

Scheme – G

Sample Test Paper-I

Course Name : Diploma in Production Technology/Production Engg.

Course Code : PG/PT

Semester : Fifth

Subject Title : Plant Engineering

Marks : 25

17531

Time:1 hour

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q1. Attempt any Three of the following

3x3=9

- a) Explain the concept of TPM.
- b) Write benefits of TPM (any six).
- c) State the need of Maintenance manual?
- d) Draw a format of machine history chart.

Q2. Attempt any Two of the following

4x2=8

- a) Compare between preventive maintenance and breakdown maintenance. (minimum 4 points)
- b) Describe four stages of Repair cycle.
- c) State the names of different tools required for preventive maintenance of lathe machine?

Q3. Attempt any Two of the following

4x2=8

- a) Draw a sketch of electric supply system and label it.
- b) State methods of purification of water and describe any one of them.
- c) Describe industrial ventilation.

Scheme – G

Sample Test Paper-II

Course Name : Diploma in Production Technology/Production Engg.

Course Code : PG/PT

Semester : Fifth

Subject Title : Plant Engineering

Marks : 25

17531

Time:1 hour

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q1. Attempt any Three of the following

3x3=9

- a) State importance of lubrication.
- b) Define wear and state how it can be controlled?
- c) Describe plastic flow wear process.
- d) Why fuse is used in electrical installation?

Q2. Attempt any Two of the following

4x2=8

- a) Enlist equipments necessary for electrical maintenance.
- b) How fire due to electricity can be prevented?
- c) Describe centralized lubrication system.

Q3. Attempt any Two of the following

4x2=8

- a) State the causes of accident with two examples..
- b) Give a list of personal protective equipments. (minimum eight)
- c) With the help of neat sketch describe fool proofing device for interlocking parallel shafts.

Sample Question Paper

Course Name : Diploma in Production Technology/Production Engg.

Course Code : PG/PT

Semester : Fifth

Subject Title : Plant Engineering

Marks : 100

17531

Time:3 hours

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q1. (a) Attempt any Three

12 Marks

- a) State any four basic facilities in plant. Explain any one in brief.
- b) State different types of mechanical maintenance.
- c) State benefits of TPM.
- d) State various types of lubricants.

Q1. (b) Attempt any one

06 Marks

- a) Describe electric power distribution system with the help of neat sketch.
- b) Describe industrial ventilation with help of neat sketch.

Q2. Attempt any Four

16 Marks

- a) State reasons of Breakdown of Machine tools.
- b) Write advantages of preventive maintenance.
- c) State activities performed in four stages of repair cycle.
- d) Explain the importance of maintenance manual and reports for any machine.
- e) Describe important features of TPM.

Q3. Attempt any Four.

16 Marks

- a) Write applications of TPM in industries.
- b) Describe wear behavior observed due to primary wear processes.
- c) State conditions in which following lubrication systems are suitable –
i) Wick ii) Pad iii) sump iv) splash
- d) Describe allocation of maintenance job responsibility in TPM.
- e) Describe following wear processes – i) abrasive wear ii) pitting.

Q4. (a) Attempt any Three

12 Marks

- a) Prepare cycle of maintenance for any one machine of your choice.
- b) Draw the sketch and write working of overload relays.

- c) Describe necessity of earthing for electrical installation.
- d) Define accident and list out different types of accidents.
- e) Describe basic systems of TPM.

Q4. (b) Attempt any One

06 Marks

- a) Define wear and describe corrosive reaction wear process in details.
- b) Enlist the steps necessary to extinguish sudden fire due to electricity and suggest remedies to avoid such fire in future.

Q5. Attempt any four

16 Marks

- a) Describe need of proper housekeeping in industries.
- b) Draw the neat sketch and describe fool proofing device for interlocking shafts at right angle.
- c) With the help of neat sketch describe control and trip mechanism.
- d) Write selection procedure of lubricants.
- e) Suggest precautions to avoid electric shocks.

Q6. Attempt any two

16 Marks

- a) Draw a neat sketch and describe electric power supply system.
- b) Write the step wise procedure of preventive maintenance for any one selected machine of your choice.
- c) Enlist any two reasons of occurrence of accidents in industries. How will you promote safety awareness in industry.

