

**CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY**  
**HEAD OFFICE : GUINDY, CHENNAI – 600 032.**  
**ACADEMIC CELL**  
**THIRD SEMESTER EXAMINATION – JANUARY - 2022**

Duration : 3 Hours  
 Course : PGD - PPT  
 Subject : Plastics Materials –III

Max. Marks: 60  
 Date : 03.01.2022  
 Time : 10.00 a.m. to 01.00 p.m.

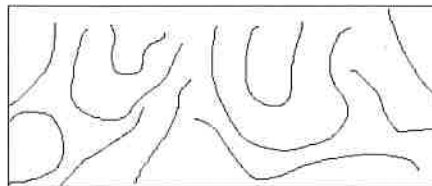
**(DO NOT CHANGE SEQUENCE OF QUESTION NUMBER IN ANSWER SCRIPT)**

**PART – A**

Answer **all** questions

30 x 1 = 30

1. Liquid crystalline polymer are known as self-reinforced polymer. Say True or False
2. E-caprolactam is the monomer of \_\_\_\_\_  
 a) Nylon-6      b) Nylon 6 6      c) PC      d) None of These
3. Plastics are light, strong and durable. Say True or False
4. Which is an example of thermosetting plastics?  
 a) Polystyrene      b) Polyethylene      c) Bakelite      d) PP
5. The suitable material for X-ray film is  
 a) PBT      b) Nylon 6, 6      c) PET      d) PPO
6. Linear polymers are normally \_\_\_\_\_  
 a) Thermosetting      b) Thermoplastics  
 c) Elastomeric      d) Having extremely high softening point
7. PC/ABS is an \_\_\_\_\_  
 a) Blend      b) Alloy      c) Copolymer      d) None of These
8. A miscible polyblends exhibits a single Glass Transition Temperature (T<sub>g</sub>). Say True or False.
9. Benefits of polymer blending  
 a) Synergistic combinations of blending ingredients improve Mechanical Properties  
 b) Improve Bio-degradability  
 c) Improved recycling Characteristics  
 d) All of These.
- 10 The physical mixture of two or more polymers that are not linked by covalent bonds is called \_\_\_\_\_  
 a) Polymerisation      b) Dendrimer      c) Polyblend      d) Multiblend
11. Polymers are dissolved in common solvent to give \_\_\_\_\_  
 a) Mechanical blends      b) Solution-cast blends  
 c) Latex blend      d) Chemical blends
12. The immiscible blends exhibit \_\_\_\_\_  
 a) Excellent mechanical properties      b) Poor mechanical properties  
 c) Poor chemical properties      d) Intermediate chemical properties
13. Plastics and elastomers differ due to their properties of \_\_\_\_\_  
 a) Resistivity      b) Dielectric strength      c) Acoustic insulation      d) Extensibility
14. Which polymeric arrangement does the figure represent?  
 a) Unvulcanized  
 b) Vulcanized  
 c) Stretched vulcanized  
 d) Stretched unvulcanized



15. How is the hardness of an elastomer measured?  
 a) Bloom      b) Brinnell hardness test      c) Rockwell hardness test      d) Shore durometer
16. What is the thermal conductivity of rubber?  
 a) 0.04 W/m °C      b) 0.16 W/m °C      c) 0.64 W/m °C      d) 1.12 W/m °C
17. The loss of heat in elastomers due to friction is known as \_\_\_\_\_  
 a) Resilience      b) Hardness      c) Resistivity      d) Hysteresis

18. Jute fiber is a ..... fiber.
19. Neoprene is the family of \_\_\_\_\_  
a) Synthetic Rubber      b) Thermoplastics      c) Thermosets      d) None of These
20. These polymers consist of coil-like polymer chains:  
a) Thermoplastics      b) Thermosets      c) Elastomers      d) All polymers
21. Elastomers are \_\_\_\_\_?  
a) Thermosetting material      b) Exemplified by protein derivatives  
c) Having high flexural strength      d) Having very high tensile strength and heat resistance
22. Function of Fillers is \_\_\_\_\_  
a) Increase Conductance      b) Reduce Shrinkage  
c) Increase Stiffness and Hardness      d) Increase ability to shock
23. UV stabilizers are added to plastics to increase the life of plastics, especially when exposed to U.V lights. Say true or false.
24. Function of Plasticizer is \_\_\_\_\_  
a) Improve Rheology      b) Lower Glass Transition Temperature  
c) Increase electrical Stability      d) Improve Strength
25. Halogens are used as \_\_\_\_\_ in plastics.  
a) Flame Retardant      b) UV light absorber      c) Antimicrobial      d) Antistatic agent
26. Kevlar is commercial name for \_\_\_\_\_.  
a) Glass fibers      b) Carbon fibres      c) Aramid fibers      d) Cermets
27. Which of the following fibres is used for making parachutes?  
a) Plastic      b) Terelyne      c) Nylon      d) Steel
28. Talc is -----.  
a) Hydrated Al silicates      b) Hydrated Magnesium silicates.  
c) Mixture of Al & Magnesium silicates      d) None of these.
29. Which of the following material is a mixture of two fibres?  
a) Jute      b) Polywool      c) Polyester      d) Nylon
30. What is the other name for artificial silk?  
a) Nylon      b) Rayon      c) Acrylic      d) Polyester

