

**PSG POLYTECHNIC COLLEGE, COIMBATORE - 641 004****DIPLOMA EVEN SEMESTER EXAMINATIONS – APRIL 2014****B12403 PRODUCTION TECHNOLOGY****MODEL QUESTION PAPER****Instructions:**

1. **Group A** and **Group B** questions should be answered in the Main Answer book.
2. Answer any **TEN** questions in **Group A**. Each question carries two marks.
3. Answer **ALL** questions either **(a)** subdivision or **(b)** subdivision in **Group B**. Each question carries 14 marks.

**Group – A****Marks: 10 x3=30**

1. List out the different allowances given to a pattern.
2. What are the properties that the moulding sand should possess?
3. Give the advantages and application of pressure die casting.
4. Compare hot working and cold working processes.
5. Briefly write about the extrusion process.
6. Mention the applications of gas welding.
7. What are the functions of face plate?
8. How is a lathe specified?
9. What are the operations done using a lathe?
10. List the work holding devices used in shaper.
11. What are the tool holding devices used in drilling machine?
12. How to cut T-slot in a milling machine?
13. Classify the types of broaches.
14. Define lapping and honing.
15. List the advantages of CNC turning centre.

**Group– B****Marks: 5 x 14 = 70**

16. a) Narrate the shell moulding process with neat sketch. Write the applications and advantages of shell moulding.  
**(OR)**  
b) What is pressure die casting? Explain with neat sketch the working of a hot chamber process.
17. a) What is meant by hot working? Briefly describe any three hot working operations with neat sketch.  
**(OR)**  
b) Write short notes on  
i) Spot welding      ii) Seam welding      iii) Projection welding

18. a) Draw a neat sketch of lathe and mark the parts. Explain its working.

**(OR)**

b) Explain any four operations performed on a lathe with simple sketch.

19. a) Describe the working principal of radial drilling machine with neat sketch.

**(OR)**

b) Explain with neat sketch the construction and working principle of column and knee type milling machine.

20. a) With the help of neat sketch, discuss the following

i) Horizontal broaching machine      ii) Continuous broaching machine

**(OR)**

b) Draw the neat sketch of cylindrical centre type grinding machine and explain.