

KATHMANDU UNIVERSITY
End Semester Examination [C]
January, 2019

Marks scored:

Level : B. Pharm.
Year : I

Course : PHAR 111
Semester : II

Exam Roll No. : Time: 30 mins.

F. M. : 20

Registration No.:

Date : JAN 04 2019

SECTION "A"

[20Q. × 1 = 20 marks]

Check (✓) the correct answer/s of the following multiple choice questions:

- An alcoholic or hydro-alcoholic (more than 60% alcohol) solutions of volatile substance is known
[a] Elixir [b] Spirit [c] Gargle [d] Tincture
- Nepal Pharmacy Council was established in the year..... A.D
[a] 1995 [b] 2000 [c] 2005 [d] 2010
- Which one of the following activities is concerned with Pharmacy profession?
[a] Injecting drugs in Hospital setting
[b] Nursing Care
[c] Minor disease diagnosis and treatment in Community Pharmacy
[d] Working like a Doctor
- The importance of extraction is due to the following reasons except
[a] Potency of drug can be controlled in extract than in crude drug and can be used accordingly.
[b] More stable form
[c] Diminished organoleptic properties
[d] Storage and transport feasibility
- The Di-electric constant of Water is
[a] 90 [b] 80 [c] 70 [d] 60
- The prefix nano means
[a] 1 billionth [b] 1 millionth [c] 1 hundredth [d] 1 thousandth
- "Material Medica" is an encyclopedia of drugs from
[a] Israel [b] Greece [c] Egypt [d] Iraq
- PharmD Post-Baccalaurate education commenced in Kathmandu University inA.D.
[a] 1999 [b] 2000 [c] 2010 [d] 2018

9. Morphine and Caffeine can be extracted from and respectively.
 [a] Cinchona bark, Tea leaves [b] Nux-vomica, Tobacco Leaves
 [c] Sunflower, Tobacco Leaves [d] Opium, Tea Leaves
10. The communiton energy cannot be estimated by law.
 [a] hook's [b] Kick's [c] Rittinger's [d] Newton's
11. Mesh size of 10 has apertures and their diameter ismm
 [a] 10, 0.5 [b] 9, 0.4 [c] 8, 0.3 [d] 7, 0.2
12. A pharmacist attempts to weigh a 240 mg of Codeine Phosphate on an analytical balance with the S.R of 12 mg. Calculate the maximum potential error.
 [a] 5 % [b] 0.5% [c] 50% [d] 2.5%
13. How many mEq of KCl are present in 1.5 g of KCL ?
 [a] 35.33 mEq [b] 20.1 mEq [c] 5.38 mEq [d] 75.89 mEq
14. One gallon of alcohol is equivalent to ml.
 [a] 45555.55553 ml [b] 3467.52340 ml [c] 3 785.41178 ml [d] 7884.45678 ml
15. How many milliliters of water must be added to 300 ml of 50% alcoholic solution to make a 40% alcoholic solution?
 [a] 95 ml [b] 172 ml [c] 220 ml [d] 375 ml
16. Finely divided solid intended for nasal inhalations are called
 [a] Insufflations [b] Enema [c] Suppositories [d] Capsule
17. Which statement about the significant figure is incorrect?
 [a] Digits other than zero are significant
 [b] A zero between digits is significant
 [c] Final Zeros after a decimal point are significant
 [d] Zeros used only to show the location of the decimal point are significant
18. Which measurement system below is used in the United States for ordinary commodities?
 [a] Metric system [b] Apothecary system
 [c] Avoirdupois system [d] None of the above
19. Which statement about the sustained release tablet is correct?
 [a] Deliver drugs in large amounts with 100 percent bioavailability
 [b] It cannot be crushed
 [c] It can be chewed
 [d] Very expensive
20. Starch powder is used as a
 [a] Disintegrant [b] Binder [c] Lubricant [d] Glidant

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F. M. : 55

Indicate by checking (✓) of each question you have answered in the cover page of main answer book.

SECTION "B"

[5Q. × 3 = 15 marks]

Answer *ANY FIVE* of the following questions.

1. Define the following terms:
 - a. Pharmacy
 - b. Menstrum
 - c. Pulverization
2. Distinguish between the definition of drug as per rug act 1978 of Nepal and Drug and cosmetic act -1940 of India?
3. List down the theories of extraction?
4. Convert:
 - a. 2 hectolitre (hL) to deciliter(dL)
 - b. Convert 4556 mL to litres
 - c. 4 gallon U.S. to litre
5. Write short note on the following topics. (*ANY TWO*)
 - a. Solid dosage form
 - b. Enema
 - c. Hard gelatin Capsule
6. How many mg methylparaben are needed to prepare 8 fluidounces of a solution containing 0.12% (w/v) of Methylparaben.
7. Define
 - a. Glidant
 - b. Diluents
 - c. Lubricant

SECTION "C"

[5Q. × 5 = 25 marks]

Answer *ANY FIVE* of the following questions.

8. List down the phases of evolution of Pharmacy and Write short note on the chemical discovery by Pharmacist.
9. List down the theory of comminution. Explain the mechanism of size reduction and give at least three examples in each category.
10. What is mesh number? What does mesh number of 300 indicate? List down mesh size with corresponding wire diameter and aperture in a table.
11. Differentiate between density and specific gravity. A pycnometer weighs 20.12g. Filled with water, it weighs 48.56g; filled with glycerol, it weighs 42.45g. Calculate the specific gravity of the glycerol and the cost of 1 pint of the glycerol? (1 pounds of glycerol cost Rs 3000/-, 1 pint = 473.176473 ml)
12. Explain different types of conveyor. Why does handling of solid are difficult than liquid in pharmaceuticals?
13. Explain the advantage and disadvantage of oral dosage form.
14. Define aliquot and the sensitivity requirement. A prescriptions balance has a sensitivity requirement of 0.005g. Explain how you would weigh 0.013 g of atropine sulfate with an error not greater than 4%, using lactose as a diluent.

SECTION "D"

[2Q. × 7.5 = 15 marks]

Answer *ANY TWO* of the following questions.

15. Discuss about pharmacy education and manpower development in Nepal.
16. List down different extraction processes and explain them. Which process is the most efficient? Justify.
17. Explain the role and mechanism of suspending agent in suspension? What are emulsifying agent? Differentiate between glidant and lubricant.