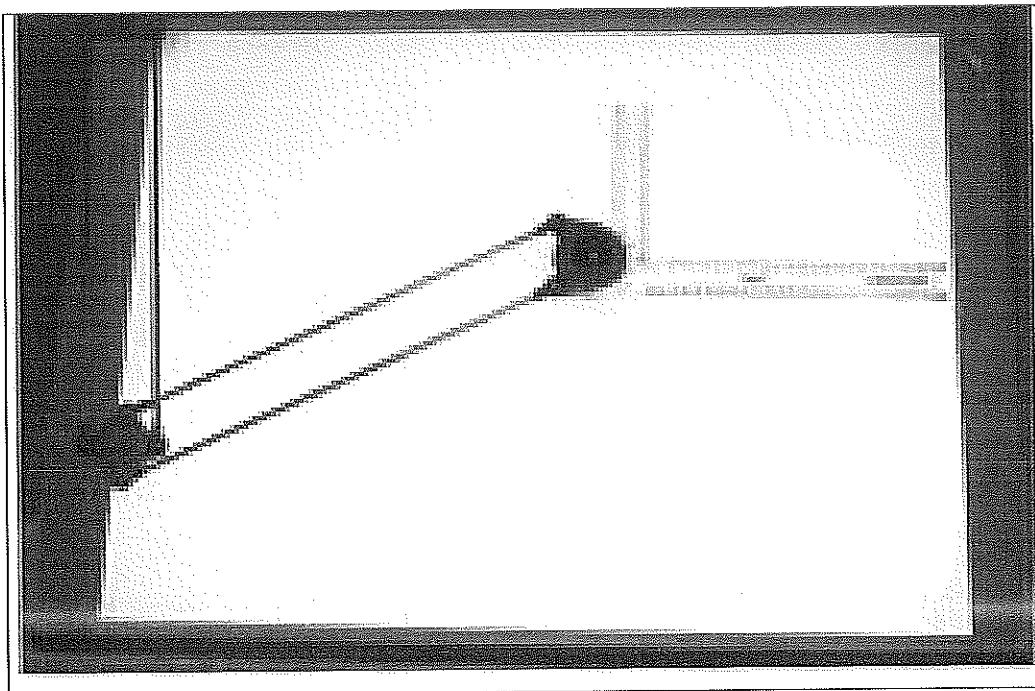
### GEOMETRIC TOLERANCE



Q 33. List out the tools and equipments used for manual drafting.

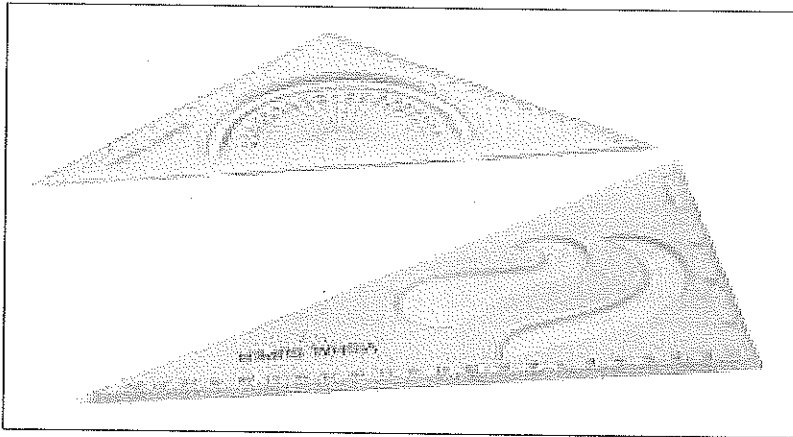
3. Ans: **Mini-drafter**

- This is a device used to draw parallel or inclined lines very effectively with ease. This is mounted on the top left corner of the drawing board by means of a clamping mechanism which is an integral part of the device



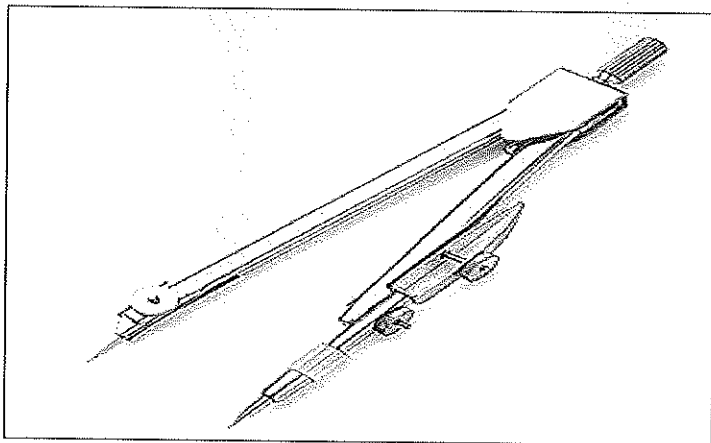
4. **Set squares**

Set squares are a set of 45° set square and 30°-60° set-square, as shown in figure . They are used in conjunction with each other and with T-square to draw parallel, inclined and perpendicular lines.



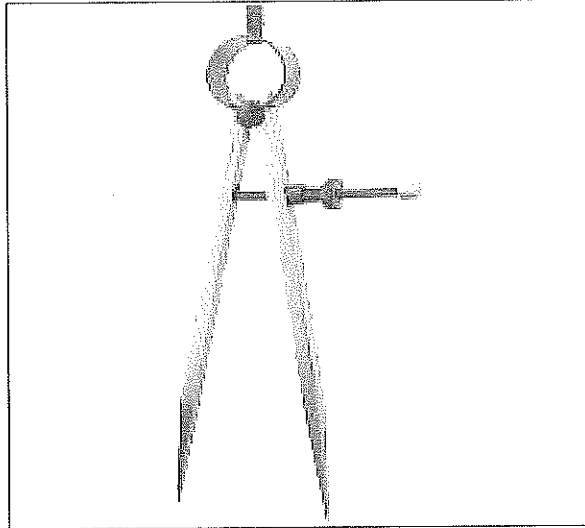
## 5. Compasses

These are used to draw arcs or circles. Generally, two sizes of compasses: one large compass and the other a small spring bow compass are commonly found.



## 6. Divider

Dividers are used to transfer lengths to the drawings either from scales or from the drawing itself.



### **7. Pencils / lead sticks/ pencil sharpener / eraser/etc**

- The primary tool used in technical drawings is the pencil or lead sticks. Generally, for technical drawings, the three grades of pencil used is HB, H and 2H. For different purposes, different grades of pencils are used.
- Pencil sharpener is used to mend the pencils.
- Eraser is used to erase the unnecessary part of the pencil drawing.