**PART – B**

Answer **all** questions (Max. 40 words)

4 x 2 = 8

1. What is a lubricant? Name the types of lubricant.
2. What is the difference between Flexible- PVC & Rigid-PVC?
3. What is the Flame Retardant? Give an Example.
4. What are the different types of Polyblends?

**PART – C**

Answer any **four** questions (Max. 100 words)

4 x 3 = 12

1. What are the Natural fibers? Explain with Example.
2. Write briefly about PP-EPDM blends
3. What are the technological requirement of additives.
4. Write Short Note on a) Impact Modifiers      b) FRP
5. What is the difference between blends and Alloys ?

**PART – D**

Answer any **two** questions (Max. 300 words)

2 x 5 = 10

1. Describe about compounding of PVC for rigid pipes with the help of High speed mixer? Explain briefly.
2. Briefly explain the Blowing Agent and its function.
3. Write short note on Compounding Techniques.

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**THIRD SEMESTER EXAMINATION – JANUARY - 2022**

Duration : 3 Hours  
 Course : PGD - PPT  
 Subject : Plastics Processing Techniques-III

Max. Marks: 60  
 Date : 04.01.2022  
 Time : 10.00 a.m. to 01.00 p.m.

**(DO NOT CHANGE SEQUENCE OF QUESTION NUMBER IN ANSWER SCRIPT)**

**PART – A**

Answer **all** questions

30 x 1 = 30

1. In the gas assisted injection molding the gas injection can be done through \_\_\_\_\_.  
 a) Nozzle    b) Mould    c) both (a) and (b)    d) none of above
2. FRP "I" beams are produced by \_\_\_\_\_.  
 a) Matched die    b) pultrusion    c) Filament winding    d) centrifugal casting
3. The blowing agents added in EPS molding is in the range of \_\_\_\_\_.  
 a) 2-3%    b) 15%    c) Up to 8%    d) None of the above
4. In thermoset molding screw root is  
 a) Tapered    b) Straight    c) First tapered then straight    d) none of above
5. Thin wall moulding requires \_\_\_\_\_ injection machine.  
 a) Low pressure    b) Standard pressure    c) High pressure    d) None of the above
6. Operations in all electric injection molding machine are carried out by \_\_\_\_\_.  
 a) Hydraulic oil actuation    b) Pneumatic air actuation    c) Servo motors    d) None of these
7. Gas assisted injection molding can produce moldings with weight and cycle time also \_\_\_\_\_.  
 a) reduces    b) increases    c) does not change    d) all of above
8. Thermoset injection molding is used to mold electrical parts that are require \_\_\_\_\_.  
 a) Dimensional Stability    b) Electrical Insulation    c) Both a) and b)    d) None of these
9. In Co-injection it is always preferable to use  
 a) A more viscous material as the core    b) A less viscous material as the core  
 c) A more viscous material as the skin    d) None of above
10. Yogurt cup is manufactured by \_\_\_\_\_.  
 a) Conventional Injection Molding    b) Reaction Injection Molding  
 c) Thin walled injection molding    d) none of these
11. FRP pipes with better optical property is produced by \_\_\_\_\_.  
 a) Filament winding    b) Centrifugal casting    c) pultrusion    d) none of these
12. \_\_\_\_\_ comes under E-waste  
 a) Pipes    b) Hoses    c) Mobile phones    d) Films
13. From which plastics material the monomer may recover \_\_\_\_\_.  
 a) PC    b) PET    c) PVC    d) PP
14. The shot capacity of the thermoset molding should be \_\_\_\_\_.  
 a) Less than 20%    b) More than 80%    c) Between 20% to 80%    d) None of these
15. Structural foam molding is \_\_\_\_\_.  
 a) Low pressure process    b) High pressure process    c) Both A&B    d) None of these
16. The compression ratio of Thermoset screw is \_\_\_\_\_.
17. For automated material loading in machine \_\_\_\_\_ is used.
18. The most commonly used FRP mould material is \_\_\_\_\_.
19. Larger diameter pipes are made with \_\_\_\_\_ FRP technique.
20. \_\_\_\_\_ type of Glass fibre is mostly used in FRP Fabrication.
21. In thermoset injection molding process water Jackets are using for heating - say True or False
22. Multiple nozzles are possible in a single part to allow large surface area in Structural foam Molding process - say True or False
23. All electric machines can achieve 40 -80% energy saving - say True or False
24. FRP boats are made up of FRP hand lay up process - say True or False
25. The recycling triangular logo with No.6 is used for Polypropylene – say True or False
26. Abbreviate MSW
27. Abbreviate DAP
28. Abbreviate UF
29. Abbreviate DMC
30. Abbreviate RRR

