

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: M.Pharm  
BRANCH:Pharmacy**

**SEMESTER : II  
SESSION : SP/22**

**SUBJECT: MQA203T AUDITS AND REGULATORY COMPLIANCE**

**TIME: 3.00 Hours**

**FULL MARKS: 75**

**INSTRUCTIONS:**

1. The question paper contains 7 questions each of 15 marks and total 105 marks.
  2. Candidates may attempt any 5 questions maximum of 75 marks.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) What do you mean by compliance classification in auditing? Write the SOP & significance of auditing in pharmaceutical industry. [7]
- Q.1(b) What is the purpose of FDA audit? Explain the auditing procedure with suitable flow chart. [8]
- Q.2(a) What are reasons for FDA's CGMP guidance? Discuss the significance of manufacturing in quality system. [7]
- Q.2(b) Why quality audit is necessary? Write about auditors' tools, audit observations, audit report & IQARP. [8]
- Q.3(a) Describe how vendor audit is related to QbD involving understanding of product variability? [7]
- Q.3(b) Write short note on: [8]
- i. PCNC
  - ii. PCC
  - iii. Gang printing
- Q.4(a) Discuss steps for preapproval auditing of tablet manufacturing process? [7]
- Q.4(b) Describe stock culture? Write about storage and disposal of storage culture? [8]
- Q.5(a) Describe key parameters in auditing a microbiological and sterility testing quality [7]
- Q.5(b) Write short note on : [8]
- i. Antimicrobial Effectiveness Test
  - ii. Identity Testing of Microorganisms
  - iii. Biosafety levels
- Q.6(a) Justify the role of physical & chemical process in ETP. [7]
- Q.6(b) Write notes on analysis of energy consumption and building function with respect to HVAC. [8]
- Q.7(a) Explain about CGMP and the different concepts of modern quality systems [7]
- Q.7(b) Discuss about 21 CFR CGMP regulations related to management responsibilities [8]

:::02/05/2022:::