**PART – B**

Answer **all** questions (Max. 40 words)

4 x 2 = 8

1. What is Co-injection molding?
2. Classify the FRP process.
3. Name three temperature zones in thermoset Injection molding machine barrel
4. Why size reduction of the waste plastics products is necessary?

**PART – C**

Answer any **four** questions (Max. 100 words)

4 x 3 = 12

1. Define structural foam molding and write down the materials used in Structural foam molding?
2. Write a note on advantages and disadvantages of all electric injection molding machine.
3. List out the drying equipments and brief about Dehumidifier.
4. Write short note on Pultrusion.
5. Write down the types of wastes and sources of plastics waste?

**PART – D**

Answer any **two** questions (Max. 300 words)

2 x 5 = 10

1. Explain about Gas assisted injection molding process and benefits of GAIM..
2. Explain usage of Robots in injection moulding process and automatic material handling systems?
3. What are the various recycling techniques used to recycle the plastic waste? Explain the each technique.

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THIRD SEMESTER EXAMINATION – JANUARY - 2022

Duration : 3 Hours  
Course : PGD - PPT  
Subject : Plastics Testing-III

Max. Marks: 60  
Date : 05.01.2022  
Time : 10.00 a.m. to 01.00 p.m.

**(DO NOT CHANGE SEQUENCE OF QUESTION NUMBER IN ANSWER SCRIPT)**

**PART – A**

Answer **all** questions

30 x 1 = 30

- The limiting Oxygen Index (LOI) is the minimum concentration of ----- expressed as a percentage that will support combustion of a polymer:  
a) Nitrogen      b) Hydrogen      c) Oxygen      d) None of these
- Expand VCM :-----
- The IS standards for testing of Water Storage Tank is-----  
a) IS 2508      b) IS 4984      c) IS 4985      d) IS 12701
- Pie Tape is used for measuring  
a) Outside Diameter    b) Inside Diameter    c) Wall Thickness    d) Length
- MFI Test Condition for HDPE pipe is  
a) 190°C /2.16Kg    b) 190°C /5Kg      c) 220°C /2.16Kg    d) 250 °C /2.16Kg
- Which of the following ASTM test method is applicable for Smoke Density.  
a) ASTM 2843      b) ASTM 732      c) ASTM 790      d) ASTM 3418
- Non-Destructive testing plays an important role in.  
a) Quality Control    b) Production Control    c) Planning Control    d) Quantitative analysis
- What is the purpose of Salt-spray test?  
a) To evaluate printed surface  
b) To evaluate electroplated Parts  
c) To evaluate Printed surface and electroplated Parts  
d) None
- Expand SDR:-----
- Which of the following is not a characteristic of LASER ?  
a) Monochromatic    b) Coherent      c) Divergent      d) Intense
- Identify the type of destructive testing?  
a) Radiography Test    b) Dye Penetrant test    c) Creep Test      d) Visual Test
- In which of the following materials, ultrasonic testing cannot be used?  
a) Plastics      b) Ceramics      c) Non ferrous Object    d) Ferrous Object
- Expand DSC:-----
- Reversion Test is done on Woven Sacks –say True or False
- Destructive Tests are generally much easier to interpret than the Non -destructive tests-say True or False
- As per IS 4985 the value of Opacity tester shall not be more than 0.2 % -say True/False
- Which of the following components of the X-ray fluorescent spectrometer induces fluorescent radiation?  
a) Excitation source    b) Energy analyser    c) X-ray spectrometer    d) Detection System
- The energy of the emitted X-rays depends upon the \_\_\_\_\_ of the atom and their intensity depends upon the \_\_\_\_\_  
a) Atomic number, amount of sample    b) Mass number, amount of sample  
c) Mass number, concentration of atoms    d) Atomic number, concentration of atoms
- Expand NDT:-----
- As per IS 4985 the dead weight used for determination of VST is  
a) 5 kg      b) 1 kg      c) 8 kg      d) None of these

21. In destructive testing, all the operations are performed manually, thus it does not require any technologies or electronic devices-say True or False
22. The Density of the resin at 23°C when tested with IS 7328 for testing of rotational molded PE water storage tank is-----  
 a) 932 to 943 kg/m<sup>3</sup>      b) 940 to 960 kg/m<sup>3</sup>      c) 950 to 965 kg/m<sup>3</sup>      d) 889 to 932 kg/m<sup>3</sup>
23. Why is a mono-energetic radiation source required in X-ray fluorescent spectrometer?  
 a) To provide good sensitivity      b) To provide high accuracy  
 c) To provide a proper range      d) To reduce unwanted background
24. ASTM D Test Method is used for determination of LOI.  
 a) ASTM D2863      b) ASTM D 1238      c) ASTM D1525      d) ASTM D 732
25. Expand XRF:-----
26. Fluorescent X-ray spectrometers would require only moderate-intensity X-ray tubes.-say True/False.
27. Write the unit of VST ?  
 a) V/mil      b) g/cc      c) °C      d) %
28. As per IS 4985:2000, class 3 pipes indicates working pressure (PN) of 8.0 kg/cm<sup>2</sup>.-say True/False.
29. MFI for PVC resin.  
 a) 10g/10 min      b) Can't be Conducted      c) 20 g/10 min      d) 50 g/10 min
30. The oil heating rate used for VST is ----- °C/hour.  
 a) 50 °C/ hour      b) 120 °C/hour.      c) Both      d) None of these

**PART – B**

Answer **all** questions (Max. 40 words)

4 x 2 = 8

1. Define Smoke Density.
2. What do you mean by X-Ray Fluorescence?
3. Define Non-Destructive Testing (NDT).
4. Define Net Capacity and Gross Capacity as per IS 12701.

**PART – C**

Answer any **four** questions (Max. 100 words)

4 x 3 = 12

1. Write Short notes on Ultrasonic methods and its application for failure analysis in plastics.
2. Explain Flammability (UL-94) and its application.
3. What is Salt spray testing and explain its application.
4. Write down the application of Plastics Foams.
5. Write down the application and advantages of Non-destructive testing.

**PART – D**

Answer any **two** questions (Max. 300 words)

2 x 5 = 10

1. Write down the different test of Woven sacks as per IS 14887 and explain any three tests.
2. What are the different type of failure analysis of plastics product, and explain any two .
3. Explain in detail with neat sketch of Limited Oxygen Index Test.

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THIRD SEMESTER EXAMINATION – JANUARY - 2022

Duration : 3 Hours  
Course : PGD - PPT  
Subject : Communication Skills in English

Max. Marks: 60  
Date : 06.01.2022  
Time : 10.00 a.m. to 01.00 p.m.

**(DO NOT CHANGE SEQUENCE OF QUESTION NUMBER IN ANSWER SCRIPT)**

**PART – A**

Answer **all** questions

30 x 1 = 30

**Choose the right option to identify the part of speech for the underlined words in the following sentences**

1. She ran to the station quickly.  
a. Verb      b. Noun      c. Adverb      d. Pronoun
2. What did she ask you to do?  
a. Conjunction      b. Proposition      c. Pronoun      d. Verb
3. I want to go to a university in the United States.  
a. Adjective      b. Preposition      c. Noun      d. Verb
4. Tara speaks English well  
a. Adverb      b. Verb      c. Noun      d. Adjective
5. After lunch let's go out for a coffee  
a. Pronoun      b. Preposition      c. Verb      d. Noun

**Choose the correct passive sentences from the given options**

6. I sent the report yesterday.  
a. The report was sent yesterday.      b. They send the report today.  
c. They were sending the report yesterday.      d. I don't send the report yesterday.
7. She is writing a letter.  
a. A letter is being written by her      b. She wrote a letter yesterday.  
c. A letter was being written by her.      d. I am writing a letter.
8. He teaches English  
a. English is taught by him.      b. English is being taught by him  
c. English is teaching by him.      d. English was taught by him.
9. They are building a house.  
a. A house is being built by them.      b. They build a house.  
c. A house is built by them.      d. They built a house for them
10. May God bless you with happiness!  
a. May you be blessed with happiness!      b. May you always be blessed with happiness!  
c. God bless you with happiness.      d. May you bless me with happiness!

**Give appropriate words for the given statement**

11. A fresher without experience:  
a. Novice      b. Novel      c. Biodata      d. Curriculum vitae
12. A place where experiments are done;  
a. Laboratory      b. Industry      c. Scientist      d. Scientific
13. The life history of a person written by himself.  
a. Writer      b. Autobiography      c. biography      d. Dictator
14. The Person in charge of a ship  
a. Captain      b. Driver      c. Chauffeur      d. Pilot
15. One who travels on foot \_\_\_\_\_  
a. Pedestrian      b. Passenger      c. Driver      d. Traveller

**Choose the correct proposition**

16. She was born \_\_\_\_\_ 2005.  
a. On      b. In      c. For      d. To
17. My lunch period is \_\_\_\_\_ science class.  
a. Next      b. Near      c. After      d. Over
18. My sister painted sheep \_\_\_\_\_ the walls of her bedroom.  
a. On      b. In      c. Over      d. By

19. They are waiting \_\_\_\_\_ the bus.  
a. For                      b. To                      c. In                      d. Over
20. You can look up the word \_\_\_\_\_ a dictionary.  
a. In                      b. On                      c. Upon                      d. Near

**Expand the following abbreviation /acronyms**

21. AICTE  
22. DRDO  
23. PAN  
24. CIPET  
25. ATM  
26. Sumptuous meal means a 'feast' (True / False)  
27. There are eight parts of speech in English Grammar (True / False)  
28. The past tense of 'put' is putted (True / False)  
29. Complex sentence is a sentence which has only one main clause and no subordinate clause (True / False)  
30. Verb never change form (True / False)

**PART – B**

Answer **all** questions (Max. 40 words)

4 x 2 = 8

1. Write meaning of the following idioms and make sentences.  
a. Kill two birds with one stone                      b. Once in a blue moon.
2. Write four instructions to save fuel.
3. Write close antonyms of the given words.  
a. Able                      b. fortunate                      c. love                      d. gloomy
4. Make a meaningful sentence for the given words  
a. Informal                      b. Feedback.

**PART – C**

Answer any **four** questions (Max. 100 words)

4 x 3 = 12

1. What is report writing? Describe technical report with illustration.
2. Write three sets of dialogues between friends discussing about their dreams.
3. Write a letter to the editor of newspaper concerning your view on unemployment .
4. Write single line definition of the following terms.  
a. Internet                      b. Computer                      c. Software
5. Write a letter to the training Incharge CIPET ,requesting for three days leave for elder brother marriage

**PART – D**

Answer any **two** questions (Max. 300 words)

2 x 5 = 10

1. Write essay not exceeding 250 words indicating the role of internet in modern times.
2. Write five Instructions that you have to follow in the library
3. Write a letter to the editor of The Hindu highlighting the need to plant more trees in your area.

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**THIRD SEMESTER EXAMINATION – JANUARY - 2022**

Duration : 3 Hours  
 Course : PGD - PPT  
 Subject : Industrial Management & Entrepreneurship

Max. Marks: 60  
 Date : 07.01.2022  
 Time : 10.00 a.m. to 01.00 p.m.

**(DO NOT CHANGE SEQUENCE OF QUESTION NUMBER IN ANSWER SCRIPT)**

**PART – A**

Answer **all** questions

30 x 1 = 30

1. Costs are classified as \_\_\_\_\_  
 a) Indirect Cost      b) Factory Cost      c) Fixed or Variable      d) Labour Cost
2. Prime Cost means \_\_\_\_\_  
 a) Total of Indirect Cost      b) Factory Cost      c) Total of Direct Cost      d) Material Cost
3. "Quality is meeting or exceeding customer expectations" – this definition of quality is known as  
 a) Perceived Quality      b) Customer-driven quality  
 c) One-dimensional quality      d) Expected quality
4. BEP stands for \_\_\_\_\_  
 a) Break-Even Point      b) Break-even Product      c) Break-even Price      d) Break-even Part
5. Selection and staffing are the functions of  
 a) Sales Manager      b) Works Manager      c) HR      d) Director
6. Top management functions are the most important because this take care of \_\_\_\_\_  
 a) Overall organization      b) Specific problems      c) Routine problems      d) Extraordinary problems
7. Fishbone diagrams are drawn \_\_\_\_\_  
 a) To find customer needs      b) To find the cost of quality  
 c) To brainstorm causes of an effect      d) To screen workers' suggestions
8. SWOT stands for \_\_\_\_\_
9. BOQ stands for Bill of Quantity True / False
10. EOQ stands \_\_\_\_\_
11. Behavioral groups can be classified as \_\_\_\_\_  
 a) Primary and Secondary groups      b) Small and large groups  
 c) Internal and External groups      d) none of these
12. Abraham Maslow is noted with developing the motivational theory as \_\_\_\_\_  
 a) One Factor Theory      b) Two-Factor Theory      c) Three-factor theory      d) None of the above
13. \_\_\_\_\_ is a psychological state that reflects an intention to behave in certain way  
 a) Preference      b) Habit      c) Motivation      d) Fear
14. Depreciation is diminishing in the value of Fixed Assets due to :  
 a) Usage      b) Obsolescence      c) Wear and tear      d) All of the above
15. FIFO is \_\_\_\_\_
16. Which one of these is used for motivation?  
 a) Job simplification      b) Job rotation      c) Job enlargement      d) Job enrichment
17. The objective of TQM is \_\_\_\_\_  
 a) To improve process      b) To improve profitability      c) Botha (a) and (b)      d) None of the above
18. Entrepreneurs are best as : Doers True / False
19. SSI stands for :  
 a) Small Scale Industries      b) Small Size Industries  
 c) State sponsored industries      d) None of these
20. Which of the following represents India in ISO?  
 a) PFRDA      b) FSSAI      c) BIS      d) BCCI
21. BEP analysis is a \_\_\_\_\_ analysis  
 a) Short Term      b) Long Term      c) Quick      d) Medium Term
22. Overhead is a total of  
 a) Direct Costs      b) Fixed Costs      c) Variable Costs      d) Indirect Costs
23. Which is not a goal of quality management ?  
 a) Productivity and efficiency  
 b) Providing easily accessible documentation for procedures and work instructions  
 c) Management responsibility  
 d) Improving the quality of the end product or service

24. Sales – Cost of goods sold is equal to Profit or Loss True / False
25. Need based theory of motivation is invented by \_\_\_\_\_  
a) Mc Gregor b) Peter Drucker c) Elton Mayo d) Maslow
26. Advertising expenses comes under Selling Overheads True / False
27. Small Scale Industries provide \_\_\_\_\_ for increasing employment  
a) Threat b) Strength c) Opportunity d) Wealth
28. What is meant by Kaizen ?  
a) Card signal b) To avoid inadvertent errors c) Change for better quality d) None of the above
29. What is Lead Time?  
a) Time gap between initiation and completion of a production process  
b) Production time  
c) Delivery time  
d) Realization time
30. Break-even Analysis consists of : Fixed and Variable Costs True / False

**PART – B**

Answer **all** questions (Max. 40 words)

4 x 2 = 8

1. What is Manpower planning? & its requirements?
2. Describe the importance of Scientific management
3. Describe various types of tax systems in India
4. What is Kaizen quality circle and briefly explain?

**PART – C**

Answer any **four** questions (Max. 100 words)

4 x 3 = 12

1. Write an outline of a Project Report for establishing an industry to manufacture PET bottle
2. Discuss in detail about Total Quality Management
3. Define Leadership & mention the qualities of successful leader
4. Explain the term in detail with respect to processing department  
a) POKA-YOKE b) Management as a process and activity
5. Explain "Quality of Design" and "Quality of Conformance"

**PART – D**

Answer any **two** questions (Max. 300 words)

2 x 5 = 10

1. Write the steps for implementation of ISO 9000 quality system in processing department & ISO 14001:2004 with reference of manufacturing industry
2. Explain the Quality Management, its components and Principles with diagram.
3. Explain Break Even Analysis using suitable example and graph

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